



302	311	312	Max	35.00	0.00	18	0.00	18	0.00	18	5337.43	18	-934.72	18	37.93	18
302	311	312	Max	177.37									2864.63	18		
302	311	312	Max	396.00	0.00	18	0.00	18	0.00	18	-8196.75	18	-6095.80	18	37.93	18
302	311	312	Min.	35.00	0.00	18	0.00	18	0.00	18	5337.43	18	-934.72	18	37.93	18
302	311	312	Min.	177.37									2864.63	18		
302	311	312	Min.	396.00	0.00	18	0.00	18	0.00	18	-8196.75	18	-6095.80	18	37.93	18
303	313	-1607	Max	15.00	0.00	18	0.00	18	0.00	18	5320.11	18	-5157.41	18	-2796.64	18
303	313	-1607	Max	88.00	0.00	18	0.00	18	0.00	18	3098.36	18	-2084.67	18	-2796.64	18
303	313	-1607	Min.	15.00	0.00	18	0.00	18	0.00	18	5320.11	18	-5157.41	18	-2796.64	18
303	313	-1607	Min.	88.00	0.00	18	0.00	18	0.00	18	3098.36	18	-2084.67	18	-2796.64	18
303	-1607	-1608	Max	0.00	0.00	18	0.00	18	0.00	18	3988.43	18	-1221.91	18	-1147.31	18
303	-1607	-1608	Max	88.00	0.00	18	0.00	18	0.00	18	1310.15	18	1109.47	18	-1147.31	18
303	-1607	-1608	Min.	0.00	0.00	18	0.00	18	0.00	18	3988.43	18	-1221.91	18	-1147.31	18
303	-1607	-1608	Min.	88.00	0.00	18	0.00	18	0.00	18	1310.15	18	1109.47	18	-1147.31	18
303	-1608	-1609	Max	0.00	0.00	18	0.00	18	0.00	18	1711.07	18	1785.32	18	-216.12	18
303	-1608	-1609	Max	55.76									2266.27	18		
303	-1608	-1609	Max	88.00	0.00	18	0.00	18	0.00	18	-967.21	18	2112.61	18	-216.12	18
303	-1608	-1609	Min.	0.00	0.00	18	0.00	18	0.00	18	1711.07	18	1785.32	18	-216.12	18
303	-1608	-1609	Min.	55.76									2266.27	18		
303	-1608	-1609	Min.	88.00	0.00	18	0.00	18	0.00	18	-967.21	18	2112.61	18	-216.12	18
303	-1609	-1610	Max	0.00	0.00	18	0.00	18	0.00	18	-338.66	18	1767.21	18	687.91	18
303	-1609	-1610	Max	88.00	0.00	18	0.00	18	0.00	18	-3016.94	18	290.74	18	687.91	18
303	-1609	-1610	Min.	0.00	0.00	18	0.00	18	0.00	18	-338.66	18	1767.21	18	687.91	18
303	-1609	-1610	Min.	88.00	0.00	18	0.00	18	0.00	18	-3016.94	18	290.74	18	687.91	18
303	-1610	314	Max	0.00	0.00	18	0.00	18	0.00	18	-4225.45	18	-404.51	18	2798.12	18
303	-1610	314	Max	53.00	0.00	18	0.00	18	0.00	18	-5838.50	18	-3071.45	18	2798.12	18
303	-1610	314	Min.	0.00	0.00	18	0.00	18	0.00	18	-4225.45	18	-404.51	18	2798.12	18
303	-1610	314	Min.	53.00	0.00	18	0.00	18	0.00	18	-5838.50	18	-3071.45	18	2798.12	18
303	314	-1611	Max	35.00	0.00	18	0.00	18	0.00	18	8321.31	18	-6258.42	18	-5400.20	18
303	314	-1611	Max	97.80	0.00	18	0.00	18	0.00	18	6356.74	18	-1649.51	18	-5400.20	18
303	314	-1611	Min.	35.00	0.00	18	0.00	18	0.00	18	8321.31	18	-6258.42	18	-5400.20	18
303	314	-1611	Min.	97.80	0.00	18	0.00	18	0.00	18	6356.74	18	-1649.51	18	-5400.20	18
303	-1611	-1612	Max	0.00	0.00	18	0.00	18	0.00	18	3514.89	18	-14.69	18	-2873.50	18
303	-1611	-1612	Max	97.80	0.00	18	0.00	18	0.00	18	455.41	18	1926.78	18	-2873.50	18
303	-1611	-1612	Min.	0.00	0.00	18	0.00	18	0.00	18	3514.89	18	-14.69	18	-2873.50	18
303	-1611	-1612	Min.	97.80	0.00	18	0.00	18	0.00	18	455.41	18	1926.78	18	-2873.50	18
303	-1612	-1613	Max	0.00	0.00	18	0.00	18	0.00	18	1398.79	18	3175.49	18	-1825.82	18
303	-1612	-1613	Max	42.89									3487.70	18		
303	-1612	-1613	Max	97.80	0.00	18	0.00	18	0.00	18	-1660.69	18	3047.42	18	-1825.82	18
303	-1612	-1613	Min.	0.00	0.00	18	0.00	18	0.00	18	1398.79	18	3175.49	18	-1825.82	18
303	-1612	-1613	Min.	42.89									3487.70	18		
303	-1612	-1613	Min.	97.80	0.00	18	0.00	18	0.00	18	-1660.69	18	3047.42	18	-1825.82	18
303	-1613	-1614	Max	0.00	0.00	18	0.00	18	0.00	18	-767.76	18	2571.43	18	-991.27	18
303	-1613	-1614	Max	97.80	0.00	18	0.00	18	0.00	18	-3827.24	18	324.48	18	-991.27	18
303	-1613	-1614	Min.	0.00	0.00	18	0.00	18	0.00	18	-767.76	18	2571.43	18	-991.27	18
303	-1613	-1614	Min.	97.80	0.00	18	0.00	18	0.00	18	-3827.24	18	324.48	18	-991.27	18
303	-1614	315	Max	0.00	0.00	18	0.00	18	0.00	18	-5008.88	18	-1292.18	18	355.70	18
303	-1614	315	Max	80.30	0.00	18	0.00	18	0.00	18	-7520.91	18	-6322.88	18	355.70	18
303	-1614	315	Min.	0.00	0.00	18	0.00	18	0.00	18	-5008.88	18	-1292.18	18	355.70	18
303	-1614	315	Min.	80.30	0.00	18	0.00	18	0.00	18	-7520.91	18	-6322.88	18	355.70	18
303	315	-1615	Max	12.50	0.00	18	0.00	18	0.00	18	6702.76	18	-7689.11	18	-708.72	18
303	315	-1615	Max	92.75	0.00	18	0.00	18	0.00	18	5655.49	18	-2730.37	18	-708.72	18
303	315	-1615	Min.	12.50	0.00	18	0.00	18	0.00	18	6702.76	18	-7689.11	18	-708.72	18
303	315	-1615	Min.	92.75	0.00	18	0.00	18	0.00	18	5655.49	18	-2730.37	18	-708.72	18
303	-1615	-1616	Max	0.00	0.00	18	0.00	18	0.00	18	4018.13	18	-1271.36	18	810.50	18
303	-1615	-1616	Max	92.75	0.00	18	0.00	18	0.00	18	2807.74	18	1894.14	18	810.50	18
303	-1615	-1616	Min.	0.00	0.00	18	0.00	18	0.00	18	4018.13	18	-1271.36	18	810.50	18
303	-1615	-1616	Min.	92.75	0.00	18	0.00	18	0.00	18	2807.74	18	1894.14	18	810.50	18
303	-1616	-1617	Max	0.00	0.00	18	0.00	18	0.00	18	2363.93	18	2789.95	18	2033.97	18
303	-1616	-1617	Max	92.75	0.00	18	0.00	18	0.00	18	1153.55	18	4421.18	18	2033.97	18
303	-1616	-1617	Min.	0.00	0.00	18	0.00	18	0.00	18	2363.93	18	2789.95	18	2033.97	18
303	-1616	-1617	Min.	92.75	0.00	18	0.00	18	0.00	18	1153.55	18	4421.18	18	2033.97	18
303	-1617	-1618	Max	0.00	0.00	18	0.00	18	0.00	18	759.00	18	4386.92	18	3573.90	18
303	-1617	-1618	Max	57.83									4607.63	18		
303	-1617	-1618	Max	92.75	0.00	18	0.00	18	0.00	18	-451.39	18	4529.57	18	3573.90	18
303	-1617	-1618	Min.	0.00	0.00	18	0.00	18	0.00	18	759.00	18	4386.92	18	3573.90	18
303	-1617	-1618	Min.	57.83									4607.63	18		
303	-1617	-1618	Min.	92.75	0.00	18	0.00	18	0.00	18	-451.39	18	4529.57	18	3573.90	18
303	-1618	-1619	Max	0.00	0.00	18	0.00	18	0.00	18	-2735.49	18	3396.73	18	3880.90	18
303	-1618	-1619	Max	68.50	0.00	18	0.00	18	0.00	18	-3629.41	18	1216.76	18	3880.90	18
303	-1618	-1619	Min.	0.00	0.00	18	0.00	18	0.00	18	-2735.49	18	3396.73	18	3880.90	18
303	-1618	-1619	Min.	68.50	0.00	18	0.00	18	0.00	18	-3629.41	18	1216.76	18	3880.90	18
303	-1619	316	Max	0.00	0.00	18	0.00	18	0.00	18	-11350.60	18	-990.24	18	2067.56	18
303	-1619	316	Max	56.00	0.00	18	0.00	18	0.00	18	-12081.40	18	-7551.18	18	2067.56	18
303	-1619	316	Min.	0.00	0.00	18	0.00	18	0.00	18	-11350.60	18	-990.24	18	2067.56	18
303	-1619	316	Min.	56.00	0.00	18	0.00	18	0.00	18	-12081.40	18	-7551.18	18	2067.56	18



303	316	-1620	Max	17.50	0.00	18	0.00	18	0.00	18	7608.84	18	-6365.38	18	-2509.29	18
303	316	-1620	Max	92.60	0.00	18	0.00	18	0.00	18	5291.60	18	-1521.26	18	-2509.29	18
303	316	-1620	Min.	17.50	0.00	18	0.00	18	0.00	18	7608.84	18	-6365.38	18	-2509.29	18
303	316	-1620	Min.	92.60	0.00	18	0.00	18	0.00	18	5291.60	18	-1521.26	18	-2509.29	18
303	-1620	-1621	Max	0.00	0.00	18	0.00	18	0.00	18	3923.40	18	-410.07	18	-374.68	18
303	-1620	-1621	Max	92.60	0.00	18	0.00	18	0.00	18	1066.18	18	1900.10	18	-374.68	18
303	-1620	-1621	Min.	0.00	0.00	18	0.00	18	0.00	18	3923.40	18	-410.07	18	-374.68	18
303	-1620	-1621	Min.	92.60	0.00	18	0.00	18	0.00	18	1066.18	18	1900.10	18	-374.68	18
303	-1621	-1622	Max	0.00	0.00	18	0.00	18	0.00	18	1627.10	18	2353.63	18	661.88	18
303	-1621	-1622	Max	52.73									2782.65	18		
303	-1621	-1622	Max	92.60	0.00	18	0.00	18	0.00	18	-1230.11	18	2537.44	18	661.88	18
303	-1621	-1622	Min.	0.00	0.00	18	0.00	18	0.00	18	1627.10	18	2353.63	18	661.88	18
303	-1621	-1622	Min.	52.73									2782.65	18		
303	-1621	-1622	Min.	92.60	0.00	18	0.00	18	0.00	18	-1230.11	18	2537.44	18	661.88	18
303	-1622	-1623	Max	0.00	0.00	18	0.00	18	0.00	18	-706.78	18	1817.29	18	1739.82	18
303	-1622	-1623	Max	92.60	0.00	18	0.00	18	0.00	18	-3563.99	18	-160.07	18	1739.82	18
303	-1622	-1623	Min.	0.00	0.00	18	0.00	18	0.00	18	-706.78	18	1817.29	18	1739.82	18
303	-1622	-1623	Min.	92.60	0.00	18	0.00	18	0.00	18	-3563.99	18	-160.07	18	1739.82	18
303	-1623	317	Max	0.00	0.00	18	0.00	18	0.00	18	-5887.99	18	-1217.17	18	4009.63	18
303	-1623	317	Max	57.60	0.00	18	0.00	18	0.00	18	-7665.27	18	-5120.51	18	4009.63	18
303	-1623	317	Min.	0.00	0.00	18	0.00	18	0.00	18	-5887.99	18	-1217.17	18	4009.63	18
303	-1623	317	Min.	57.60	0.00	18	0.00	18	0.00	18	-7665.27	18	-5120.51	18	4009.63	18
303	317	-1624	Max	35.00	0.00	18	0.00	18	0.00	18	5809.70	18	-2390.32	18	-2981.22	18
303	317	-1624	Max	82.20	0.00	18	0.00	18	0.00	18	4401.35	18	19.49	18	-2981.22	18
303	317	-1624	Min.	35.00	0.00	18	0.00	18	0.00	18	5809.70	18	-2390.32	18	-2981.22	18
303	317	-1624	Min.	82.20	0.00	18	0.00	18	0.00	18	4401.35	18	19.49	18	-2981.22	18
303	-1624	-1625	Max	0.00	0.00	18	0.00	18	0.00	18	3125.39	18	704.86	18	-981.95	18
303	-1624	-1625	Max	82.20	0.00	18	0.00	18	0.00	18	672.72	18	2265.88	18	-981.95	18
303	-1624	-1625	Min.	0.00	0.00	18	0.00	18	0.00	18	3125.39	18	704.86	18	-981.95	18
303	-1624	-1625	Min.	82.20	0.00	18	0.00	18	0.00	18	672.72	18	2265.88	18	-981.95	18
303	-1625	-1626	Max	0.00	0.00	18	0.00	18	0.00	18	1159.42	18	2610.16	18	25.36	18
303	-1625	-1626	Max	38.60									2835.41	18		
303	-1625	-1626	Max	82.20	0.00	18	0.00	18	0.00	18	-1293.24	18	2555.16	18	25.36	18
303	-1625	-1626	Min.	0.00	0.00	18	0.00	18	0.00	18	1159.42	18	2610.16	18	25.36	18
303	-1625	-1626	Min.	38.60									2835.41	18		
303	-1625	-1626	Min.	82.20	0.00	18	0.00	18	0.00	18	-1293.24	18	2555.16	18	25.36	18
303	-1626	-1627	Max	0.00	0.00	18	0.00	18	0.00	18	-914.56	18	2037.38	18	1034.31	18
303	-1626	-1627	Max	82.20	0.00	18	0.00	18	0.00	18	-3367.24	18	277.56	18	1034.31	18
303	-1626	-1627	Min.	0.00	0.00	18	0.00	18	0.00	18	-914.56	18	2037.38	18	1034.31	18
303	-1626	-1627	Min.	82.20	0.00	18	0.00	18	0.00	18	-3367.24	18	277.56	18	1034.31	18
303	-1627	318	Max	0.00	0.00	18	0.00	18	0.00	18	-4948.52	18	-1295.66	18	3383.81	18
303	-1627	318	Max	67.20	0.00	18	0.00	18	0.00	18	-6953.62	18	-5294.78	18	3383.81	18
303	-1627	318	Min.	0.00	0.00	18	0.00	18	0.00	18	-4948.52	18	-1295.66	18	3383.81	18
303	-1627	318	Min.	67.20	0.00	18	0.00	18	0.00	18	-6953.62	18	-5294.78	18	3383.81	18
304	301	-1515	Max	0.00	0.00	18	0.00	18	0.00	18	5172.45	18	-5663.31	18	-3955.55	18
304	301	-1515	Max	84.00	0.00	18	0.00	18	0.00	18	3592.41	18	-1982.07	18	-3955.55	18
304	301	-1515	Min.	0.00	0.00	18	0.00	18	0.00	18	5172.45	18	-5663.31	18	-3955.55	18
304	301	-1515	Min.	84.00	0.00	18	0.00	18	0.00	18	3592.41	18	-1982.07	18	-3955.55	18
304	-1515	-1518	Max	0.00	0.00	18	0.00	18	0.00	18	2563.87	18	32.47	18	-1382.83	18
304	-1515	-1518	Max	84.00	0.00	18	0.00	18	0.00	18	983.83	18	1522.51	18	-1382.83	18
304	-1515	-1518	Min.	0.00	0.00	18	0.00	18	0.00	18	2563.87	18	32.47	18	-1382.83	18
304	-1515	-1518	Min.	84.00	0.00	18	0.00	18	0.00	18	983.83	18	1522.51	18	-1382.83	18
304	-1518	-1521	Max	0.00	0.00	18	0.00	18	0.00	18	1279.97	18	2290.46	18	-162.90	18
304	-1518	-1521	Max	67.63									2725.93	18		
304	-1518	-1521	Max	84.00	0.00	18	0.00	18	0.00	18	-300.07	18	2702.02	18	-162.90	18
304	-1518	-1521	Min.	0.00	0.00	18	0.00	18	0.00	18	1279.97	18	2290.46	18	-162.90	18
304	-1518	-1521	Min.	67.63									2725.93	18		
304	-1518	-1521	Min.	84.00	0.00	18	0.00	18	0.00	18	-300.07	18	2702.02	18	-162.90	18
304	-1521	-1526	Max	0.00	0.00	18	0.00	18	0.00	18	-402.72	18	2566.10	18	803.69	18
304	-1521	-1526	Max	84.00	0.00	18	0.00	18	0.00	18	-1982.76	18	1564.20	18	803.69	18
304	-1521	-1526	Min.	0.00	0.00	18	0.00	18	0.00	18	-402.72	18	2566.10	18	803.69	18
304	-1521	-1526	Min.	84.00	0.00	18	0.00	18	0.00	18	-1982.76	18	1564.20	18	803.69	18
304	-1526	-1530	Max	0.00	0.00	18	0.00	18	0.00	18	-1926.80	18	657.76	18	2205.11	18
304	-1526	-1530	Max	84.00	0.00	18	0.00	18	0.00	18	-3506.84	18	-1624.37	18	2205.11	18
304	-1526	-1530	Min.	0.00	0.00	18	0.00	18	0.00	18	-1926.80	18	657.76	18	2205.11	18
304	-1526	-1530	Min.	84.00	0.00	18	0.00	18	0.00	18	-3506.84	18	-1624.37	18	2205.11	18
304	-1530	307	Max	0.00	0.00	18	0.00	18	0.00	18	-8131.10	18	-2235.15	18	5312.68	18
304	-1530	307	Max	24.00	0.00	18	0.00	18	0.00	18	-8582.54	18	-4240.79	18	5312.68	18
304	-1530	307	Min.	0.00	0.00	18	0.00	18	0.00	18	-8131.10	18	-2235.15	18	5312.68	18
304	-1530	307	Min.	24.00	0.00	18	0.00	18	0.00	18	-8582.54	18	-4240.79	18	5312.68	18
304	307	-1549	Max	60.00	0.00	18	0.00	18	0.00	18	8735.75	18	-4691.54	18	-4941.52	18
304	307	-1549	Max	95.33	0.00	18	0.00	18	0.00	18	8071.13	18	-1722.32	18	-4941.52	18
304	307	-1549	Min.	60.00	0.00	18	0.00	18	0.00	18	8735.75	18	-4691.54	18	-4941.52	18
304	307	-1549	Min.	95.33	0.00	18	0.00	18	0.00	18	8071.13	18	-1722.32	18	-4941.52	18
304	-1549	-1566	Max	0.00	0.00	18	0.00	18	0.00	18	3465.42	18	-998.86	18	-1839.28	18
304	-1549	-1566	Max	95.33	0.00	18	0.00	18	0.00	18	1672.20	18	1450.07	18	-1839.28	18



304	-1549	-1566	Min.	0.00	0.00	18	0.00	18	0.00	18	3465.42	18	-998.86	18	-1839.28	18
304	-1549	-1566	Min.	95.33	0.00	18	0.00	18	0.00	18	1672.20	18	1450.07	18	-1839.28	18
304	-1566	-1579	Max	0.00	0.00	18	0.00	18	0.00	18	1674.65	18	2449.16	18	-482.24	18
304	-1566	-1579	Max	89.03									3194.62	18		
304	-1566	-1579	Max	95.33	0.00	18	0.00	18	0.00	18	-118.58	18	3190.88	18	-482.24	18
304	-1566	-1579	Min.	0.00	0.00	18	0.00	18	0.00	18	1674.65	18	2449.16	18	-482.24	18
304	-1566	-1579	Min.	89.03									3194.62	18		
304	-1566	-1579	Min.	95.33	0.00	18	0.00	18	0.00	18	-118.58	18	3190.88	18	-482.24	18
304	-1579	-1590	Max	0.00	0.00	18	0.00	18	0.00	18	-28.47	18	3135.34	18	422.64	18
304	-1579	-1590	Max	95.33	0.00	18	0.00	18	0.00	18	-1821.69	18	2253.44	18	422.64	18
304	-1579	-1590	Min.	0.00	0.00	18	0.00	18	0.00	18	-28.47	18	3135.34	18	422.64	18
304	-1579	-1590	Min.	95.33	0.00	18	0.00	18	0.00	18	-1821.69	18	2253.44	18	422.64	18
304	-1590	-1601	Max	0.00	0.00	18	0.00	18	0.00	18	-1655.71	18	1163.32	18	1388.80	18
304	-1590	-1601	Max	95.33	0.00	18	0.00	18	0.00	18	-3448.93	18	-1269.90	18	1388.80	18
304	-1590	-1601	Min.	0.00	0.00	18	0.00	18	0.00	18	-1655.71	18	1163.32	18	1388.80	18
304	-1590	-1601	Min.	95.33	0.00	18	0.00	18	0.00	18	-3448.93	18	-1269.90	18	1388.80	18
304	-1601	313	Max	0.00	0.00	18	0.00	18	0.00	18	-2750.87	18	-3060.07	18	3190.54	18
304	-1601	313	Max	95.33	0.00	18	0.00	18	0.00	18	-4544.09	18	-6537.33	18	3190.54	18
304	-1601	313	Min.	0.00	0.00	18	0.00	18	0.00	18	-2750.87	18	-3060.07	18	3190.54	18
304	-1601	313	Min.	95.33	0.00	18	0.00	18	0.00	18	-4544.09	18	-6537.33	18	3190.54	18
305	302	308	Max	15.00	0.00	18	0.00	18	0.00	18	4355.05	18	-3266.54	18	45.75	18
305	302	308	Max	250.86									1881.76	18		
305	302	308	Max	489.00	0.00	18	0.00	18	0.00	18	-4376.03	18	-3316.27	18	45.75	18
305	302	308	Min.	15.00	0.00	18	0.00	18	0.00	18	4355.05	18	-3266.54	18	45.75	18
305	302	308	Min.	250.86									1881.76	18		
305	302	308	Min.	489.00	0.00	18	0.00	18	0.00	18	-4376.03	18	-3316.27	18	45.75	18
305	308	314	Max	15.00	0.00	18	0.00	18	0.00	18	4645.42	18	-3685.19	18	-5.11	18
305	308	314	Max	266.36									2172.48	18		
305	308	314	Max	557.00	0.00	18	0.00	18	0.00	18	-5338.22	18	-5562.70	18	-5.11	18
305	308	314	Min.	15.00	0.00	18	0.00	18	0.00	18	4645.42	18	-3685.19	18	-5.11	18
305	308	314	Min.	266.36									2172.48	18		
305	308	314	Min.	557.00	0.00	18	0.00	18	0.00	18	-5338.22	18	-5562.70	18	-5.11	18
307	303	309	Max	15.00	0.00	18	0.00	18	0.00	18	8729.51	18	-6782.53	18	-12.05	18
307	303	309	Max	257.35									3795.44	18		
307	303	309	Max	489.00	0.00	18	0.00	18	0.00	18	-8344.12	18	-5869.15	18	-12.05	18
307	303	309	Min.	15.00	0.00	18	0.00	18	0.00	18	8729.51	18	-6782.53	18	-12.05	18
307	303	309	Min.	257.35									3795.44	18		
307	303	309	Min.	489.00	0.00	18	0.00	18	0.00	18	-8344.12	18	-5869.15	18	-12.05	18
307	309	-1546	Max	15.00	0.00	18	0.00	18	0.00	18	4785.47	18	-3192.55	18	-398.81	18
307	309	-1546	Max	82.00	0.00	18	0.00	18	0.00	18	3454.85	18	-432.04	18	-398.81	18
307	309	-1546	Min.	15.00	0.00	18	0.00	18	0.00	18	4785.47	18	-3192.55	18	-398.81	18
307	309	-1546	Min.	82.00	0.00	18	0.00	18	0.00	18	3454.85	18	-432.04	18	-398.81	18
307	-1546	-1560	Max	0.00	0.00	18	0.00	18	0.00	18	3430.63	18	376.31	18	58.60	18
307	-1546	-1560	Max	82.00	0.00	18	0.00	18	0.00	18	1802.11	18	2521.73	18	58.60	18
307	-1546	-1560	Min.	0.00	0.00	18	0.00	18	0.00	18	3430.63	18	376.31	18	58.60	18
307	-1546	-1560	Min.	82.00	0.00	18	0.00	18	0.00	18	1802.11	18	2521.73	18	58.60	18
307	-1560	-2024	Max	0.00	0.00	18	0.00	18	0.00	18	1023.47	18	2991.15	18	140.52	18
307	-1560	-2024	Max	50.30									3254.71	18		
307	-1560	-2024	Max	223.00	0.00	18	0.00	18	0.00	18	-3405.31	18	335.40	18	140.52	18
307	-1560	-2024	Min.	0.00	0.00	18	0.00	18	0.00	18	1023.47	18	2991.15	18	140.52	18
307	-1560	-2024	Min.	50.30									3254.71	18		
307	-1560	-2024	Min.	223.00	0.00	18	0.00	18	0.00	18	-3405.31	18	335.40	18	140.52	18
308	304	310	Max	15.00	0.00	18	0.00	18	0.00	18	9303.33	18	-7061.92	18	2.25	18
308	304	310	Max	256.20									4158.10	18		
308	304	310	Max	489.00	0.00	18	0.00	18	0.00	18	-8979.01	18	-6293.27	18	2.25	18
308	304	310	Min.	15.00	0.00	18	0.00	18	0.00	18	9303.33	18	-7061.92	18	2.25	18
308	304	310	Min.	256.20									4158.10	18		
308	304	310	Min.	489.00	0.00	18	0.00	18	0.00	18	-8979.01	18	-6293.27	18	2.25	18
308	310	-1550	Max	15.00	0.00	18	0.00	18	0.00	18	2310.29	18	-1466.64	18	252.38	18
308	310	-1550	Max	95.33	0.00	18	0.00	18	0.00	18	714.87	18	-251.54	18	252.38	18
308	310	-1550	Min.	15.00	0.00	18	0.00	18	0.00	18	2310.29	18	-1466.64	18	252.38	18
308	310	-1550	Min.	95.33	0.00	18	0.00	18	0.00	18	714.87	18	-251.54	18	252.38	18
308	-1550	-1567	Max	0.00	0.00	18	0.00	18	0.00	18	986.79	18	-124.05	18	194.95	18
308	-1550	-1567	Max	49.69									121.11	18		
308	-1550	-1567	Max	95.33	0.00	18	0.00	18	0.00	18	-906.53	18	-85.79	18	194.95	18
308	-1550	-1567	Min.	0.00	0.00	18	0.00	18	0.00	18	986.79	18	-124.05	18	194.95	18
308	-1550	-1567	Min.	49.69									121.11	18		
308	-1550	-1567	Min.	95.33	0.00	18	0.00	18	0.00	18	-906.53	18	-85.79	18	194.95	18
308	-1567	-1580	Max	0.00	0.00	18	0.00	18	0.00	18	-69.10	18	-264.08	18	-166.75	18
308	-1567	-1580	Max	95.33	0.00	18	0.00	18	0.00	18	-1962.42	18	-1232.43	18	-166.75	18
308	-1567	-1580	Min.	0.00	0.00	18	0.00	18	0.00	18	-69.10	18	-264.08	18	-166.75	18
308	-1567	-1580	Min.	95.33	0.00	18	0.00	18	0.00	18	-1962.42	18	-1232.43	18	-166.75	18
308	-1580	-2027	Max	0.00	0.00	18	0.00	18	0.00	18	-1805.74	18	-1884.02	18	-213.18	18
308	-1580	-2027	Max	101.00	0.00	18	0.00	18	0.00	18	-3811.60	18	-4720.77	18	-213.18	18
308	-1580	-2027	Min.	0.00	0.00	18	0.00	18	0.00	18	-1805.74	18	-1884.02	18	-213.18	18
308	-1580	-2027	Min.	101.00	0.00	18	0.00	18	0.00	18	-3811.60	18	-4720.77	18	-213.18	18



309	305	311	Max	15.00	0.00	18	0.00	18	0.00	18	4362.23	18	-3284.32	18	-29.26	18
309	305	311	Max	251.25									1880.97	18		
309	305	311	Max	489.00	0.00	18	0.00	18	0.00	18	-4368.85	18	-3300.01	18	-29.26	18
309	305	311	Min.	15.00	0.00	18	0.00	18	0.00	18	4362.23	18	-3284.32	18	-29.26	18
309	305	311	Min.	251.25									1880.97	18		
309	305	311	Min.	489.00	0.00	18	0.00	18	0.00	18	-4368.85	18	-3300.01	18	-29.26	18
309	311	317	Max	15.00	0.00	18	0.00	18	0.00	18	4775.53	18	-3985.52	18	30.28	18
309	311	317	Max	273.49									2204.90	18		
309	311	317	Max	557.00	0.00	18	0.00	18	0.00	18	-5208.11	18	-5157.81	18	30.28	18
309	311	317	Min.	15.00	0.00	18	0.00	18	0.00	18	4775.53	18	-3985.52	18	30.28	18
309	311	317	Min.	273.49									2204.90	18		
309	311	317	Min.	557.00	0.00	18	0.00	18	0.00	18	-5208.11	18	-5157.81	18	30.28	18
310	306	312	Max	105.00	0.00	18	0.00	18	0.00	18	3412.87	18	-1989.06	18	-67.71	18
310	306	312	Max	286.44									1107.08	18		
310	306	312	Max	444.00	0.00	18	0.00	18	0.00	18	-2963.72	18	-1227.76	18	-67.71	18
310	306	312	Min.	105.00	0.00	18	0.00	18	0.00	18	3412.87	18	-1989.06	18	-67.71	18
310	306	312	Min.	286.44									1107.08	18		
310	306	312	Min.	444.00	0.00	18	0.00	18	0.00	18	-2963.72	18	-1227.76	18	-67.71	18
310	312	318	Max	60.00	0.00	18	0.00	18	0.00	18	3635.58	18	-1998.04	18	-32.80	18
310	312	318	Max	252.69									1515.34	18		
310	312	318	Max	467.00	0.00	18	0.00	18	0.00	18	-4020.09	18	-2780.51	18	-32.80	18
310	312	318	Min.	60.00	0.00	18	0.00	18	0.00	18	3635.58	18	-1998.04	18	-32.80	18
310	312	318	Min.	252.69									1515.34	18		
310	312	318	Min.	467.00	0.00	18	0.00	18	0.00	18	-4020.09	18	-2780.51	18	-32.80	18
401	401	402	Max	12.50	0.00	18	0.00	18	0.00	18	6272.01	18	-4898.56	18	-158.24	18
401	401	402	Max	231.63									1973.26	18		
401	401	402	Max	405.00	0.00	18	0.00	18	0.00	18	-4962.41	18	-2328.48	18	-158.24	18
401	401	402	Min.	12.50	0.00	18	0.00	18	0.00	18	6272.01	18	-4898.56	18	-158.24	18
401	401	402	Min.	231.63									1973.26	18		
401	401	402	Min.	405.00	0.00	18	0.00	18	0.00	18	-4962.41	18	-2328.48	18	-158.24	18
401	402	403	Max	35.00	0.00	18	0.00	18	0.00	18	6360.17	18	-4794.48	18	-160.91	18
401	402	403	Max	254.12									2173.64	18		
401	402	403	Max	431.00	0.00	18	0.00	18	0.00	18	-5134.25	18	-2367.15	18	-160.91	18
401	402	403	Min.	35.00	0.00	18	0.00	18	0.00	18	6360.17	18	-4794.48	18	-160.91	18
401	402	403	Min.	254.12									2173.64	18		
401	402	403	Min.	431.00	0.00	18	0.00	18	0.00	18	-5134.25	18	-2367.15	18	-160.91	18
401	403	404	Max	12.00	0.00	18	0.00	18	0.00	18	4788.16	18	-4254.56	18	-11.90	18
401	403	404	Max	266.55									1839.66	18		
401	403	404	Max	496.00	0.00	18	0.00	18	0.00	18	-4315.88	18	-3111.66	18	-11.90	18
401	403	404	Min.	12.00	0.00	18	0.00	18	0.00	18	4788.16	18	-4254.56	18	-11.90	18
401	403	404	Min.	266.55									1839.66	18		
401	403	404	Min.	496.00	0.00	18	0.00	18	0.00	18	-4315.88	18	-3111.66	18	-11.90	18
401	404	405	Max	58.00	0.00	18	0.00	18	0.00	18	4875.95	18	-2232.35	18	216.04	18
401	404	405	Max	227.75									1916.90	18		
401	404	405	Max	428.00	0.00	18	0.00	18	0.00	18	-5724.37	18	-3801.91	18	216.04	18
401	404	405	Min.	58.00	0.00	18	0.00	18	0.00	18	4875.95	18	-2232.35	18	216.04	18
401	404	405	Min.	227.75									1916.90	18		
401	404	405	Min.	428.00	0.00	18	0.00	18	0.00	18	-5724.37	18	-3801.91	18	216.04	18
401	405	406	Max	35.00	0.00	18	0.00	18	0.00	18	4436.52	18	-1699.52	18	182.29	18
401	405	406	Max	194.22									1846.49	18		
401	405	406	Max	396.00	0.00	18	0.00	18	0.00	18	-5582.29	18	-3767.63	18	182.29	18
401	405	406	Min.	35.00	0.00	18	0.00	18	0.00	18	4436.52	18	-1699.52	18	182.29	18
401	405	406	Min.	194.22									1846.49	18		
401	405	406	Min.	396.00	0.00	18	0.00	18	0.00	18	-5582.29	18	-3767.63	18	182.29	18
402	407	408	Max	12.50	0.00	18	0.00	18	0.00	18	9559.35	18	-9183.16	18	27.37	18
402	407	408	Max	248.00									2417.94	18		
402	407	408	Max	405.00	0.00	18	0.00	18	0.00	18	-5884.63	18	-1971.53	18	27.37	18
402	407	408	Min.	12.50	0.00	18	0.00	18	0.00	18	9559.35	18	-9183.16	18	27.37	18
402	407	408	Min.	248.00									2417.94	18		
402	407	408	Min.	405.00	0.00	18	0.00	18	0.00	18	-5884.63	18	-1971.53	18	27.37	18
402	408	409	Max	35.00	0.00	18	0.00	18	0.00	18	9926.58	18	-8711.80	18	206.14	18
402	408	409	Max	281.51									3541.18	18		
402	408	409	Max	432.00	0.00	18	0.00	18	0.00	18	-6036.53	18	-990.04	18	206.14	18
402	408	409	Min.	35.00	0.00	18	0.00	18	0.00	18	9926.58	18	-8711.80	18	206.14	18
402	408	409	Min.	281.51									3541.18	18		
402	408	409	Min.	432.00	0.00	18	0.00	18	0.00	18	-6036.53	18	-990.04	18	206.14	18
402	409	-1746	Max	13.00	0.00	18	0.00	18	0.00	18	4321.62	18	-2697.22	18	927.16	18
402	409	-1746	Max	84.67	0.00	18	0.00	18	0.00	18	2844.57	18	-129.34	18	927.16	18
402	409	-1746	Min.	13.00	0.00	18	0.00	18	0.00	18	4321.62	18	-2697.22	18	927.16	18
402	409	-1746	Min.	84.67	0.00	18	0.00	18	0.00	18	2844.57	18	-129.34	18	927.16	18
402	-1746	-1747	Max	0.00	0.00	18	0.00	18	0.00	18	2510.25	18	-71.03	18	1006.44	18
402	-1746	-1747	Max	84.67	0.00	18	0.00	18	0.00	18	765.27	18	1315.61	18	1006.44	18
402	-1746	-1747	Min.	0.00	0.00	18	0.00	18	0.00	18	2510.25	18	-71.03	18	1006.44	18
402	-1746	-1747	Min.	84.67	0.00	18	0.00	18	0.00	18	765.27	18	1315.61	18	1006.44	18
402	-1747	-1748	Max	0.00	0.00	18	0.00	18	0.00	18	1210.04	18	1237.78	18	552.15	18
402	-1747	-1748	Max	58.09									1592.95	18		



402	-1747	-1748	Max	84.67	0.00	18	0.00	18	0.00	18	-534.94	18	1523.57	18	552.15	18
402	-1747	-1748	Min.	0.00	0.00	18	0.00	18	0.00	18	1210.04	18	1237.78	18	552.15	18
402	-1747	-1748	Min.	58.09									1592.95	18		
402	-1747	-1748	Min.	84.67	0.00	18	0.00	18	0.00	18	-534.94	18	1523.57	18	552.15	18
402	-1748	-1749	Max	0.00	0.00	18	0.00	18	0.00	18	82.48	18	1452.54	18	-171.96	18
402	-1748	-1749	Max	3.27									1454.14	18		
402	-1748	-1749	Max	84.67	0.00	18	0.00	18	0.00	18	-1662.50	18	783.67	18	-171.96	18
402	-1748	-1749	Min.	0.00	0.00	18	0.00	18	0.00	18	82.48	18	1452.54	18	-171.96	18
402	-1748	-1749	Min.	3.27									1454.14	18		
402	-1748	-1749	Min.	84.67	0.00	18	0.00	18	0.00	18	-1662.50	18	783.67	18	-171.96	18
402	-1749	-1750	Max	0.00	0.00	18	0.00	18	0.00	18	-889.88	18	597.71	18	-664.94	18
402	-1749	-1750	Max	84.67	0.00	18	0.00	18	0.00	18	-2634.86	18	-894.43	18	-664.94	18
402	-1749	-1750	Min.	0.00	0.00	18	0.00	18	0.00	18	-889.88	18	597.71	18	-664.94	18
402	-1749	-1750	Min.	84.67	0.00	18	0.00	18	0.00	18	-2634.86	18	-894.43	18	-664.94	18
402	-1750	410	Max	0.00	0.00	18	0.00	18	0.00	18	-3132.99	18	-1319.47	18	-659.48	18
402	-1750	410	Max	71.67	0.00	18	0.00	18	0.00	18	-4610.04	18	-4094.06	18	-659.48	18
402	-1750	410	Min.	0.00	0.00	18	0.00	18	0.00	18	-3132.99	18	-1319.47	18	-659.48	18
402	-1750	410	Min.	71.67	0.00	18	0.00	18	0.00	18	-4610.04	18	-4094.06	18	-659.48	18
402	410	411	Max	57.00	0.00	18	0.00	18	0.00	18	6234.78	18	-2023.68	18	-399.62	18
402	410	411	Max	214.93									2908.73	18		
402	410	411	Max	428.00	0.00	18	0.00	18	0.00	18	-8384.45	18	-6011.33	18	-399.62	18
402	410	411	Min.	57.00	0.00	18	0.00	18	0.00	18	6234.78	18	-2023.68	18	-399.62	18
402	410	411	Min.	214.93									2908.73	18		
402	410	411	Min.	428.00	0.00	18	0.00	18	0.00	18	-8384.45	18	-6011.33	18	-399.62	18
402	411	412	Max	35.00	0.00	18	0.00	18	0.00	18	4921.78	18	-172.70	18	-2.76	18
402	411	412	Max	166.28									3057.95	18		
402	411	412	Max	396.00	0.00	18	0.00	18	0.00	18	-8612.40	18	-6834.27	18	-2.76	18
402	411	412	Min.	35.00	0.00	18	0.00	18	0.00	18	4921.78	18	-172.70	18	-2.76	18
402	411	412	Min.	166.28									3057.95	18		
402	411	412	Min.	396.00	0.00	18	0.00	18	0.00	18	-8612.40	18	-6834.27	18	-2.76	18
403	413	-1819	Max	12.50	0.00	18	0.00	18	0.00	18	5641.47	18	-5491.13	18	-2647.92	18
403	413	-1819	Max	88.00	0.00	18	0.00	18	0.00	18	3314.18	18	-2110.38	18	-2647.92	18
403	413	-1819	Min.	12.50	0.00	18	0.00	18	0.00	18	5641.47	18	-5491.13	18	-2647.92	18
403	413	-1819	Min.	88.00	0.00	18	0.00	18	0.00	18	3314.18	18	-2110.38	18	-2647.92	18
403	-1819	-1820	Max	0.00	0.00	18	0.00	18	0.00	18	4046.16	18	-1094.00	18	-1180.69	18
403	-1819	-1820	Max	88.00	0.00	18	0.00	18	0.00	18	1333.56	18	1273.07	18	-1180.69	18
403	-1819	-1820	Min.	0.00	0.00	18	0.00	18	0.00	18	4046.16	18	-1094.00	18	-1180.69	18
403	-1819	-1820	Min.	88.00	0.00	18	0.00	18	0.00	18	1333.56	18	1273.07	18	-1180.69	18
403	-1820	-1821	Max	0.00	0.00	18	0.00	18	0.00	18	1734.40	18	1988.92	18	-326.93	18
403	-1820	-1821	Max	55.81									2476.83	18		
403	-1820	-1821	Max	88.00	0.00	18	0.00	18	0.00	18	-978.20	18	2321.65	18	-326.93	18
403	-1820	-1821	Min.	0.00	0.00	18	0.00	18	0.00	18	1734.40	18	1988.92	18	-326.93	18
403	-1820	-1821	Min.	55.81									2476.83	18		
403	-1820	-1821	Min.	88.00	0.00	18	0.00	18	0.00	18	-978.20	18	2321.65	18	-326.93	18
403	-1821	-1822	Max	0.00	0.00	18	0.00	18	0.00	18	-386.20	18	2003.06	18	529.06	18
403	-1821	-1822	Max	88.00	0.00	18	0.00	18	0.00	18	-3098.80	18	469.66	18	529.06	18
403	-1821	-1822	Min.	0.00	0.00	18	0.00	18	0.00	18	-386.20	18	2003.06	18	529.06	18
403	-1821	-1822	Min.	88.00	0.00	18	0.00	18	0.00	18	-3098.80	18	469.66	18	529.06	18
403	-1822	414	Max	0.00	0.00	18	0.00	18	0.00	18	-4261.68	18	-260.42	18	2516.12	18
403	-1822	414	Max	53.00	0.00	18	0.00	18	0.00	18	-5895.40	18	-2952.04	18	2516.12	18
403	-1822	414	Min.	0.00	0.00	18	0.00	18	0.00	18	-4261.68	18	-260.42	18	2516.12	18
403	-1822	414	Min.	53.00	0.00	18	0.00	18	0.00	18	-5895.40	18	-2952.04	18	2516.12	18
403	414	-1823	Max	35.00	0.00	18	0.00	18	0.00	18	8471.14	18	-6330.44	18	-4827.62	18
403	414	-1823	Max	97.80	0.00	18	0.00	18	0.00	18	6506.57	18	-1627.44	18	-4827.62	18
403	414	-1823	Min.	35.00	0.00	18	0.00	18	0.00	18	8471.14	18	-6330.44	18	-4827.62	18
403	414	-1823	Min.	97.80	0.00	18	0.00	18	0.00	18	6506.57	18	-1627.44	18	-4827.62	18
403	-1823	-1824	Max	0.00	0.00	18	0.00	18	0.00	18	3600.38	18	-47.20	18	-2424.41	18
403	-1823	-1824	Max	97.80	0.00	18	0.00	18	0.00	18	540.90	18	1977.89	18	-2424.41	18
403	-1823	-1824	Min.	0.00	0.00	18	0.00	18	0.00	18	3600.38	18	-47.20	18	-2424.41	18
403	-1823	-1824	Min.	97.80	0.00	18	0.00	18	0.00	18	540.90	18	1977.89	18	-2424.41	18
403	-1824	-1825	Max	0.00	0.00	18	0.00	18	0.00	18	1468.89	18	3167.19	18	-1400.32	18
403	-1824	-1825	Max	46.37									3511.99	18		
403	-1824	-1825	Max	97.80	0.00	18	0.00	18	0.00	18	-1590.59	18	3107.67	18	-1400.32	18
403	-1824	-1825	Min.	0.00	0.00	18	0.00	18	0.00	18	1468.89	18	3167.19	18	-1400.32	18
403	-1824	-1825	Min.	46.37									3511.99	18		
403	-1824	-1825	Min.	97.80	0.00	18	0.00	18	0.00	18	-1590.59	18	3107.67	18	-1400.32	18
403	-1825	-1826	Max	0.00	0.00	18	0.00	18	0.00	18	-689.93	18	2568.53	18	-557.69	18
403	-1825	-1826	Max	97.80	0.00	18	0.00	18	0.00	18	-3749.41	18	397.69	18	-557.69	18
403	-1825	-1826	Min.	0.00	0.00	18	0.00	18	0.00	18	-689.93	18	2568.53	18	-557.69	18
403	-1825	-1826	Min.	97.80	0.00	18	0.00	18	0.00	18	-3749.41	18	397.69	18	-557.69	18
403	-1826	415	Max	0.00	0.00	18	0.00	18	0.00	18	-4896.24	18	-1275.78	18	866.88	18
403	-1826	415	Max	80.30	0.00	18	0.00	18	0.00	18	-7408.27	18	-6216.04	18	866.88	18
403	-1826	415	Min.	0.00	0.00	18	0.00	18	0.00	18	-4896.24	18	-1275.78	18	866.88	18
403	-1826	415	Min.	80.30	0.00	18	0.00	18	0.00	18	-7408.27	18	-6216.04	18	866.88	18
403	415	-1827	Max	12.50	0.00	18	0.00	18	0.00	18	6327.09	18	-7300.92	18	-857.73	18
403	415	-1827	Max	92.75	0.00	18	0.00	18	0.00	18	5279.83	18	-2643.64	18	-857.73	18



403	415	-1827	Min.	12.50	0.00	18	0.00	18	0.00	18	6327.09	18	-7300.92	18	-857.73	18
403	415	-1827	Min.	92.75	0.00	18	0.00	18	0.00	18	5279.83	18	-2643.64	18	-857.73	18
403	-1827	-1828	Max	0.00	0.00	18	0.00	18	0.00	18	3743.19	18	-1294.81	18	679.53	18
403	-1827	-1828	Max	92.75	0.00	18	0.00	18	0.00	18	2532.80	18	1615.69	18	679.53	18
403	-1827	-1828	Min.	0.00	0.00	18	0.00	18	0.00	18	3743.19	18	-1294.81	18	679.53	18
403	-1827	-1828	Min.	92.75	0.00	18	0.00	18	0.00	18	2532.80	18	1615.69	18	679.53	18
403	-1828	-1829	Max	0.00	0.00	18	0.00	18	0.00	18	2135.69	18	2418.07	18	1814.86	18
403	-1828	-1829	Max	92.75	0.00	18	0.00	18	0.00	18	925.30	18	3837.60	18	1814.86	18
403	-1828	-1829	Min.	0.00	0.00	18	0.00	18	0.00	18	2135.69	18	2418.07	18	1814.86	18
403	-1828	-1829	Min.	92.75	0.00	18	0.00	18	0.00	18	925.30	18	3837.60	18	1814.86	18
403	-1829	-1830	Max	0.00	0.00	18	0.00	18	0.00	18	644.74	18	3772.79	18	3129.98	18
403	-1829	-1830	Max	49.41									3932.06	18		
403	-1829	-1830	Max	92.75	0.00	18	0.00	18	0.00	18	-565.64	18	3809.47	18	3129.98	18
403	-1829	-1830	Min.	0.00	0.00	18	0.00	18	0.00	18	644.74	18	3772.79	18	3129.98	18
403	-1829	-1830	Min.	49.41									3932.06	18		
403	-1829	-1830	Min.	92.75	0.00	18	0.00	18	0.00	18	-565.64	18	3809.47	18	3129.98	18
403	-1830	-1831	Max	0.00	0.00	18	0.00	18	0.00	18	-2413.44	18	2758.38	18	3302.08	18
403	-1830	-1831	Max	68.50	0.00	18	0.00	18	0.00	18	-3307.37	18	799.00	18	3302.08	18
403	-1830	-1831	Min.	0.00	0.00	18	0.00	18	0.00	18	-2413.44	18	2758.38	18	3302.08	18
403	-1830	-1831	Min.	68.50	0.00	18	0.00	18	0.00	18	-3307.37	18	799.00	18	3302.08	18
403	-1831	416	Max	0.00	0.00	18	0.00	18	0.00	18	-9981.28	18	-1128.94	18	1801.50	18
403	-1831	416	Max	56.00	0.00	18	0.00	18	0.00	18	-10712.10	18	-6923.08	18	1801.50	18
403	-1831	416	Min.	0.00	0.00	18	0.00	18	0.00	18	-9981.28	18	-1128.94	18	1801.50	18
403	-1831	416	Min.	56.00	0.00	18	0.00	18	0.00	18	-10712.10	18	-6923.08	18	1801.50	18
403	416	-1832	Max	17.50	0.00	18	0.00	18	0.00	18	7505.15	18	-6196.26	18	-2588.02	18
403	416	-1832	Max	92.60	0.00	18	0.00	18	0.00	18	5187.91	18	-1430.02	18	-2588.02	18
403	416	-1832	Min.	17.50	0.00	18	0.00	18	0.00	18	7505.15	18	-6196.26	18	-2588.02	18
403	416	-1832	Min.	92.60	0.00	18	0.00	18	0.00	18	5187.91	18	-1430.02	18	-2588.02	18
403	-1832	-1833	Max	0.00	0.00	18	0.00	18	0.00	18	3857.10	18	-250.30	18	-604.57	18
403	-1832	-1833	Max	92.60	0.00	18	0.00	18	0.00	18	999.89	18	1998.49	18	-604.57	18
403	-1832	-1833	Min.	0.00	0.00	18	0.00	18	0.00	18	3857.10	18	-250.30	18	-604.57	18
403	-1832	-1833	Min.	92.60	0.00	18	0.00	18	0.00	18	999.89	18	1998.49	18	-604.57	18
403	-1833	-1834	Max	0.00	0.00	18	0.00	18	0.00	18	1544.09	18	2512.31	18	374.92	18
403	-1833	-1834	Max	50.04									2898.66	18		
403	-1833	-1834	Max	92.60	0.00	18	0.00	18	0.00	18	-1313.13	18	2619.24	18	374.92	18
403	-1833	-1834	Min.	0.00	0.00	18	0.00	18	0.00	18	1544.09	18	2512.31	18	374.92	18
403	-1833	-1834	Min.	50.04									2898.66	18		
403	-1833	-1834	Min.	92.60	0.00	18	0.00	18	0.00	18	-1313.13	18	2619.24	18	374.92	18
403	-1834	-1835	Max	0.00	0.00	18	0.00	18	0.00	18	-811.96	18	1952.43	18	1406.44	18
403	-1834	-1835	Max	92.60	0.00	18	0.00	18	0.00	18	-3669.16	18	-122.32	18	1406.44	18
403	-1834	-1835	Min.	0.00	0.00	18	0.00	18	0.00	18	-811.96	18	1952.43	18	1406.44	18
403	-1834	-1835	Min.	92.60	0.00	18	0.00	18	0.00	18	-3669.16	18	-122.32	18	1406.44	18
403	-1835	417	Max	0.00	0.00	18	0.00	18	0.00	18	-6040.64	18	-1140.86	18	3561.48	18
403	-1835	417	Max	57.60	0.00	18	0.00	18	0.00	18	-7817.91	18	-5132.12	18	3561.48	18
403	-1835	417	Min.	0.00	0.00	18	0.00	18	0.00	18	-6040.64	18	-1140.86	18	3561.48	18
403	-1835	417	Min.	57.60	0.00	18	0.00	18	0.00	18	-7817.91	18	-5132.12	18	3561.48	18
403	417	-1836	Max	35.00	0.00	18	0.00	18	0.00	18	5628.45	18	-2063.53	18	-2663.59	18
403	417	-1836	Max	82.20	0.00	18	0.00	18	0.00	18	4220.10	18	260.73	18	-2663.59	18
403	417	-1836	Min.	35.00	0.00	18	0.00	18	0.00	18	5628.45	18	-2063.53	18	-2663.59	18
403	417	-1836	Min.	82.20	0.00	18	0.00	18	0.00	18	4220.10	18	260.73	18	-2663.59	18
403	-1836	-1837	Max	0.00	0.00	18	0.00	18	0.00	18	3060.25	18	926.56	18	-789.49	18
403	-1836	-1837	Max	82.20	0.00	18	0.00	18	0.00	18	607.58	18	2434.03	18	-789.49	18
403	-1836	-1837	Min.	0.00	0.00	18	0.00	18	0.00	18	3060.25	18	926.56	18	-789.49	18
403	-1836	-1837	Min.	82.20	0.00	18	0.00	18	0.00	18	607.58	18	2434.03	18	-789.49	18
403	-1837	-1838	Max	0.00	0.00	18	0.00	18	0.00	18	1073.04	18	2716.57	18	172.46	18
403	-1837	-1838	Max	35.50									2909.49	18		
403	-1837	-1838	Max	82.20	0.00	18	0.00	18	0.00	18	-1379.63	18	2590.56	18	172.46	18
403	-1837	-1838	Min.	0.00	0.00	18	0.00	18	0.00	18	1073.04	18	2716.57	18	172.46	18
403	-1837	-1838	Min.	35.50									2909.49	18		
403	-1837	-1838	Min.	82.20	0.00	18	0.00	18	0.00	18	-1379.63	18	2590.56	18	172.46	18
403	-1838	-1839	Max	0.00	0.00	18	0.00	18	0.00	18	-1042.23	18	2001.03	18	1156.34	18
403	-1838	-1839	Max	82.20	0.00	18	0.00	18	0.00	18	-3494.90	18	136.27	18	1156.34	18
403	-1838	-1839	Min.	0.00	0.00	18	0.00	18	0.00	18	-1042.23	18	2001.03	18	1156.34	18
403	-1838	-1839	Min.	82.20	0.00	18	0.00	18	0.00	18	-3494.90	18	136.27	18	1156.34	18
403	-1839	418	Max	0.00	0.00	18	0.00	18	0.00	18	-5076.63	18	-1494.66	18	3392.82	18
403	-1839	418	Max	67.20	0.00	18	0.00	18	0.00	18	-7081.74	18	-5579.88	18	3392.82	18
403	-1839	418	Min.	0.00	0.00	18	0.00	18	0.00	18	-5076.63	18	-1494.66	18	3392.82	18
403	-1839	418	Min.	67.20	0.00	18	0.00	18	0.00	18	-7081.74	18	-5579.88	18	3392.82	18
404	401	-1727	Max	0.00	0.00	18	0.00	18	0.00	18	5266.65	18	-5934.21	18	-3594.69	18
404	401	-1727	Max	84.00	0.00	18	0.00	18	0.00	18	3674.85	18	-2178.78	18	-3594.69	18
404	401	-1727	Min.	0.00	0.00	18	0.00	18	0.00	18	5266.65	18	-5934.21	18	-3594.69	18
404	401	-1727	Min.	84.00	0.00	18	0.00	18	0.00	18	3674.85	18	-2178.78	18	-3594.69	18
404	-1727	-1730	Max	0.00	0.00	18	0.00	18	0.00	18	2749.57	18	-84.21	18	-1356.09	18
404	-1727	-1730	Max	84.00	0.00	18	0.00	18	0.00	18	1157.77	18	1556.88	18	-1356.09	18
404	-1727	-1730	Min.	0.00	0.00	18	0.00	18	0.00	18	2749.57	18	-84.21	18	-1356.09	18
404	-1727	-1730	Min.	84.00	0.00	18	0.00	18	0.00	18	1157.77	18	1556.88	18	-1356.09	18





404	-1730	-1733	Max	0.00	0.00	18	0.00	18	0.00	18	1452.24	18	2413.22	18	-283.04	18
404	-1730	-1733	Max	76.64									2969.69	18		
404	-1730	-1733	Max	84.00	0.00	18	0.00	18	0.00	18	-139.56	18	2964.55	18	-283.04	18
404	-1730	-1733	Min.	0.00	0.00	18	0.00	18	0.00	18	1452.24	18	2413.22	18	-283.04	18
404	-1730	-1733	Min.	76.64									2969.69	18		
404	-1730	-1733	Min.	84.00	0.00	18	0.00	18	0.00	18	-139.56	18	2964.55	18	-283.04	18
404	-1733	-1738	Max	0.00	0.00	18	0.00	18	0.00	18	-245.37	18	2919.21	18	526.15	18
404	-1733	-1738	Max	84.00	0.00	18	0.00	18	0.00	18	-1837.17	18	2044.55	18	526.15	18
404	-1733	-1738	Min.	0.00	0.00	18	0.00	18	0.00	18	-245.37	18	2919.21	18	526.15	18
404	-1733	-1738	Min.	84.00	0.00	18	0.00	18	0.00	18	-1837.17	18	2044.55	18	526.15	18
404	-1738	-1742	Max	0.00	0.00	18	0.00	18	0.00	18	-1778.19	18	1242.58	18	1585.64	18
404	-1738	-1742	Max	84.00	0.00	18	0.00	18	0.00	18	-3369.99	18	-919.66	18	1585.64	18
404	-1738	-1742	Min.	0.00	0.00	18	0.00	18	0.00	18	-1778.19	18	1242.58	18	1585.64	18
404	-1738	-1742	Min.	84.00	0.00	18	0.00	18	0.00	18	-3369.99	18	-919.66	18	1585.64	18
404	-1742	407	Max	0.00	0.00	18	0.00	18	0.00	18	-5641.95	18	-1775.37	18	3789.16	18
404	-1742	407	Max	54.00	0.00	18	0.00	18	0.00	18	-6665.25	18	-5098.32	18	3789.16	18
404	-1742	407	Min.	0.00	0.00	18	0.00	18	0.00	18	-5641.95	18	-1775.37	18	3789.16	18
404	-1742	407	Min.	54.00	0.00	18	0.00	18	0.00	18	-6665.25	18	-5098.32	18	3789.16	18
404	407	-1761	Max	30.00	0.00	18	0.00	18	0.00	18	6586.40	18	-5142.22	18	-3623.00	18
404	407	-1761	Max	95.33	0.00	18	0.00	18	0.00	18	5348.34	18	-1243.54	18	-3623.00	18
404	407	-1761	Min.	30.00	0.00	18	0.00	18	0.00	18	6586.40	18	-5142.22	18	-3623.00	18
404	407	-1761	Min.	95.33	0.00	18	0.00	18	0.00	18	5348.34	18	-1243.54	18	-3623.00	18
404	-1761	-1778	Max	0.00	0.00	18	0.00	18	0.00	18	3262.58	18	-106.47	18	-1390.65	18
404	-1761	-1778	Max	95.33	0.00	18	0.00	18	0.00	18	1456.01	18	2142.72	18	-1390.65	18
404	-1761	-1778	Min.	0.00	0.00	18	0.00	18	0.00	18	3262.58	18	-106.47	18	-1390.65	18
404	-1761	-1778	Min.	95.33	0.00	18	0.00	18	0.00	18	1456.01	18	2142.72	18	-1390.65	18
404	-1778	-1791	Max	0.00	0.00	18	0.00	18	0.00	18	1449.29	18	2998.97	18	-348.29	18
404	-1778	-1791	Max	76.44									3553.17	18		
404	-1778	-1791	Max	95.33	0.00	18	0.00	18	0.00	18	-357.28	18	3519.49	18	-348.29	18
404	-1778	-1791	Min.	0.00	0.00	18	0.00	18	0.00	18	1449.29	18	2998.97	18	-348.29	18
404	-1778	-1791	Min.	76.44									3553.17	18		
404	-1778	-1791	Min.	95.33	0.00	18	0.00	18	0.00	18	-357.28	18	3519.49	18	-348.29	18
404	-1791	-1802	Max	0.00	0.00	18	0.00	18	0.00	18	-236.11	18	3361.92	18	430.48	18
404	-1791	-1802	Max	95.33	0.00	18	0.00	18	0.00	18	-2042.67	18	2275.70	18	430.48	18
404	-1791	-1802	Min.	0.00	0.00	18	0.00	18	0.00	18	-236.11	18	3361.92	18	430.48	18
404	-1791	-1802	Min.	95.33	0.00	18	0.00	18	0.00	18	-2042.67	18	2275.70	18	430.48	18
404	-1802	-1813	Max	0.00	0.00	18	0.00	18	0.00	18	-1932.71	18	1080.74	18	1343.67	18
404	-1802	-1813	Max	95.33	0.00	18	0.00	18	0.00	18	-3739.28	18	-1622.91	18	1343.67	18
404	-1802	-1813	Min.	0.00	0.00	18	0.00	18	0.00	18	-1932.71	18	1080.74	18	1343.67	18
404	-1802	-1813	Min.	95.33	0.00	18	0.00	18	0.00	18	-3739.28	18	-1622.91	18	1343.67	18
404	-1813	413	Max	0.00	0.00	18	0.00	18	0.00	18	-3280.96	18	-3637.56	18	3072.31	18
404	-1813	413	Max	95.33	0.00	18	0.00	18	0.00	18	-5087.52	18	-7626.53	18	3072.31	18
404	-1813	413	Min.	0.00	0.00	18	0.00	18	0.00	18	-3280.96	18	-3637.56	18	3072.31	18
404	-1813	413	Min.	95.33	0.00	18	0.00	18	0.00	18	-5087.52	18	-7626.53	18	3072.31	18
405	402	408	Max	15.00	0.00	18	0.00	18	0.00	18	4413.96	18	-3344.08	18	52.29	18
405	402	408	Max	252.82									1904.58	18		
405	402	408	Max	489.00	0.00	18	0.00	18	0.00	18	-4383.48	18	-3271.84	18	52.29	18
405	402	408	Min.	15.00	0.00	18	0.00	18	0.00	18	4413.96	18	-3344.08	18	52.29	18
405	402	408	Min.	252.82									1904.58	18		
405	402	408	Min.	489.00	0.00	18	0.00	18	0.00	18	-4383.48	18	-3271.84	18	52.29	18
405	408	414	Max	15.00	0.00	18	0.00	18	0.00	18	4585.06	18	-3543.67	18	-13.27	18
405	408	414	Max	261.52									2119.77	18		
405	408	414	Max	557.00	0.00	18	0.00	18	0.00	18	-5474.46	18	-5953.93	18	-13.27	18
405	408	414	Min.	15.00	0.00	18	0.00	18	0.00	18	4585.06	18	-3543.67	18	-13.27	18
405	408	414	Min.	261.52									2119.77	18		
405	408	414	Min.	557.00	0.00	18	0.00	18	0.00	18	-5474.46	18	-5953.93	18	-13.27	18
407	403	409	Max	15.00	0.00	18	0.00	18	0.00	18	8725.02	18	-6758.19	18	15.38	18
407	403	409	Max	257.23									3808.89	18		
407	403	409	Max	489.00	0.00	18	0.00	18	0.00	18	-8348.62	18	-5866.12	18	15.38	18
407	403	409	Min.	15.00	0.00	18	0.00	18	0.00	18	8725.02	18	-6758.19	18	15.38	18
407	403	409	Min.	257.23									3808.89	18		
407	403	409	Min.	489.00	0.00	18	0.00	18	0.00	18	-8348.62	18	-5866.12	18	15.38	18
407	409	-1758	Max	15.00	0.00	18	0.00	18	0.00	18	4342.52	18	-2526.02	18	-634.73	18
407	409	-1758	Max	82.00	0.00	18	0.00	18	0.00	18	3011.90	18	-62.29	18	-634.73	18
407	409	-1758	Min.	15.00	0.00	18	0.00	18	0.00	18	4342.52	18	-2526.02	18	-634.73	18
407	409	-1758	Min.	82.00	0.00	18	0.00	18	0.00	18	3011.90	18	-62.29	18	-634.73	18
407	-1758	-1772	Max	0.00	0.00	18	0.00	18	0.00	18	3223.79	18	620.80	18	-13.72	18
407	-1758	-1772	Max	82.00	0.00	18	0.00	18	0.00	18	1595.27	18	2596.62	18	-13.72	18
407	-1758	-1772	Min.	0.00	0.00	18	0.00	18	0.00	18	3223.79	18	620.80	18	-13.72	18
407	-1758	-1772	Min.	82.00	0.00	18	0.00	18	0.00	18	1595.27	18	2596.62	18	-13.72	18
407	-1772	-2025	Max	0.00	0.00	18	0.00	18	0.00	18	913.34	18	3003.17	18	181.40	18
407	-1772	-2025	Max	44.60									3212.99	18		
407	-1772	-2025	Max	223.00	0.00	18	0.00	18	0.00	18	-3515.44	18	101.83	18	181.40	18
407	-1772	-2025	Min.	0.00	0.00	18	0.00	18	0.00	18	913.34	18	3003.17	18	181.40	18
407	-1772	-2025	Min.	44.60									3212.99	18		
407	-1772	-2025	Min.	223.00	0.00	18	0.00	18	0.00	18	-3515.44	18	101.83	18	181.40	18



408	404	410	Max	15.00	0.00	18	0.00	18	0.00	18	9314.76	18	-7081.01	18	-4.66	18
408	404	410	Max	256.50									4166.60	18		
408	404	410	Max	489.00	0.00	18	0.00	18	0.00	18	-8967.58	18	-6258.17	18	-4.66	18
408	404	410	Min.	15.00	0.00	18	0.00	18	0.00	18	9314.76	18	-7081.01	18	-4.66	18
408	404	410	Min.	256.50									4166.60	18		
408	404	410	Min.	489.00	0.00	18	0.00	18	0.00	18	-8967.58	18	-6258.17	18	-4.66	18
408	410	-1762	Max	15.00	0.00	18	0.00	18	0.00	18	1962.18	18	-953.34	18	487.40	18
408	410	-1762	Max	95.33	0.00	18	0.00	18	0.00	18	366.76	18	-17.88	18	487.40	18
408	410	-1762	Min.	15.00	0.00	18	0.00	18	0.00	18	1962.18	18	-953.34	18	487.40	18
408	410	-1762	Min.	95.33	0.00	18	0.00	18	0.00	18	366.76	18	-17.88	18	487.40	18
408	-1762	-1779	Max	0.00	0.00	18	0.00	18	0.00	18	845.79	18	-18.86	18	305.58	18
408	-1762	-1779	Max	42.54									161.24	18		
408	-1762	-1779	Max	95.33	0.00	18	0.00	18	0.00	18	-1047.53	18	-115.02	18	305.58	18
408	-1762	-1779	Min.	0.00	0.00	18	0.00	18	0.00	18	845.79	18	-18.86	18	305.58	18
408	-1762	-1779	Min.	42.54									161.24	18		
408	-1762	-1779	Min.	95.33	0.00	18	0.00	18	0.00	18	-1047.53	18	-115.02	18	305.58	18
408	-1779	-1792	Max	0.00	0.00	18	0.00	18	0.00	18	-12.26	18	-319.58	18	-213.65	18
408	-1779	-1792	Max	95.33	0.00	18	0.00	18	0.00	18	-1905.58	18	-1233.75	18	-213.65	18
408	-1779	-1792	Min.	0.00	0.00	18	0.00	18	0.00	18	-12.26	18	-319.58	18	-213.65	18
408	-1779	-1792	Min.	95.33	0.00	18	0.00	18	0.00	18	-1905.58	18	-1233.75	18	-213.65	18
408	-1792	-2028	Max	0.00	0.00	18	0.00	18	0.00	18	-1519.84	18	-1766.06	18	-408.89	18
408	-1792	-2028	Max	101.00	0.00	18	0.00	18	0.00	18	-3525.70	18	-4314.05	18	-408.89	18
408	-1792	-2028	Min.	0.00	0.00	18	0.00	18	0.00	18	-1519.84	18	-1766.06	18	-408.89	18
408	-1792	-2028	Min.	101.00	0.00	18	0.00	18	0.00	18	-3525.70	18	-4314.05	18	-408.89	18
409	405	411	Max	15.00	0.00	18	0.00	18	0.00	18	4390.79	18	-3347.19	18	-36.90	18
409	405	411	Max	253.37									1886.00	18		
409	405	411	Max	489.00	0.00	18	0.00	18	0.00	18	-4340.29	18	-3227.49	18	-36.90	18
409	405	411	Min.	15.00	0.00	18	0.00	18	0.00	18	4390.79	18	-3347.19	18	-36.90	18
409	405	411	Min.	253.37									1886.00	18		
409	405	411	Min.	489.00	0.00	18	0.00	18	0.00	18	-4340.29	18	-3227.49	18	-36.90	18
409	411	417	Max	15.00	0.00	18	0.00	18	0.00	18	4656.37	18	-3766.72	18	34.87	18
409	411	417	Max	266.96									2118.61	18		
409	411	417	Max	557.00	0.00	18	0.00	18	0.00	18	-5327.27	18	-5584.86	18	34.87	18
409	411	417	Min.	15.00	0.00	18	0.00	18	0.00	18	4656.37	18	-3766.72	18	34.87	18
409	411	417	Min.	266.96									2118.61	18		
409	411	417	Min.	557.00	0.00	18	0.00	18	0.00	18	-5327.27	18	-5584.86	18	34.87	18
410	406	412	Max	105.00	0.00	18	0.00	18	0.00	18	3209.08	18	-1644.54	18	-69.81	18
410	406	412	Max	275.61									1092.89	18		
410	406	412	Max	444.00	0.00	18	0.00	18	0.00	18	-3167.51	18	-1574.07	18	-69.81	18
410	406	412	Min.	105.00	0.00	18	0.00	18	0.00	18	3209.08	18	-1644.54	18	-69.81	18
410	406	412	Min.	275.61									1092.89	18		
410	406	412	Min.	444.00	0.00	18	0.00	18	0.00	18	-3167.51	18	-1574.07	18	-69.81	18
410	412	418	Max	60.00	0.00	18	0.00	18	0.00	18	3434.97	18	-1596.44	18	-36.35	18
410	412	418	Max	241.92									1539.88	18		
410	412	418	Max	467.00	0.00	18	0.00	18	0.00	18	-4220.70	18	-3195.41	18	-36.35	18
410	412	418	Min.	60.00	0.00	18	0.00	18	0.00	18	3434.97	18	-1596.44	18	-36.35	18
410	412	418	Min.	241.92									1539.88	18		
410	412	418	Min.	467.00	0.00	18	0.00	18	0.00	18	-4220.70	18	-3195.41	18	-36.35	18
501	502	503	Max	35.00	0.00	18	0.00	18	0.00	18	3820.88	18	-2638.78	18	-271.86	18
501	502	503	Max	251.60									1499.19	18		
501	502	503	Max	431.00	0.00	18	0.00	18	0.00	18	-3164.73	18	-1339.60	18	-271.86	18
501	502	503	Min.	35.00	0.00	18	0.00	18	0.00	18	3820.88	18	-2638.78	18	-271.86	18
501	502	503	Min.	251.60									1499.19	18		
501	502	503	Min.	431.00	0.00	18	0.00	18	0.00	18	-3164.73	18	-1339.60	18	-271.86	18
501	503	504	Max	12.00	0.00	18	0.00	18	0.00	18	2728.59	18	-2548.15	18	27.29	18
501	503	504	Max	271.87									997.18	18		
501	503	504	Max	496.00	0.00	18	0.00	18	0.00	18	-2353.41	18	-1640.23	18	27.29	18
501	503	504	Min.	12.00	0.00	18	0.00	18	0.00	18	2728.59	18	-2548.15	18	27.29	18
501	503	504	Min.	271.87									997.18	18		
501	503	504	Min.	496.00	0.00	18	0.00	18	0.00	18	-2353.41	18	-1640.23	18	27.29	18
501	504	505	Max	58.00	0.00	18	0.00	18	0.00	18	2814.01	18	-982.23	18	156.40	18
501	504	505	Max	219.28									1296.22	18		
501	504	505	Max	428.00	0.00	18	0.00	18	0.00	18	-3615.51	18	-2464.99	18	156.40	18
501	504	505	Min.	58.00	0.00	18	0.00	18	0.00	18	2814.01	18	-982.23	18	156.40	18
501	504	505	Min.	219.28									1296.22	18		
501	504	505	Min.	428.00	0.00	18	0.00	18	0.00	18	-3615.51	18	-2464.99	18	156.40	18
501	505	506	Max	35.00	0.00	18	0.00	18	0.00	18	2543.06	18	-701.19	18	281.87	18
501	505	506	Max	179.60									1224.88	18		
501	505	506	Max	396.00	0.00	18	0.00	18	0.00	18	-3503.85	18	-2435.42	18	281.87	18
501	505	506	Min.	35.00	0.00	18	0.00	18	0.00	18	2543.06	18	-701.19	18	281.87	18
501	505	506	Min.	179.60									1224.88	18		
501	505	506	Min.	396.00	0.00	18	0.00	18	0.00	18	-3503.85	18	-2435.42	18	281.87	18
502	508	509	Max	35.00	0.00	18	0.00	18	0.00	18	6873.23	18	-5440.95	18	413.77	18
502	508	509	Max	274.15									2786.91	18		
502	508	509	Max	432.00	0.00	18	0.00	18	0.00	18	-4523.90	18	-777.52	18	413.77	18
502	508	509	Min.	35.00	0.00	18	0.00	18	0.00	18	6873.23	18	-5440.95	18	413.77	18





502	508	509	Min.	274.15								2786.91	18			
502	508	509	Min.	432.00	0.00	18	0.00	18	0.00	18	-4523.90	18	-777.52	18	413.77	18
502	509	-1937	Max	13.00	0.00	18	0.00	18	0.00	18	1359.23	18	-980.29	18	590.60	18
502	509	-1937	Max	84.67	0.00	18	0.00	18	0.00	18	764.40	18	-219.33	18	590.60	18
502	509	-1937	Min.	13.00	0.00	18	0.00	18	0.00	18	1359.23	18	-980.29	18	590.60	18
502	509	-1937	Min.	84.67	0.00	18	0.00	18	0.00	18	764.40	18	-219.33	18	590.60	18
502	-1937	-1938	Max	0.00	0.00	18	0.00	18	0.00	18	763.67	18	-248.98	18	409.37	18
502	-1937	-1938	Max	84.67	0.00	18	0.00	18	0.00	18	60.94	18	100.11	18	409.37	18
502	-1937	-1938	Min.	0.00	0.00	18	0.00	18	0.00	18	763.67	18	-248.98	18	409.37	18
502	-1937	-1938	Min.	84.67	0.00	18	0.00	18	0.00	18	60.94	18	100.11	18	409.37	18
502	-1938	-1939	Max	0.00	0.00	18	0.00	18	0.00	18	408.41	18	57.13	18	137.50	18
502	-1938	-1939	Max	49.21									157.61	18		
502	-1938	-1939	Max	84.67	0.00	18	0.00	18	0.00	18	-294.32	18	105.42	18	137.50	18
502	-1938	-1939	Min.	0.00	0.00	18	0.00	18	0.00	18	408.41	18	57.13	18	137.50	18
502	-1938	-1939	Min.	49.21									157.61	18		
502	-1938	-1939	Min.	84.67	0.00	18	0.00	18	0.00	18	-294.32	18	105.42	18	137.50	18
502	-1939	-1940	Max	0.00	0.00	18	0.00	18	0.00	18	55.45	18	128.31	18	-290.50	18
502	-1939	-1940	Max	6.07									130.14	18		
502	-1939	-1940	Max	84.67	0.00	18	0.00	18	0.00	18	-647.28	18	-122.23	18	-290.50	18
502	-1939	-1940	Min.	0.00	0.00	18	0.00	18	0.00	18	55.45	18	128.31	18	-290.50	18
502	-1939	-1940	Min.	6.07									130.14	18		
502	-1939	-1940	Min.	84.67	0.00	18	0.00	18	0.00	18	-647.28	18	-122.23	18	-290.50	18
502	-1940	-1941	Max	0.00	0.00	18	0.00	18	0.00	18	-178.68	18	-123.07	18	-565.37	18
502	-1940	-1941	Max	84.67	0.00	18	0.00	18	0.00	18	-881.41	18	-571.84	18	-565.37	18
502	-1940	-1941	Min.	0.00	0.00	18	0.00	18	0.00	18	-178.68	18	-123.07	18	-565.37	18
502	-1940	-1941	Min.	84.67	0.00	18	0.00	18	0.00	18	-881.41	18	-571.84	18	-565.37	18
502	-1941	510	Max	0.00	0.00	18	0.00	18	0.00	18	-1255.71	18	-656.62	18	-562.12	18
502	-1941	510	Max	71.67	0.00	18	0.00	18	0.00	18	-1850.55	18	-1769.70	18	-562.12	18
502	-1941	510	Min.	0.00	0.00	18	0.00	18	0.00	18	-1255.71	18	-656.62	18	-562.12	18
502	-1941	510	Min.	71.67	0.00	18	0.00	18	0.00	18	-1850.55	18	-1769.70	18	-562.12	18
502	510	511	Max	57.00	0.00	18	0.00	18	0.00	18	4386.10	18	-1165.39	18	-398.95	18
502	510	511	Max	205.40									2244.37	18		
502	510	511	Max	428.00	0.00	18	0.00	18	0.00	18	-6056.03	18	-4263.10	18	-398.95	18
502	510	511	Min.	57.00	0.00	18	0.00	18	0.00	18	4386.10	18	-1165.39	18	-398.95	18
502	510	511	Min.	205.40									2244.37	18		
502	510	511	Min.	428.00	0.00	18	0.00	18	0.00	18	-6056.03	18	-4263.10	18	-398.95	18
502	511	512	Max	35.00	0.00	18	0.00	18	0.00	18	3812.22	18	-663.14	18	69.70	18
502	511	512	Max	177.20									2047.43	18		
502	511	512	Max	396.00	0.00	18	0.00	18	0.00	18	-5865.50	18	-4369.32	18	69.70	18
502	511	512	Min.	35.00	0.00	18	0.00	18	0.00	18	3812.22	18	-663.14	18	69.70	18
502	511	512	Min.	177.20									2047.43	18		
502	511	512	Min.	396.00	0.00	18	0.00	18	0.00	18	-5865.50	18	-4369.32	18	69.70	18
503	514	515	Max	35.00	0.00	18	0.00	18	0.00	18	4097.07	18	-2549.65	18	-721.27	18
503	514	515	Max	247.88									1817.67	18		
503	514	515	Max	471.50	0.00	18	0.00	18	0.00	18	-4291.46	18	-2973.89	18	-721.27	18
503	514	515	Min.	35.00	0.00	18	0.00	18	0.00	18	4097.07	18	-2549.65	18	-721.27	18
503	514	515	Min.	247.88									1817.67	18		
503	514	515	Min.	471.50	0.00	18	0.00	18	0.00	18	-4291.46	18	-2973.89	18	-721.27	18
503	515	-2000	Max	12.50	0.00	18	0.00	18	0.00	18	3070.39	18	-2742.07	18	1582.52	18
503	515	-2000	Max	92.75	0.00	18	0.00	18	0.00	18	2592.91	18	-469.68	18	1582.52	18
503	515	-2000	Min.	12.50	0.00	18	0.00	18	0.00	18	3070.39	18	-2742.07	18	1582.52	18
503	515	-2000	Min.	92.75	0.00	18	0.00	18	0.00	18	2592.91	18	-469.68	18	1582.52	18
503	-2000	-2001	Max	0.00	0.00	18	0.00	18	0.00	18	798.01	18	-31.16	18	206.07	18
503	-2000	-2001	Max	92.75	0.00	18	0.00	18	0.00	18	246.14	18	453.06	18	206.07	18
503	-2000	-2001	Min.	0.00	0.00	18	0.00	18	0.00	18	798.01	18	-31.16	18	206.07	18
503	-2000	-2001	Min.	92.75	0.00	18	0.00	18	0.00	18	246.14	18	453.06	18	206.07	18
503	-2001	-2002	Max	0.00	0.00	18	0.00	18	0.00	18	208.73	18	593.71	18	14.14	18
503	-2001	-2002	Max	35.08									630.32	18		
503	-2001	-2002	Max	92.75	0.00	18	0.00	18	0.00	18	-343.13	18	531.38	18	14.14	18
503	-2001	-2002	Min.	0.00	0.00	18	0.00	18	0.00	18	208.73	18	593.71	18	14.14	18
503	-2001	-2002	Min.	35.08									630.32	18		
503	-2001	-2002	Min.	92.75	0.00	18	0.00	18	0.00	18	-343.13	18	531.38	18	14.14	18
503	-2002	-2003	Max	0.00	0.00	18	0.00	18	0.00	18	-105.27	18	426.99	18	107.20	18
503	-2002	-2003	Max	92.75	0.00	18	0.00	18	0.00	18	-657.14	18	73.43	18	107.20	18
503	-2002	-2003	Min.	0.00	0.00	18	0.00	18	0.00	18	-105.27	18	426.99	18	107.20	18
503	-2002	-2003	Min.	92.75	0.00	18	0.00	18	0.00	18	-657.14	18	73.43	18	107.20	18
503	-2003	-2004	Max	0.00	0.00	18	0.00	18	0.00	18	-606.98	18	-94.55	18	126.83	18
503	-2003	-2004	Max	68.50	0.00	18	0.00	18	0.00	18	-1014.55	18	-649.92	18	126.83	18
503	-2003	-2004	Min.	0.00	0.00	18	0.00	18	0.00	18	-606.98	18	-94.55	18	126.83	18
503	-2003	-2004	Min.	68.50	0.00	18	0.00	18	0.00	18	-1014.55	18	-649.92	18	126.83	18
503	-2004	516	Max	0.00	0.00	18	0.00	18	0.00	18	-1690.35	18	-854.99	18	-27.50	18
503	-2004	516	Max	56.00	0.00	18	0.00	18	0.00	18	-2023.55	18	-1894.88	18	-27.50	18
503	-2004	516	Min.	0.00	0.00	18	0.00	18	0.00	18	-1690.35	18	-854.99	18	-27.50	18
503	-2004	516	Min.	56.00	0.00	18	0.00	18	0.00	18	-2023.55	18	-1894.88	18	-27.50	18
503	516	517	Max	17.50	0.00	18	0.00	18	0.00	18	3829.70	18	-2079.11	18	512.18	18
503	516	517	Max	219.57									1797.06	18		



503	516	517	Max	428.00	0.00	18	0.00	18	0.00	18	-3936.48	18	-2298.29	18	512.18	18
503	516	517	Min.	17.50	0.00	18	0.00	18	0.00	18	3829.70	18	-2079.11	18	512.18	18
503	516	517	Min.	219.57									1797.06			
503	516	517	Min.	428.00	0.00	18	0.00	18	0.00	18	-3936.48	18	-2298.29	18	512.18	18
503	517	518	Max	35.00	0.00	18	0.00	18	0.00	18	2162.66	18	301.42	18	-489.20	18
503	517	518	Max	153.78									1585.79			
503	517	518	Max	396.00	0.00	18	0.00	18	0.00	18	-4410.30	18	-3755.58	18	-489.20	18
503	517	518	Min.	35.00	0.00	18	0.00	18	0.00	18	2162.66	18	301.42	18	-489.20	18
503	517	518	Min.	153.78									1585.79			
503	517	518	Min.	396.00	0.00	18	0.00	18	0.00	18	-4410.30	18	-3755.58	18	-489.20	18
505	502	508	Max	15.00	0.00	18	0.00	18	0.00	18	2553.83	18	-1846.19	18	47.47	18
505	502	508	Max	258.22									1259.54			
505	502	508	Max	489.00	0.00	18	0.00	18	0.00	18	-2423.17	18	-1536.54	18	47.47	18
505	502	508	Min.	15.00	0.00	18	0.00	18	0.00	18	2553.83	18	-1846.19	18	47.47	18
505	502	508	Min.	258.22									1259.54			
505	502	508	Min.	489.00	0.00	18	0.00	18	0.00	18	-2423.17	18	-1536.54	18	47.47	18
505	508	514	Max	15.00	0.00	18	0.00	18	0.00	18	2968.76	18	-2231.45	18	-45.35	18
505	508	514	Max	297.74									1965.49			
505	508	514	Max	557.00	0.00	18	0.00	18	0.00	18	-2722.24	18	-1563.36	18	-45.35	18
505	508	514	Min.	15.00	0.00	18	0.00	18	0.00	18	2968.76	18	-2231.45	18	-45.35	18
505	508	514	Min.	297.74									1965.49			
505	508	514	Min.	557.00	0.00	18	0.00	18	0.00	18	-2722.24	18	-1563.36	18	-45.35	18
507	503	509	Max	15.00	0.00	18	0.00	18	0.00	18	5507.08	18	-4242.78	18	-69.93	18
507	503	509	Max	266.76									2689.68			
507	503	509	Max	489.00	0.00	18	0.00	18	0.00	18	-4861.14	18	-2711.88	18	-69.93	18
507	503	509	Min.	15.00	0.00	18	0.00	18	0.00	18	5507.08	18	-4242.78	18	-69.93	18
507	503	509	Min.	266.76									2689.68			
507	503	509	Min.	489.00	0.00	18	0.00	18	0.00	18	-4861.14	18	-2711.88	18	-69.93	18
507	509	-1948	Max	15.00	0.00	18	0.00	18	0.00	18	463.11	18	-96.50	18	-561.21	18
507	509	-1948	Max	70.66									32.70			
507	509	-1948	Max	82.00	0.00	18	0.00	18	0.00	18	-92.99	18	27.49	18	-561.21	18
507	509	-1948	Min.	15.00	0.00	18	0.00	18	0.00	18	463.11	18	-96.50	18	-561.21	18
507	509	-1948	Min.	70.66									32.70			
507	509	-1948	Min.	82.00	0.00	18	0.00	18	0.00	18	-92.99	18	27.49	18	-561.21	18
507	-1948	-1959	Max	0.00	0.00	18	0.00	18	0.00	18	200.59	18	-203.79	18	-374.89	18
507	-1948	-1959	Max	23.56									-179.57			
507	-1948	-1959	Max	82.00	0.00	18	0.00	18	0.00	18	-480.00	18	-318.35	18	-374.89	18
507	-1948	-1959	Min.	0.00	0.00	18	0.00	18	0.00	18	200.59	18	-203.79	18	-374.89	18
507	-1948	-1959	Min.	23.56									-179.57			
507	-1948	-1959	Min.	82.00	0.00	18	0.00	18	0.00	18	-480.00	18	-318.35	18	-374.89	18
507	-1959	-1969	Max	0.00	0.00	18	0.00	18	0.00	18	243.68	18	-401.92	18	133.91	18
507	-1959	-1969	Max	29.36									-366.15			
507	-1959	-1969	Max	81.60	0.00	18	0.00	18	0.00	18	-433.60	18	-479.41	18	133.91	18
507	-1959	-1969	Min.	0.00	0.00	18	0.00	18	0.00	18	243.68	18	-401.92	18	133.91	18
507	-1959	-1969	Min.	29.36									-366.15			
507	-1959	-1969	Min.	81.60	0.00	18	0.00	18	0.00	18	-433.60	18	-479.41	18	133.91	18
507	-1969	-2026	Max	0.00	0.00	18	0.00	18	0.00	18	475.73	18	-279.95	18	595.74	18
507	-1969	-2026	Max	56.56									-143.63			
507	-1969	-2026	Max	141.40	0.00	18	0.00	18	0.00	18	-697.89	18	-437.01	18	595.74	18
507	-1969	-2026	Min.	0.00	0.00	18	0.00	18	0.00	18	475.73	18	-279.95	18	595.74	18
507	-1969	-2026	Min.	56.56									-143.63			
507	-1969	-2026	Min.	141.40	0.00	18	0.00	18	0.00	18	-697.89	18	-437.01	18	595.74	18
508	504	510	Max	15.00	0.00	18	0.00	18	0.00	18	5348.63	18	-3930.71	18	47.36	18
508	504	510	Max	259.52									2608.55			
508	504	510	Max	489.00	0.00	18	0.00	18	0.00	18	-5019.59	18	-3150.90	18	47.36	18
508	504	510	Min.	15.00	0.00	18	0.00	18	0.00	18	5348.63	18	-3930.71	18	47.36	18
508	504	510	Min.	259.52									2608.55			
508	504	510	Min.	489.00	0.00	18	0.00	18	0.00	18	-5019.59	18	-3150.90	18	47.36	18
508	510	-1949	Max	15.00	0.00	18	0.00	18	0.00	18	637.34	18	-503.04	18	483.17	18
508	510	-1949	Max	91.79									-258.35			
508	510	-1949	Max	95.33	0.00	18	0.00	18	0.00	18	-29.43	18	-258.87	18	483.17	18
508	510	-1949	Min.	15.00	0.00	18	0.00	18	0.00	18	637.34	18	-503.04	18	483.17	18
508	510	-1949	Min.	91.79									-258.35			
508	510	-1949	Min.	95.33	0.00	18	0.00	18	0.00	18	-29.43	18	-258.87	18	483.17	18
508	-1949	-1962	Max	0.00	0.00	18	0.00	18	0.00	18	268.05	18	-427.33	18	260.59	18
508	-1949	-1962	Max	32.30									-384.05			
508	-1949	-1962	Max	95.33	0.00	18	0.00	18	0.00	18	-523.21	18	-548.96	18	260.59	18
508	-1949	-1962	Min.	0.00	0.00	18	0.00	18	0.00	18	268.05	18	-427.33	18	260.59	18
508	-1949	-1962	Min.	32.30									-384.05			
508	-1949	-1962	Min.	95.33	0.00	18	0.00	18	0.00	18	-523.21	18	-548.96	18	260.59	18
508	-1962	-1973	Max	0.00	0.00	18	0.00	18	0.00	18	170.29	18	-620.19	18	-180.39	18
508	-1962	-1973	Max	19.07									-602.81			
508	-1962	-1973	Max	95.33	0.00	18	0.00	18	0.00	18	-620.98	18	-835.02	18	-180.39	18
508	-1962	-1973	Min.	0.00	0.00	18	0.00	18	0.00	18	170.29	18	-620.19	18	-180.39	18
508	-1962	-1973	Min.	19.07									-602.81			
508	-1962	-1973	Min.	95.33	0.00	18	0.00	18	0.00	18	-620.98	18	-835.02	18	-180.39	18



508	-1973	-2029	Max	0.00	0.00	18	0.00	18	0.00	18	-373.42	18	-898.57	18	-406.05	18
508	-1973	-2029	Max	101.00	0.00	18	0.00	18	0.00	18	-1211.72	18	-1699.06	18	-406.05	18
508	-1973	-2029	Min.	0.00	0.00	18	0.00	18	0.00	18	-373.42	18	-898.57	18	-406.05	18
508	-1973	-2029	Min.	101.00	0.00	18	0.00	18	0.00	18	-1211.72	18	-1699.06	18	-406.05	18
509	505	511	Max	15.00	0.00	18	0.00	18	0.00	18	3327.62	18	-2286.66	18	-35.15	18
509	505	511	Max	244.21									1531.63	18		
509	505	511	Max	489.00	0.00	18	0.00	18	0.00	18	-3545.38	18	-2802.75	18	-35.15	18
509	505	511	Min.	15.00	0.00	18	0.00	18	0.00	18	3327.62	18	-2286.66	18	-35.15	18
509	505	511	Min.	244.21									1531.63	18		
509	505	511	Min.	489.00	0.00	18	0.00	18	0.00	18	-3545.38	18	-2802.75	18	-35.15	18
509	511	517	Max	15.00	0.00	18	0.00	18	0.00	18	4096.01	18	-3644.76	18	14.68	18
509	511	517	Max	297.48									2140.51	18		
509	511	517	Max	557.00	0.00	18	0.00	18	0.00	18	-3762.99	18	-2742.28	18	14.68	18
509	511	517	Min.	15.00	0.00	18	0.00	18	0.00	18	4096.01	18	-3644.76	18	14.68	18
509	511	517	Min.	297.48									2140.51	18		
509	511	517	Min.	557.00	0.00	18	0.00	18	0.00	18	-3762.99	18	-2742.28	18	14.68	18
510	506	512	Max	105.00	0.00	18	0.00	18	0.00	18	1818.10	18	-957.71	18	-87.30	18
510	506	512	Max	278.15									616.33	18		
510	506	512	Max	444.00	0.00	18	0.00	18	0.00	18	-1741.40	18	-827.71	18	-87.30	18
510	506	512	Min.	105.00	0.00	18	0.00	18	0.00	18	1818.10	18	-957.71	18	-87.30	18
510	506	512	Min.	278.15									616.33	18		
510	506	512	Min.	444.00	0.00	18	0.00	18	0.00	18	-1741.40	18	-827.71	18	-87.30	18
510	512	518	Max	60.00	0.00	18	0.00	18	0.00	18	1776.88	18	-546.50	18	54.83	18
510	512	518	Max	228.67									956.95	18		
510	512	518	Max	467.00	0.00	18	0.00	18	0.00	18	-2496.63	18	-2011.19	18	54.83	18
510	512	518	Min.	60.00	0.00	18	0.00	18	0.00	18	1776.88	18	-546.50	18	54.83	18
510	512	518	Min.	228.67									956.95	18		
510	512	518	Min.	467.00	0.00	18	0.00	18	0.00	18	-2496.63	18	-2011.19	18	54.83	18

Tipo di combinazione di carico: SLE F

Asta	N1	N2		X <cm>	N <daN>	CC	Ty <daN>	CC	Mz <daNm>	CC	Tz <daN>	CC	My <daNm>	CC	Mx <daNm>	CC
1	1	101	Max	0.00	-70477.50	19	-514.23	19	-532.33	19	-7468.83	19	17529.50	19	5.00	19
1	1	101	Max	220.00	-68497.50	19	-514.24	19	-1663.65	19	-7468.82	19	1098.10	19	5.00	19
1	1	101	Min.	0.00	-70477.50	19	-514.23	19	-532.33	19	-7468.83	19	17529.50	19	5.00	19
1	1	101	Min.	220.00	-68497.50	19	-514.24	19	-1663.65	19	-7468.82	19	1098.10	19	5.00	19
1	101	201	Max	0.00	-56780.20	19	-273.43	19	1034.23	19	-4827.18	19	7068.96	19	-6.92	19
1	101	201	Max	300.00	-54080.20	19	-273.43	19	213.95	19	-4827.18	19	-7412.58	19	-6.92	19
1	101	201	Min.	0.00	-56780.20	19	-273.43	19	1034.23	19	-4827.18	19	7068.96	19	-6.92	19
1	101	201	Min.	300.00	-54080.20	19	-273.43	19	213.95	19	-4827.18	19	-7412.58	19	-6.92	19
1	201	301	Max	0.00	-37701.00	19	360.89	19	-644.62	19	1917.12	19	-7499.14	19	-19.45	19
1	201	301	Max	300.00	-35001.00	19	360.89	19	438.07	19	1917.12	19	-1747.79	19	-19.45	19
1	201	301	Min.	0.00	-37701.00	19	360.89	19	-644.62	19	1917.12	19	-7499.14	19	-19.45	19
1	201	301	Min.	300.00	-35001.00	19	360.89	19	438.07	19	1917.12	19	-1747.79	19	-19.45	19
1	301	401	Max	0.00	-18960.80	19	-45.34	19	12.97	19	540.63	19	-1706.33	19	-20.79	19
1	301	401	Max	300.00	-16260.80	19	-45.34	19	-123.04	19	540.63	19	-84.45	19	-20.79	19
1	301	401	Min.	0.00	-18960.80	19	-45.34	19	12.97	19	540.63	19	-1706.33	19	-20.79	19
1	301	401	Min.	300.00	-16260.80	19	-45.34	19	-123.04	19	540.63	19	-84.45	19	-20.79	19
1	401	501	Max	0.00	-1192.50	19	-2.53	19	8.05	19	-77.42	19	246.21	19	-1.55	19
1	401	501	Max	318.00	0.00	19	-2.53	19	0.00	19	-77.42	19	0.00	19	-1.55	19
1	401	501	Min.	0.00	-1192.50	19	-2.53	19	8.05	19	-77.42	19	246.21	19	-1.55	19
1	401	501	Min.	318.00	0.00	19	-2.53	19	0.00	19	-77.42	19	0.00	19	-1.55	19
2	2	102	Max	0.00	-83106.70	19	-61.09	19	954.58	19	390.63	19	-279.53	19	2.53	19
2	2	102	Max	220.00	-81951.70	19	-61.09	19	820.19	19	390.63	19	579.84	19	2.53	19
2	2	102	Min.	0.00	-83106.70	19	-61.09	19	954.58	19	390.63	19	-279.53	19	2.53	19
2	2	102	Min.	220.00	-81951.70	19	-61.09	19	820.19	19	390.63	19	579.84	19	2.53	19
2	102	202	Max	0.00	-63072.80	19	1542.81	19	-2345.47	19	351.48	19	-790.74	19	-3.55	19
2	102	202	Max	294.00	-61529.30	19	1542.81	19	2190.39	19	351.48	19	242.61	19	-3.55	19
2	102	202	Min.	0.00	-63072.80	19	1542.81	19	-2345.47	19	351.48	19	-790.74	19	-3.55	19
2	102	202	Min.	294.00	-61529.30	19	1542.81	19	2190.39	19	351.48	19	242.61	19	-3.55	19
2	202	302	Max	0.00	-44614.80	19	1098.99	19	-1482.74	19	-838.34	19	1428.29	19	-9.99	19
2	202	302	Max	294.00	-43071.30	19	1098.99	19	1748.29	19	-838.34	19	-1036.44	19	-9.99	19
2	202	302	Min.	0.00	-44614.80	19	1098.99	19	-1482.74	19	-838.34	19	1428.29	19	-9.99	19
2	202	302	Min.	294.00	-43071.30	19	1098.99	19	1748.29	19	-838.34	19	-1036.44	19	-9.99	19
2	302	402	Max	0.00	-26195.70	19	1061.49	19	-1592.65	19	-726.27	19	1140.42	19	-10.68	19
2	302	402	Max	294.00	-24652.20	19	1061.49	19	1528.12	19	-726.27	19	-994.82	19	-10.68	19
2	302	402	Min.	0.00	-26195.70	19	1061.49	19	-1592.65	19	-726.27	19	1140.42	19	-10.68	19
2	302	402	Min.	294.00	-24652.20	19	1061.49	19	1528.12	19	-726.27	19	-994.82	19	-10.68	19
2	402	502	Max	0.00	-8196.99	19	1298.85	19	-1832.67	19	-1765.60	19	1852.84	19	-3.55	19
2	402	502	Max	268.00	-6789.99	19	1298.85	19	1648.26	19	-1765.60	19	-2878.98	19	-3.55	19
2	402	502	Min.	0.00	-8196.99	19	1298.85	19	-1832.67	19	-1765.60	19	1852.84	19	-3.55	19
2	402	502	Min.	268.00	-6789.99	19	1298.85	19	1648.26	19	-1765.60	19	-2878.98	19	-3.55	19
3	3	103	Max	0.00	-89253.50	19	1207.73	19	-178.32	19	2145.27	19	-1556.55	19	2.53	19
3	3	103	Max	220.00	-88098.50	19	1207.73	19	2478.68	19	2145.27	19	3163.05	19	2.53	19
3	3	103	Min.	0.00	-89253.50	19	1207.73	19	-178.32	19	2145.27	19	-1556.55	19	2.53	19



3	3	103	Min.	220.00	-88098.50	19	1207.73	19	2478.68	19	2145.27	19	3163.05	19	2.53	19
3	103	203	Max	0.00	-80473.60	19	3105.10	19	-4500.54	19	1631.50	19	-3032.14	19	-3.55	19
3	103	203	Max	294.00	-78930.10	19	3105.10	19	4628.46	19	1631.50	19	1764.47	19	-3.55	19
3	103	203	Min.	0.00	-80473.60	19	3105.10	19	-4500.54	19	1631.50	19	-3032.14	19	-3.55	19
3	103	203	Min.	294.00	-78930.10	19	3105.10	19	4628.46	19	1631.50	19	1764.47	19	-3.55	19
3	203	303	Max	0.00	-56310.90	19	2545.89	19	-3869.35	19	125.58	19	120.06	19	-9.99	19
3	203	303	Max	294.00	-54767.40	19	2545.89	19	3615.56	19	125.58	19	489.27	19	-9.99	19
3	203	303	Min.	0.00	-56310.90	19	2545.89	19	-3869.35	19	125.58	19	120.06	19	-9.99	19
3	203	303	Min.	294.00	-54767.40	19	2545.89	19	3615.56	19	125.58	19	489.27	19	-9.99	19
3	303	403	Max	0.00	-34732.30	19	2185.21	19	-3220.09	19	223.68	19	-402.72	19	-10.68	19
3	303	403	Max	294.00	-33188.80	19	2185.21	19	3204.43	19	223.68	19	254.89	19	-10.68	19
3	303	403	Min.	0.00	-34732.30	19	2185.21	19	-3220.09	19	223.68	19	-402.72	19	-10.68	19
3	303	403	Min.	294.00	-33188.80	19	2185.21	19	3204.43	19	223.68	19	254.89	19	-10.68	19
3	403	503	Max	0.00	-13239.00	19	2490.57	19	-3633.84	19	327.94	19	-555.86	19	-3.30	19
3	403	503	Max	294.00	-11695.50	19	2490.57	19	3688.43	19	327.94	19	408.27	19	-3.30	19
3	403	503	Min.	0.00	-13239.00	19	2490.57	19	-3633.84	19	327.94	19	-555.86	19	-3.30	19
3	403	503	Min.	294.00	-11695.50	19	2490.57	19	3688.43	19	327.94	19	408.27	19	-3.30	19
4	4	104	Max	0.00	-96205.30	19	1533.59	19	-706.02	19	-1103.04	19	881.10	19	2.53	19
4	4	104	Max	220.00	-95050.30	19	1533.59	19	2667.88	19	-1103.04	19	-1545.60	19	2.53	19
4	4	104	Min.	0.00	-96205.30	19	1533.59	19	-706.02	19	-1103.04	19	881.10	19	2.53	19
4	4	104	Min.	220.00	-95050.30	19	1533.59	19	2667.88	19	-1103.04	19	-1545.60	19	2.53	19
4	104	204	Max	0.00	-76707.50	19	2733.36	19	-4112.97	19	-222.27	19	561.70	19	-3.55	19
4	104	204	Max	294.00	-75164.00	19	2733.36	19	3923.11	19	-222.27	19	-91.77	19	-3.55	19
4	104	204	Min.	0.00	-76707.50	19	2733.36	19	-4112.97	19	-222.27	19	561.70	19	-3.55	19
4	104	204	Min.	294.00	-75164.00	19	2733.36	19	3923.11	19	-222.27	19	-91.77	19	-3.55	19
4	204	304	Max	0.00	-55269.80	19	2367.28	19	-3380.92	19	-588.12	19	1031.89	19	-9.99	19
4	204	304	Max	294.00	-53726.30	19	2367.28	19	3578.88	19	-588.12	19	-697.19	19	-9.99	19
4	204	304	Min.	0.00	-55269.80	19	2367.28	19	-3380.92	19	-588.12	19	1031.89	19	-9.99	19
4	204	304	Min.	294.00	-53726.30	19	2367.28	19	3578.88	19	-588.12	19	-697.19	19	-9.99	19
4	304	404	Max	0.00	-33838.60	19	2394.07	19	-3554.51	19	-619.83	19	928.76	19	-10.68	19
4	304	404	Max	294.00	-32295.10	19	2394.07	19	3484.06	19	-619.83	19	-893.55	19	-10.68	19
4	304	404	Min.	0.00	-33838.60	19	2394.07	19	-3554.51	19	-619.83	19	928.76	19	-10.68	19
4	304	404	Min.	294.00	-32295.10	19	2394.07	19	3484.06	19	-619.83	19	-893.55	19	-10.68	19
4	404	504	Max	0.00	-12438.00	19	2445.87	19	-3645.35	19	-421.87	19	548.53	19	-3.30	19
4	404	504	Max	294.00	-10894.50	19	2445.87	19	3545.51	19	-421.87	19	-691.76	19	-3.30	19
4	404	504	Min.	0.00	-12438.00	19	2445.87	19	-3645.35	19	-421.87	19	548.53	19	-3.30	19
4	404	504	Min.	294.00	-10894.50	19	2445.87	19	3545.51	19	-421.87	19	-691.76	19	-3.30	19
5	5	105	Max	0.00	-81220.00	19	167.29	19	418.87	19	134.62	19	162.21	19	2.53	19
5	5	105	Max	220.00	-80065.00	19	167.29	19	786.89	19	134.62	19	458.37	19	2.53	19
5	5	105	Min.	0.00	-81220.00	19	167.29	19	418.87	19	134.62	19	162.21	19	2.53	19
5	5	105	Min.	220.00	-80065.00	19	167.29	19	786.89	19	134.62	19	458.37	19	2.53	19
5	105	205	Max	0.00	-64294.60	19	1440.99	19	-2165.31	19	936.20	19	-1384.48	19	-3.55	19
5	105	205	Max	294.00	-62751.10	19	1440.99	19	2071.21	19	936.20	19	1367.95	19	-3.55	19
5	105	205	Min.	0.00	-64294.60	19	1440.99	19	-2165.31	19	936.20	19	-1384.48	19	-3.55	19
5	105	205	Min.	294.00	-62751.10	19	1440.99	19	2071.21	19	936.20	19	1367.95	19	-3.55	19
5	205	305	Max	0.00	-46388.40	19	1114.12	19	-1519.20	19	445.33	19	-384.36	19	-9.99	19
5	205	305	Max	294.00	-44844.90	19	1114.12	19	1756.32	19	445.33	19	924.91	19	-9.99	19
5	205	305	Min.	0.00	-46388.40	19	1114.12	19	-1519.20	19	445.33	19	-384.36	19	-9.99	19
5	205	305	Min.	294.00	-44844.90	19	1114.12	19	1756.32	19	445.33	19	924.91	19	-9.99	19
5	305	405	Max	0.00	-28887.50	19	1089.91	19	-1621.33	19	563.59	19	-876.69	19	-10.68	19
5	305	405	Max	294.00	-27344.00	19	1089.91	19	1583.02	19	563.59	19	780.26	19	-10.68	19
5	305	405	Min.	0.00	-28887.50	19	1089.91	19	-1621.33	19	563.59	19	-876.69	19	-10.68	19
5	305	405	Min.	294.00	-27344.00	19	1089.91	19	1583.02	19	563.59	19	780.26	19	-10.68	19
5	405	505	Max	0.00	-11485.70	19	1350.79	19	-1885.82	19	1131.37	19	-1552.01	19	-3.30	19
5	405	505	Max	294.00	-9942.19	19	1350.79	19	2085.51	19	1131.37	19	1774.21	19	-3.30	19
5	405	505	Min.	0.00	-11485.70	19	1350.79	19	-1885.82	19	1131.37	19	-1552.01	19	-3.30	19
5	405	505	Min.	294.00	-9942.19	19	1350.79	19	2085.51	19	1131.37	19	1774.21	19	-3.30	19
6	6	-1032	Max	0.00	-57341.00	19	-1346.03	19	1610.09	19	-492.45	19	13633.00	19	-4.69	19
6	6	-1032	Max	199.00	-55550.00	19	-1346.03	19	-1068.52	19	-492.45	19	12653.00	19	-4.69	19
6	6	-1032	Min.	0.00	-57341.00	19	-1346.03	19	1610.09	19	-492.45	19	13633.00	19	-4.69	19
6	6	-1032	Min.	199.00	-55550.00	19	-1346.03	19	-1068.52	19	-492.45	19	12653.00	19	-4.69	19
6	-1032	106	Max	0.00	-56851.30	19	23868.80	19	-2131.92	19	-33620.20	19	14217.10	19	161.54	19
6	-1032	106	Max	3.00	-56824.30	19	23868.80	19	-1415.85	19	-33620.20	19	13208.50	19	161.54	19
6	-1032	106	Min.	0.00	-56851.30	19	23868.80	19	-2131.92	19	-33620.20	19	14217.10	19	161.54	19
6	-1032	106	Min.	3.00	-56824.30	19	23868.80	19	-1415.85	19	-33620.20	19	13208.50	19	161.54	19
6	106	206	Max	0.00	-50172.70	19	855.53	19	-806.91	19	-3698.95	19	3558.87	19	-7.55	19
6	106	206	Max	268.00	-47760.70	19	855.53	19	1485.91	19	-3698.95	19	-6354.32	19	-7.55	19
6	106	206	Min.	0.00	-50172.70	19	855.53	19	-806.91	19	-3698.95	19	3558.87	19	-7.55	19
6	106	206	Min.	268.00	-47760.70	19	855.53	19	1485.91	19	-3698.95	19	-6354.32	19	-7.55	19
6	206	306	Max	0.00	-36041.60	19	1281.59	19	-1749.87	19	572.81	19	-4785.97	19	-21.24	19
6	206	306	Max	268.00	-33629.60	19	1281.59	19	1684.78	19	572.81	19	-3250.83	19	-21.24	19
6	206	306	Min.	0.00	-36041.60	19	1281.59	19	-1749.87	19	572.81	19	-4785.97	19	-21.24	19
6	206	306	Min.	268.00	-33629.60	19	1281.59	19	1684.78	19	572.81	19	-3250.83	19	-21.24	19
6	306	406	Max	0.00	-22534.50	19	1265.71	19	-1740.69	19	110.41	19	-1342.30	19	-22.71	19
6	306	406	Max	268.00	-20122.50	19	1265.71	19	1651.40	19	110.41	19	-1046.39	19	-22.71	19
6	306	406	Min.	0.00	-22534.50	19	1265.71	19	-1740.69	19	110.41	19	-1342.30	19	-22.71	19



6	306	406	Min.	268.00	-20122.50	19	1265.70	19	1651.40	19	110.41	19	-1046.39	19	-22.71	19
6	406	506	Max	0.00	-9023.52	19	1546.20	19	-2114.26	19	-232.27	19	122.76	19	-7.02	19
6	406	506	Max	268.00	-6611.52	19	1546.20	19	2029.55	19	-232.27	19	-499.72	19	-7.02	19
6	406	506	Min.	0.00	-9023.52	19	1546.20	19	-2114.26	19	-232.27	19	122.76	19	-7.02	19
6	406	506	Min.	268.00	-6611.52	19	1546.20	19	2029.55	19	-232.27	19	-499.72	19	-7.02	19
7	7	107	Max	0.00	-125027.00	19	-803.83	19	-544.83	19	1750.25	19	-335.62	19	5.00	19
7	7	107	Max	220.00	-123047.00	19	-803.83	19	-2313.24	19	1750.25	19	3514.92	19	5.00	19
7	7	107	Min.	0.00	-125027.00	19	-803.83	19	-544.83	19	1750.25	19	-335.62	19	5.00	19
7	7	107	Min.	220.00	-123047.00	19	-803.83	19	-2313.24	19	1750.25	19	3514.92	19	5.00	19
7	107	207	Max	0.00	-104198.00	19	-241.37	19	1265.18	19	-5849.93	19	8688.30	19	-6.92	19
7	107	207	Max	300.00	-101498.00	19	-241.37	19	541.08	19	-5849.93	19	-8861.50	19	-6.92	19
7	107	207	Min.	0.00	-104198.00	19	-241.37	19	1265.18	19	-5849.93	19	8688.30	19	-6.92	19
7	107	207	Min.	300.00	-101498.00	19	-241.37	19	541.08	19	-5849.93	19	-8861.50	19	-6.92	19
7	207	307	Max	0.00	-67996.80	19	880.30	19	-1480.02	19	1342.27	19	-6395.16	19	-19.45	19
7	207	307	Max	300.00	-65296.80	19	880.30	19	1160.89	19	1342.27	19	-2368.34	19	-19.45	19
7	207	307	Min.	0.00	-67996.80	19	880.30	19	-1480.02	19	1342.27	19	-6395.16	19	-19.45	19
7	207	307	Min.	300.00	-65296.80	19	880.30	19	1160.89	19	1342.27	19	-2368.34	19	-19.45	19
7	307	407	Max	0.00	-31252.80	19	688.41	19	-958.80	19	462.51	19	-1474.82	19	-20.79	19
7	307	407	Max	300.00	-28552.80	19	688.41	19	1106.44	19	462.51	19	-87.29	19	-20.79	19
7	307	407	Min.	0.00	-31252.80	19	688.41	19	-958.80	19	462.51	19	-1474.82	19	-20.79	19
7	307	407	Min.	300.00	-28552.80	19	688.41	19	1106.44	19	462.51	19	-87.29	19	-20.79	19
7	407	507	Max	0.00	-1192.50	19	58.74	19	-186.80	19	-74.93	19	238.26	19	-1.55	19
7	407	507	Max	254.40					-37.36	19			47.65	19		
7	407	507	Max	318.00	0.00	19	58.74	19	0.00	19	-74.93	19	0.00	19	-1.55	19
7	407	507	Min.	0.00	-1192.50	19	58.74	19	-186.80	19	-74.93	19	238.26	19	-1.55	19
7	407	507	Min.	254.40					-37.36	19			47.65	19		
7	407	507	Min.	318.00	0.00	19	58.74	19	0.00	19	-74.93	19	0.00	19	-1.55	19
8	8	108	Max	0.00	-140159.00	19	168.09	19	-8.69	19	-1005.87	19	908.17	19	2.53	19
8	8	108	Max	220.00	-139004.00	19	168.09	19	361.11	19	-1005.87	19	-1304.75	19	2.53	19
8	8	108	Min.	0.00	-140159.00	19	168.09	19	-8.69	19	-1005.87	19	908.17	19	2.53	19
8	8	108	Min.	220.00	-139004.00	19	168.09	19	361.11	19	-1005.87	19	-1304.75	19	2.53	19
8	108	208	Max	0.00	-107558.00	19	583.12	19	-970.54	19	-705.98	19	853.80	19	-3.55	19
8	108	208	Max	294.00	-106015.00	19	583.12	19	743.83	19	-705.98	19	-1221.77	19	-3.55	19
8	108	208	Min.	0.00	-107558.00	19	583.12	19	-970.54	19	-705.98	19	853.80	19	-3.55	19
8	108	208	Min.	294.00	-106015.00	19	583.12	19	743.83	19	-705.98	19	-1221.77	19	-3.55	19
8	208	308	Max	0.00	-73949.70	19	31.88	19	115.00	19	-1756.62	19	2734.28	19	-9.99	19
8	208	308	Max	294.00	-72406.20	19	31.88	19	208.73	19	-1756.62	19	-2430.18	19	-9.99	19
8	208	308	Min.	0.00	-73949.70	19	31.88	19	115.00	19	-1756.62	19	2734.28	19	-9.99	19
8	208	308	Min.	294.00	-72406.20	19	31.88	19	208.73	19	-1756.62	19	-2430.18	19	-9.99	19
8	308	408	Max	0.00	-40037.70	19	-14.43	19	7.70	19	-1964.04	19	2878.16	19	-10.68	19
8	308	408	Max	294.00	-38494.20	19	-14.43	19	-34.73	19	-1964.04	19	-2896.12	19	-10.68	19
8	308	408	Min.	0.00	-40037.70	19	-14.43	19	7.70	19	-1964.04	19	2878.16	19	-10.68	19
8	308	408	Min.	294.00	-38494.20	19	-14.43	19	-34.73	19	-1964.04	19	-2896.12	19	-10.68	19
8	408	508	Max	0.00	-13892.90	19	158.94	19	-171.13	19	-3628.27	19	4484.28	19	-3.55	19
8	408	508	Max	268.00	-12485.90	19	158.94	19	254.83	19	-3628.27	19	-5239.48	19	-3.55	19
8	408	508	Min.	0.00	-13892.90	19	158.94	19	-171.13	19	-3628.27	19	4484.28	19	-3.55	19
8	408	508	Min.	268.00	-12485.90	19	158.94	19	254.83	19	-3628.27	19	-5239.48	19	-3.55	19
9	9	109	Max	0.00	-141884.00	19	1946.87	19	-3899.02	19	-2939.38	19	7307.49	19	4.73	19
9	9	109	Max	252.00	-140120.00	19	1946.87	19	1007.10	19	-2939.38	19	-99.74	19	4.73	19
9	9	109	Min.	0.00	-141884.00	19	1946.87	19	-3899.02	19	-2939.38	19	7307.49	19	4.73	19
9	9	109	Min.	252.00	-140120.00	19	1946.87	19	1007.10	19	-2939.38	19	-99.74	19	4.73	19
9	109	209	Max	0.00	-110074.00	19	-441.72	19	337.70	19	2147.07	19	-4083.74	19	-7.27	19
9	109	209	Max	300.00	-107974.00	19	-441.72	19	-987.46	19	2147.07	19	2357.48	19	-7.27	19
9	109	209	Min.	0.00	-110074.00	19	-441.72	19	337.70	19	2147.07	19	-4083.74	19	-7.27	19
9	109	209	Min.	300.00	-107974.00	19	-441.72	19	-987.46	19	2147.07	19	2357.48	19	-7.27	19
9	209	309	Max	0.00	-73840.20	19	-890.94	19	1458.15	19	501.56	19	-319.00	19	-9.83	19
9	209	309	Max	300.00	-72265.20	19	-890.94	19	-1214.66	19	501.56	19	1185.67	19	-9.83	19
9	209	309	Min.	0.00	-73840.20	19	-890.94	19	1458.15	19	501.56	19	-319.00	19	-9.83	19
9	209	309	Min.	300.00	-72265.20	19	-890.94	19	-1214.66	19	501.56	19	1185.67	19	-9.83	19
9	309	409	Max	0.00	-42289.30	19	-1008.11	19	1527.69	19	439.45	19	-958.03	19	-10.51	19
9	309	409	Max	300.00	-40714.30	19	-1008.11	19	-1496.65	19	439.45	19	360.32	19	-10.51	19
9	309	409	Min.	0.00	-42289.30	19	-1008.11	19	1527.69	19	439.45	19	-958.03	19	-10.51	19
9	309	409	Min.	300.00	-40714.30	19	-1008.11	19	-1496.65	19	439.45	19	360.32	19	-10.51	19
9	409	509	Max	0.00	-13810.70	19	-1677.97	19	2220.28	19	1200.03	19	-1243.81	19	-3.25	19
9	409	509	Max	300.00	-12235.70	19	-1677.97	19	-2813.63	19	1200.03	19	2356.29	19	-3.25	19
9	409	509	Min.	0.00	-13810.70	19	-1677.97	19	2220.28	19	1200.03	19	-1243.81	19	-3.25	19
9	409	509	Min.	300.00	-12235.70	19	-1677.97	19	-2813.63	19	1200.03	19	2356.29	19	-3.25	19
10	10	110	Max	0.00	-126468.00	19	1213.54	19	-3049.69	19	1369.05	19	-4074.62	19	4.73	19
10	10	110	Max	252.00	-124704.00	19	1213.54	19	8.43	19	1369.05	19	-624.61	19	4.73	19
10	10	110	Min.	0.00	-126468.00	19	1213.54	19	-3049.69	19	1369.05	19	-4074.62	19	4.73	19
10	10	110	Min.	252.00	-124704.00	19	1213.54	19	8.43	19	1369.05	19	-624.61	19	4.73	19
10	110	210	Max	0.00	-97553.40	19	-850.40	19	1049.74	19	-60.47	19	907.59	19	-7.27	19
10	110	210	Max	300.00	-95453.40	19	-850.40	19	-1501.45	19	-60.47	19	726.18	19	-7.27	19
10	110	210	Min.	0.00	-97553.40	19	-850.40	19	1049.74	19	-60.47	19	907.59	19	-7.27	19
10	110	210	Min.	300.00	-95453.40	19	-850.40	19	-1501.45	19	-60.47	19	726.18	19	-7.27	19
10	210	310	Max	0.00	-68215.80	19	-1350.42	19	1971.25	19	25.00	19	-97.79	19	-9.83	19



10	210	310	Max	300.00	-66640.80	19	-1350.42	19	-2080.01	19	25.00	19	-22.80	19	-9.83	19
10	210	310	Min.	0.00	-68215.80	19	-1350.42	19	1971.25	19	25.00	19	-97.79	19	-9.83	19
10	210	310	Min.	300.00	-66640.80	19	-1350.42	19	-2080.01	19	25.00	19	-22.80	19	-9.83	19
10	310	410	Max	0.00	-41137.10	19	-1831.98	19	2772.43	19	-247.97	19	433.05	19	-10.51	19
10	310	410	Max	300.00	-39562.10	19	-1831.98	19	-2723.51	19	-247.97	19	-310.86	19	-10.51	19
10	310	410	Min.	0.00	-41137.10	19	-1831.98	19	2772.43	19	-247.97	19	433.05	19	-10.51	19
10	310	410	Min.	300.00	-39562.10	19	-1831.98	19	-2723.51	19	-247.97	19	-310.86	19	-10.51	19
10	410	510	Max	0.00	-14541.20	19	-1898.67	19	2863.35	19	-889.99	19	872.19	19	-3.25	19
10	410	510	Max	300.00	-12966.20	19	-1898.67	19	-2832.67	19	-889.99	19	-1797.77	19	-3.25	19
10	410	510	Min.	0.00	-14541.20	19	-1898.67	19	2863.35	19	-889.99	19	872.19	19	-3.25	19
10	410	510	Min.	300.00	-12966.20	19	-1898.67	19	-2832.67	19	-889.99	19	-1797.77	19	-3.25	19
11	11	111	Max	0.00	-126213.00	19	-83.05	19	425.60	19	1253.46	19	-1759.03	19	2.53	19
11	11	111	Max	220.00	-125058.00	19	-83.05	19	242.88	19	1253.46	19	998.60	19	2.53	19
11	11	111	Min.	0.00	-126213.00	19	-83.05	19	425.60	19	1253.46	19	-1759.03	19	2.53	19
11	11	111	Min.	220.00	-125058.00	19	-83.05	19	242.88	19	1253.46	19	998.60	19	2.53	19
11	111	211	Max	0.00	-96163.50	19	653.51	19	-1109.70	19	1645.23	19	-2094.89	19	-3.55	19
11	111	211	Max	294.00	-94620.00	19	653.51	19	811.61	19	1645.23	19	2742.08	19	-3.55	19
11	111	211	Min.	0.00	-96163.50	19	653.51	19	-1109.70	19	1645.23	19	-2094.89	19	-3.55	19
11	111	211	Min.	294.00	-94620.00	19	653.51	19	811.61	19	1645.23	19	2742.08	19	-3.55	19
11	211	311	Max	0.00	-70162.90	19	78.94	19	22.27	19	1722.69	19	-2393.64	19	-9.99	19
11	211	311	Max	294.00	-68619.40	19	78.94	19	254.37	19	1722.69	19	2671.07	19	-9.99	19
11	211	311	Min.	0.00	-70162.90	19	78.94	19	22.27	19	1722.69	19	-2393.64	19	-9.99	19
11	211	311	Min.	294.00	-68619.40	19	78.94	19	254.37	19	1722.69	19	2671.07	19	-9.99	19
11	311	411	Max	0.00	-44394.30	19	19.00	19	-33.07	19	1804.14	19	-2667.73	19	-10.68	19
11	311	411	Max	294.00	-42850.80	19	19.00	19	22.79	19	1804.14	19	2636.44	19	-10.68	19
11	311	411	Min.	0.00	-44394.30	19	19.00	19	-33.07	19	1804.14	19	-2667.73	19	-10.68	19
11	311	411	Min.	294.00	-42850.80	19	19.00	19	22.79	19	1804.14	19	2636.44	19	-10.68	19
11	411	511	Max	0.00	-19228.90	19	183.71	19	-175.41	19	2251.55	19	-3251.16	19	-3.30	19
11	411	511	Max	294.00	-17685.40	19	183.71	19	364.69	19	2251.55	19	3368.40	19	-3.30	19
11	411	511	Min.	0.00	-19228.90	19	183.71	19	-175.41	19	2251.55	19	-3251.16	19	-3.30	19
11	411	511	Min.	294.00	-17685.40	19	183.71	19	364.69	19	2251.55	19	3368.40	19	-3.30	19
12	12	112	Max	0.00	-92314.40	19	588.01	19	455.08	19	2817.39	19	-1496.09	19	5.00	19
12	12	112	Max	220.00	-90334.40	19	588.01	19	1748.71	19	2817.39	19	4702.16	19	5.00	19
12	12	112	Min.	0.00	-92314.40	19	588.01	19	455.08	19	2817.39	19	-1496.09	19	5.00	19
12	12	112	Min.	220.00	-90334.40	19	588.01	19	1748.71	19	2817.39	19	4702.16	19	5.00	19
12	112	212	Max	0.00	-70553.50	19	2197.80	19	-3189.49	19	-6637.50	19	10535.00	19	-7.55	19
12	112	212	Max	268.00	-68141.50	19	2197.80	19	2700.63	19	-6637.50	19	-7253.52	19	-7.55	19
12	112	212	Min.	0.00	-70553.50	19	2197.80	19	-3189.49	19	-6637.50	19	10535.00	19	-7.55	19
12	112	212	Min.	268.00	-68141.50	19	2197.80	19	2700.63	19	-6637.50	19	-7253.52	19	-7.55	19
12	212	312	Max	0.00	-51670.60	19	1906.21	19	-2505.81	19	1025.18	19	-5839.97	19	-21.24	19
12	212	312	Max	268.00	-49258.60	19	1906.20	19	2602.81	19	1025.18	19	-3092.49	19	-21.24	19
12	212	312	Min.	0.00	-51670.60	19	1906.21	19	-2505.81	19	1025.18	19	-5839.97	19	-21.24	19
12	212	312	Min.	268.00	-49258.60	19	1906.20	19	2602.81	19	1025.18	19	-3092.49	19	-21.24	19
12	312	412	Max	0.00	-32404.60	19	2145.33	19	-2958.45	19	203.36	19	-1334.23	19	-22.71	19
12	312	412	Max	268.00	-29992.60	19	2145.33	19	2791.05	19	203.36	19	-789.23	19	-22.71	19
12	312	412	Min.	0.00	-32404.60	19	2145.33	19	-2958.45	19	203.36	19	-1334.23	19	-22.71	19
12	312	412	Min.	268.00	-29992.60	19	2145.33	19	2791.05	19	203.36	19	-789.23	19	-22.71	19
12	412	512	Max	0.00	-12765.30	19	2470.64	19	-3360.18	19	120.06	19	-334.33	19	-7.02	19
12	412	512	Max	268.00	-10353.30	19	2470.64	19	3261.14	19	120.06	19	-12.58	19	-7.02	19
12	412	512	Min.	0.00	-12765.30	19	2470.64	19	-3360.18	19	120.06	19	-334.33	19	-7.02	19
12	412	512	Min.	268.00	-10353.30	19	2470.64	19	3261.14	19	120.06	19	-12.58	19	-7.02	19
13	13	113	Max	0.00	-95665.80	19	-952.16	19	78.67	19	17845.00	19	-26555.70	19	5.00	19
13	13	113	Max	220.00	-93685.80	19	-952.16	19	-2016.07	19	17845.00	19	12703.40	19	5.00	19
13	13	113	Min.	0.00	-95665.80	19	-952.16	19	78.67	19	17845.00	19	-26555.70	19	5.00	19
13	13	113	Min.	220.00	-93685.80	19	-952.16	19	-2016.07	19	17845.00	19	12703.40	19	5.00	19
13	113	213	Max	0.00	-86776.40	19	-317.63	19	1078.30	19	-6727.07	19	7661.53	19	-6.92	19
13	113	213	Max	300.00	-84076.40	19	-317.63	19	125.39	19	-6727.07	19	-12519.70	19	-6.92	19
13	113	213	Min.	0.00	-86776.40	19	-317.63	19	1078.30	19	-6727.07	19	7661.53	19	-6.92	19
13	113	213	Min.	300.00	-84076.40	19	-317.63	19	125.39	19	-6727.07	19	-12519.70	19	-6.92	19
13	213	313	Max	0.00	-58158.70	19	416.61	19	-709.30	19	-2017.56	19	-761.63	19	-19.45	19
13	213	313	Max	300.00	-55458.70	19	416.61	19	540.53	19	-2017.56	19	-6814.32	19	-19.45	19
13	213	313	Min.	0.00	-58158.70	19	416.61	19	-709.30	19	-2017.56	19	-761.63	19	-19.45	19
13	213	313	Min.	300.00	-55458.70	19	416.61	19	540.53	19	-2017.56	19	-6814.32	19	-19.45	19
13	313	413	Max	0.00	-29130.90	19	75.61	19	-163.08	19	-3911.59	19	4015.89	19	-20.79	19
13	313	413	Max	300.00	-26430.90	19	75.61	19	63.75	19	-3911.59	19	-7718.89	19	-20.79	19
13	313	413	Min.	0.00	-29130.90	19	75.61	19	-163.08	19	-3911.59	19	4015.89	19	-20.79	19
13	313	413	Min.	300.00	-26430.90	19	75.61	19	63.75	19	-3911.59	19	-7718.89	19	-20.79	19
13	413	513	Max	0.00	-1192.50	19	-1.26	19	4.02	19	-262.00	19	833.18	19	-1.55	19
13	413	513	Max	318.00	0.00	19	-1.26	19	0.00	19	-262.00	19	0.00	19	-1.55	19
13	413	513	Min.	0.00	-1192.50	19	-1.26	19	4.02	19	-262.00	19	833.18	19	-1.55	19
13	413	513	Min.	318.00	0.00	19	-1.26	19	0.00	19	-262.00	19	0.00	19	-1.55	19
14	14	114	Max	0.00	-116536.00	19	-442.17	19	-668.28	19	-1005.17	19	1021.43	19	2.53	19
14	14	114	Max	220.00	-115381.00	19	-442.17	19	-1641.05	19	-1005.17	19	-1189.94	19	2.53	19
14	14	114	Min.	0.00	-116536.00	19	-442.17	19	-668.28	19	-1005.17	19	1021.43	19	2.53	19
14	14	114	Min.	220.00	-115381.00	19	-442.17	19	-1641.05	19	-1005.17	19	-1189.94	19	2.53	19
14	114	214	Max	0.00	-93472.20	19	820.08	19	-227.64	19	-505.52	19	504.62	19	-3.50	19





14	114	214	Max	300.00	-91897.20	19	820.08	19	2232.59	19	-505.52	19	-1011.95	19	-3.50	19
14	114	214	Min.	0.00	-93472.20	19	820.08	19	-227.64	19	-505.52	19	504.62	19	-3.50	19
14	114	214	Min.	300.00	-91897.20	19	820.08	19	2232.59	19	-505.52	19	-1011.95	19	-3.50	19
14	214	314	Max	0.00	-64972.20	19	1909.46	19	-2987.41	19	-1359.79	19	2226.45	19	-9.83	19
14	214	314	Max	300.00	-63397.20	19	1909.46	19	2740.96	19	-1359.79	19	-1852.90	19	-9.83	19
14	214	314	Min.	0.00	-64972.20	19	1909.46	19	-2987.41	19	-1359.79	19	2226.45	19	-9.83	19
14	214	314	Min.	300.00	-63397.20	19	1909.46	19	2740.96	19	-1359.79	19	-1852.90	19	-9.83	19
14	314	414	Max	0.00	-36581.30	19	1886.39	19	-2642.33	19	-1198.71	19	1892.52	19	-10.51	19
14	314	414	Max	300.00	-35006.30	19	1886.39	19	3016.84	19	-1198.71	19	-1703.62	19	-10.51	19
14	314	414	Min.	0.00	-36581.30	19	1886.39	19	-2642.33	19	-1198.71	19	1892.52	19	-10.51	19
14	314	414	Min.	300.00	-35006.30	19	1886.39	19	3016.84	19	-1198.71	19	-1703.62	19	-10.51	19
14	414	514	Max	0.00	-8655.86	19	-59.39	19	-1079.34	19	-1977.06	19	2504.77	19	-3.55	19
14	414	514	Max	268.00	-7248.86	19	-59.39	19	-1238.51	19	-1977.06	19	-2793.75	19	-3.55	19
14	414	514	Min.	0.00	-8655.86	19	-59.39	19	-1079.34	19	-1977.06	19	2504.77	19	-3.55	19
14	414	514	Min.	268.00	-7248.86	19	-59.39	19	-1238.51	19	-1977.06	19	-2793.75	19	-3.55	19
17	17	117	Max	0.00	-113822.00	19	-749.24	19	-111.72	19	638.83	19	-363.00	19	2.53	19
17	17	117	Max	220.00	-112667.00	19	-749.24	19	-1760.06	19	638.83	19	1042.43	19	2.53	19
17	17	117	Min.	0.00	-113822.00	19	-749.24	19	-111.72	19	638.83	19	-363.00	19	2.53	19
17	17	117	Min.	220.00	-112667.00	19	-749.24	19	-1760.06	19	638.83	19	1042.43	19	2.53	19
17	117	217	Max	0.00	-92648.70	19	553.09	19	-36.64	19	1373.52	19	-2154.19	19	-3.50	19
17	117	217	Max	300.00	-91073.70	19	553.09	19	1622.61	19	1373.52	19	1966.36	19	-3.50	19
17	117	217	Min.	0.00	-92648.70	19	553.09	19	-36.64	19	1373.52	19	-2154.19	19	-3.50	19
17	117	217	Min.	300.00	-91073.70	19	553.09	19	1622.61	19	1373.52	19	1966.36	19	-3.50	19
17	217	317	Max	0.00	-65475.20	19	1390.84	19	-2165.62	19	900.17	19	-1180.21	19	-9.83	19
17	217	317	Max	300.00	-63900.20	19	1390.84	19	2006.89	19	900.17	19	1520.31	19	-9.83	19
17	217	317	Min.	0.00	-65475.20	19	1390.84	19	-2165.62	19	900.17	19	-1180.21	19	-9.83	19
17	217	317	Min.	300.00	-63900.20	19	1390.84	19	2006.89	19	900.17	19	1520.31	19	-9.83	19
17	317	417	Max	0.00	-38667.40	19	1465.99	19	-1993.64	19	948.81	19	-1448.55	19	-10.51	19
17	317	417	Max	300.00	-37092.40	19	1465.99	19	2404.34	19	948.81	19	1397.87	19	-10.51	19
17	317	417	Min.	0.00	-38667.40	19	1465.99	19	-1993.64	19	948.81	19	-1448.55	19	-10.51	19
17	317	417	Min.	300.00	-37092.40	19	1465.99	19	2404.34	19	948.81	19	1397.87	19	-10.51	19
17	417	517	Max	0.00	-11923.60	19	-590.69	19	-272.93	19	1501.40	19	-1964.04	19	-3.30	19
17	417	517	Max	294.00	-10380.10	19	-590.69	19	-2009.57	19	1501.40	19	2450.07	19	-3.30	19
17	417	517	Min.	0.00	-11923.60	19	-590.69	19	-272.93	19	1501.40	19	-1964.04	19	-3.30	19
17	417	517	Min.	294.00	-10380.10	19	-590.69	19	-2009.57	19	1501.40	19	2450.07	19	-3.30	19
18	18	118	Max	0.00	-78331.00	19	658.36	19	-31.07	19	14783.90	19	-21187.40	19	5.00	19
18	18	118	Max	220.00	-76351.00	19	658.36	19	1417.32	19	14783.90	19	11337.30	19	5.00	19
18	18	118	Min.	0.00	-78331.00	19	658.36	19	-31.07	19	14783.90	19	-21187.40	19	5.00	19
18	18	118	Min.	220.00	-76351.00	19	658.36	19	1417.32	19	14783.90	19	11337.30	19	5.00	19
18	118	218	Max	0.00	-67370.00	19	1894.79	19	-2705.28	19	-5820.17	19	8633.93	19	-6.92	19
18	118	218	Max	300.00	-64670.00	19	1894.79	19	2979.08	19	-5820.17	19	-8826.59	19	-6.92	19
18	118	218	Min.	0.00	-67370.00	19	1894.79	19	-2705.28	19	-5820.17	19	8633.93	19	-6.92	19
18	118	218	Min.	300.00	-64670.00	19	1894.79	19	2979.08	19	-5820.17	19	-8826.59	19	-6.92	19
18	218	318	Max	0.00	-48588.40	19	2061.16	19	-3086.65	19	-287.25	19	-3176.64	19	-19.45	19
18	218	318	Max	300.00	-45888.40	19	2061.16	19	3096.84	19	-287.25	19	-4038.39	19	-19.45	19
18	218	318	Min.	0.00	-48588.40	19	2061.16	19	-3086.65	19	-287.25	19	-3176.64	19	-19.45	19
18	218	318	Min.	300.00	-45888.40	19	2061.16	19	3096.84	19	-287.25	19	-4038.39	19	-19.45	19
18	318	418	Max	0.00	-29357.00	19	2112.91	19	-3178.27	19	-1098.67	19	454.70	19	-20.79	19
18	318	418	Max	300.00	-26657.00	19	2112.91	19	3160.45	19	-1098.67	19	-2841.31	19	-20.79	19
18	318	418	Min.	0.00	-29357.00	19	2112.91	19	-3178.27	19	-1098.67	19	454.70	19	-20.79	19
18	318	418	Min.	300.00	-26657.00	19	2112.91	19	3160.45	19	-1098.67	19	-2841.31	19	-20.79	19
18	418	518	Max	0.00	-10358.50	19	2309.92	19	-3394.97	19	334.80	19	625.73	19	-7.02	19
18	418	518	Max	268.00	-7946.49	19	2309.91	19	2795.60	19	334.80	19	1522.99	19	-7.02	19
18	418	518	Min.	0.00	-10358.50	19	2309.92	19	-3394.97	19	334.80	19	625.73	19	-7.02	19
18	418	518	Min.	268.00	-7946.49	19	2309.91	19	2795.60	19	334.80	19	1522.99	19	-7.02	19
101	101	102	Max	15.00	0.00	19	0.00	19	0.00	19	5632.30	19	-2273.64	19	-200.55	19
101	101	102	Max	188.85									2641.21	19		
101	101	102	Max	405.00	0.00	19	0.00	19	0.00	19	-6953.76	19	-4850.48	19	-200.55	19
101	101	102	Min.	15.00	0.00	19	0.00	19	0.00	19	5632.30	19	-2273.64	19	-200.55	19
101	101	102	Min.	188.85									2641.21	19		
101	101	102	Min.	405.00	0.00	19	0.00	19	0.00	19	-6953.76	19	-4850.48	19	-200.55	19
101	102	-1153	Max	35.00	0.00	19	0.00	19	0.00	19	5603.41	19	-3721.66	19	-420.07	19
101	102	-1153	Max	165.00	0.00	19	0.00	19	0.00	19	1321.37	19	779.45	19	-420.07	19
101	102	-1153	Min.	35.00	0.00	19	0.00	19	0.00	19	5603.41	19	-3721.66	19	-420.07	19
101	102	-1153	Min.	165.00	0.00	19	0.00	19	0.00	19	1321.37	19	779.45	19	-420.07	19
101	-1153	103	Max	0.00	0.00	19	0.00	19	0.00	19	2630.20	19	619.78	19	-32.87	19
101	-1153	103	Max	96.60									1890.17	19		
101	-1153	103	Max	266.00	0.00	19	0.00	19	0.00	19	-4612.39	19	-2016.52	19	-32.87	19
101	-1153	103	Min.	0.00	0.00	19	0.00	19	0.00	19	2630.20	19	619.78	19	-32.87	19
101	-1153	103	Min.	96.60									1890.17	19		
101	-1153	103	Min.	266.00	0.00	19	0.00	19	0.00	19	-4612.39	19	-2016.52	19	-32.87	19
101	103	-1154	Max	12.00	0.00	19	0.00	19	0.00	19	-8142.44	19	1153.76	19	327.70	19
101	103	-1154	Max	76.00	0.00	19	0.00	19	0.00	19	-9301.48	19	-4428.30	19	327.70	19
101	103	-1154	Min.	12.00	0.00	19	0.00	19	0.00	19	-8142.44	19	1153.76	19	327.70	19
101	103	-1154	Min.	76.00	0.00	19	0.00	19	0.00	19	-9301.48	19	-4428.30	19	327.70	19
101	-1154	-1155	Max	8.31	0.00	19	0.00	19	0.00	19	3266.26	19	-2524.29	19	-205.47	19



101	-1154	-1155	Max	84.50	0.00	19	0.00	19	0.00	19	1886.54	19	-561.45	19	-205.47	19
101	-1154	-1155	Min.	8.31	0.00	19	0.00	19	0.00	19	3266.26	19	-2524.29	19	-205.47	19
101	-1154	-1155	Min.	84.50	0.00	19	0.00	19	0.00	19	1886.54	19	-561.45	19	-205.47	19
101	-1155	-1156	Max	0.00	0.00	19	0.00	19	0.00	19	1659.84	19	6.39	19	-379.06	19
101	-1155	-1156	Max	84.50	0.00	19	0.00	19	0.00	19	129.54	19	762.40	19	-379.06	19
101	-1155	-1156	Min.	0.00	0.00	19	0.00	19	0.00	19	1659.84	19	6.39	19	-379.06	19
101	-1155	-1156	Min.	84.50	0.00	19	0.00	19	0.00	19	129.54	19	762.40	19	-379.06	19
101	-1156	-1157	Max	0.00	0.00	19	0.00	19	0.00	19	908.41	19	929.99	19	-148.40	19
101	-1156	-1157	Max	50.16									1157.82	19		
101	-1156	-1157	Max	84.50	0.00	19	0.00	19	0.00	19	-621.89	19	1051.04	19	-148.40	19
101	-1156	-1157	Min.	0.00	0.00	19	0.00	19	0.00	19	908.41	19	929.99	19	-148.40	19
101	-1156	-1157	Min.	50.16									1157.82	19		
101	-1156	-1157	Min.	84.50	0.00	19	0.00	19	0.00	19	-621.89	19	1051.04	19	-148.40	19
101	-1157	-1158	Max	0.00	0.00	19	0.00	19	0.00	19	-1.46	19	841.90	19	66.81	19
101	-1157	-1158	Max	83.47	0.00	19	0.00	19	0.00	19	-1513.12	19	209.78	19	66.81	19
101	-1157	-1158	Min.	0.00	0.00	19	0.00	19	0.00	19	-1.46	19	841.90	19	66.81	19
101	-1157	-1158	Min.	83.47	0.00	19	0.00	19	0.00	19	-1513.12	19	209.78	19	66.81	19
101	-1158	104	Max	0.00	0.00	19	0.00	19	0.00	19	-1471.25	19	-62.53	19	406.68	19
101	-1158	104	Max	82.00	0.00	19	0.00	19	0.00	19	-2956.27	19	-1877.82	19	406.68	19
101	-1158	104	Min.	0.00	0.00	19	0.00	19	0.00	19	-1471.25	19	-62.53	19	406.68	19
101	-1158	104	Min.	82.00	0.00	19	0.00	19	0.00	19	-2956.27	19	-1877.82	19	406.68	19
101	104	105	Max	58.00	0.00	19	0.00	19	0.00	19	4459.70	19	-1848.78	19	200.78	19
101	104	105	Max	223.21									1849.16	19		
101	104	105	Max	428.00	0.00	19	0.00	19	0.00	19	-5490.16	19	-3755.12	19	200.78	19
101	104	105	Min.	58.00	0.00	19	0.00	19	0.00	19	4459.70	19	-1848.78	19	200.78	19
101	104	105	Min.	223.21									1849.16	19		
101	104	105	Min.	428.00	0.00	19	0.00	19	0.00	19	-5490.16	19	-3755.12	19	200.78	19
101	105	106	Max	35.00	0.00	19	0.00	19	0.00	19	4364.87	19	-2242.04	19	226.73	19
101	105	106	Max	201.73									1408.96	19		
101	105	106	Max	396.00	0.00	19	0.00	19	0.00	19	-5054.10	19	-3486.09	19	226.73	19
101	105	106	Min.	35.00	0.00	19	0.00	19	0.00	19	4364.87	19	-2242.04	19	226.73	19
101	105	106	Min.	201.73									1408.96	19		
101	105	106	Min.	396.00	0.00	19	0.00	19	0.00	19	-5054.10	19	-3486.09	19	226.73	19
101	106	-1159	Max	15.00	0.00	19	0.00	19	0.00	19	-6631.42	19	5868.89	19	50.20	19
101	106	-1159	Max	118.00	0.00	19	0.00	19	0.00	19	-7572.84	19	-1446.31	19	50.20	19
101	106	-1159	Min.	15.00	0.00	19	0.00	19	0.00	19	-6631.42	19	5868.89	19	50.20	19
101	106	-1159	Min.	118.00	0.00	19	0.00	19	0.00	19	-7572.84	19	-1446.31	19	50.20	19
102	107	108	Max	15.00	0.00	19	0.00	19	0.00	19	7183.23	19	-2954.96	19	-71.70	19
102	107	108	Max	188.48									3299.97	19		
102	107	108	Max	405.00	0.00	19	0.00	19	0.00	19	-8902.67	19	-6307.88	19	-71.70	19
102	107	108	Min.	15.00	0.00	19	0.00	19	0.00	19	7183.23	19	-2954.96	19	-71.70	19
102	107	108	Min.	188.48									3299.97	19		
102	107	108	Min.	405.00	0.00	19	0.00	19	0.00	19	-8902.67	19	-6307.88	19	-71.70	19
102	108	109	Max	35.00	0.00	19	0.00	19	0.00	19	10471.50	19	-8431.80	19	98.85	19
102	108	109	Max	266.57									3692.56	19		
102	108	109	Max	432.00	0.00	19	0.00	19	0.00	19	-7480.72	19	-2495.15	19	98.85	19
102	108	109	Min.	35.00	0.00	19	0.00	19	0.00	19	10471.50	19	-8431.80	19	98.85	19
102	108	109	Min.	266.57									3692.56	19		
102	108	109	Min.	432.00	0.00	19	0.00	19	0.00	19	-7480.72	19	-2495.15	19	98.85	19
102	109	-1170	Max	13.00	0.00	19	0.00	19	0.00	19	2959.02	19	-2765.00	19	-288.54	19
102	109	-1170	Max	84.67	0.00	19	0.00	19	0.00	19	2273.88	19	-889.88	19	-288.54	19
102	109	-1170	Min.	13.00	0.00	19	0.00	19	0.00	19	2959.02	19	-2765.00	19	-288.54	19
102	109	-1170	Min.	84.67	0.00	19	0.00	19	0.00	19	2273.88	19	-889.88	19	-288.54	19
102	-1170	-1171	Max	0.00	0.00	19	0.00	19	0.00	19	1728.88	19	-402.49	19	5.62	19
102	-1170	-1171	Max	84.67	0.00	19	0.00	19	0.00	19	919.47	19	718.64	19	5.62	19
102	-1170	-1171	Min.	0.00	0.00	19	0.00	19	0.00	19	1728.88	19	-402.49	19	5.62	19
102	-1170	-1171	Min.	84.67	0.00	19	0.00	19	0.00	19	919.47	19	718.64	19	5.62	19
102	-1171	-1172	Max	0.00	0.00	19	0.00	19	0.00	19	790.73	19	899.98	19	30.83	19
102	-1171	-1172	Max	82.97									1227.00	19		
102	-1171	-1172	Max	84.67	0.00	19	0.00	19	0.00	19	-18.68	19	1226.82	19	30.83	19
102	-1171	-1172	Min.	0.00	0.00	19	0.00	19	0.00	19	790.73	19	899.98	19	30.83	19
102	-1171	-1172	Min.	82.97									1227.00	19		
102	-1171	-1172	Min.	84.67	0.00	19	0.00	19	0.00	19	-18.68	19	1226.82	19	30.83	19
102	-1172	-1173	Max	0.00	0.00	19	0.00	19	0.00	19	-102.03	19	1173.26	19	22.27	19
102	-1172	-1173	Max	84.67	0.00	19	0.00	19	0.00	19	-911.44	19	744.23	19	22.27	19
102	-1172	-1173	Min.	0.00	0.00	19	0.00	19	0.00	19	-102.03	19	1173.26	19	22.27	19
102	-1172	-1173	Min.	84.67	0.00	19	0.00	19	0.00	19	-911.44	19	744.23	19	22.27	19
102	-1173	-1174	Max	0.00	0.00	19	0.00	19	0.00	19	-959.49	19	406.06	19	55.14	19
102	-1173	-1174	Max	84.67	0.00	19	0.00	19	0.00	19	-1768.91	19	-748.97	19	55.14	19
102	-1173	-1174	Min.	0.00	0.00	19	0.00	19	0.00	19	-959.49	19	406.06	19	55.14	19
102	-1173	-1174	Min.	84.67	0.00	19	0.00	19	0.00	19	-1768.91	19	-748.97	19	55.14	19
102	-1174	110	Max	0.00	0.00	19	0.00	19	0.00	19	-2495.61	19	-1350.95	19	383.19	19
102	-1174	110	Max	71.67	0.00	19	0.00	19	0.00	19	-3180.75	19	-3384.97	19	383.19	19
102	-1174	110	Min.	0.00	0.00	19	0.00	19	0.00	19	-2495.61	19	-1350.95	19	383.19	19
102	-1174	110	Min.	71.67	0.00	19	0.00	19	0.00	19	-3180.75	19	-3384.97	19	383.19	19
102	110	111	Max	57.00	0.00	19	0.00	19	0.00	19	6315.25	19	-1713.86	19	-162.29	19



102	110	111	Max	207.01								3039.44	19			
102	110	111	Max	428.00	0.00	19	0.00	19	0.00	19	-9248.84	19	-7155.68	19	-162.29	19
102	110	111	Min.	57.00	0.00	19	0.00	19	0.00	19	6315.25	19	-1713.86	19	-162.29	19
102	110	111	Min.	207.01									3039.44	19		
102	110	111	Min.	428.00	0.00	19	0.00	19	0.00	19	-9248.84	19	-7155.68	19	-162.29	19
102	111	112	Max	35.00	0.00	19	0.00	19	0.00	19	7654.97	19	-4001.70	19	89.85	19
102	111	112	Max	211.63									2843.90	19		
102	111	112	Max	396.00	0.00	19	0.00	19	0.00	19	-7793.45	19	-4251.66	19	89.85	19
102	111	112	Min.	35.00	0.00	19	0.00	19	0.00	19	7654.97	19	-4001.70	19	89.85	19
102	111	112	Min.	211.63									2843.90	19		
102	111	112	Min.	396.00	0.00	19	0.00	19	0.00	19	-7793.45	19	-4251.66	19	89.85	19
103	113	114	Max	15.00	0.00	19	0.00	19	0.00	19	6120.69	19	-2894.10	19	225.13	19
103	113	114	Max	195.27									2641.48	19		
103	113	114	Max	405.00	0.00	19	0.00	19	0.00	19	-7076.06	19	-4757.07	19	225.13	19
103	113	114	Min.	15.00	0.00	19	0.00	19	0.00	19	6120.69	19	-2894.10	19	225.13	19
103	113	114	Min.	195.27									2641.48	19		
103	113	114	Min.	405.00	0.00	19	0.00	19	0.00	19	-7076.06	19	-4757.07	19	225.13	19
103	114	115	Max	35.00	0.00	19	0.00	19	0.00	19	8197.25	19	-6552.75	19	-739.03	19
103	114	115	Max	271.95									3159.00	19		
103	114	115	Max	471.50	0.00	19	0.00	19	0.00	19	-6903.31	19	-3728.73	19	-739.03	19
103	114	115	Min.	35.00	0.00	19	0.00	19	0.00	19	8197.25	19	-6552.75	19	-739.03	19
103	114	115	Min.	271.95									3159.00	19		
103	114	115	Min.	471.50	0.00	19	0.00	19	0.00	19	-6903.31	19	-3728.73	19	-739.03	19
103	115	-1236	Max	12.50	0.00	19	0.00	19	0.00	19	4853.01	19	-4661.21	19	525.88	19
103	115	-1236	Max	287.41									2009.60	19		
103	115	-1236	Max	371.00	0.00	19	0.00	19	0.00	19	-1475.52	19	1392.94	19	525.88	19
103	115	-1236	Min.	12.50	0.00	19	0.00	19	0.00	19	4853.01	19	-4661.21	19	525.88	19
103	115	-1236	Min.	287.41									2009.60	19		
103	115	-1236	Min.	371.00	0.00	19	0.00	19	0.00	19	-1475.52	19	1392.94	19	525.88	19
103	-1236	-1237	Max	0.00	0.00	19	0.00	19	0.00	19	-2192.21	19	908.07	19	146.74	19
103	-1236	-1237	Max	68.50	0.00	19	0.00	19	0.00	19	-3401.43	19	-1007.75	19	146.74	19
103	-1236	-1237	Min.	0.00	0.00	19	0.00	19	0.00	19	-2192.21	19	908.07	19	146.74	19
103	-1236	-1237	Min.	68.50	0.00	19	0.00	19	0.00	19	-3401.43	19	-1007.75	19	146.74	19
103	-1237	116	Max	0.00	0.00	19	0.00	19	0.00	19	-3816.39	19	-1737.22	19	60.62	19
103	-1237	116	Max	56.00	0.00	19	0.00	19	0.00	19	-4804.94	19	-4151.20	19	60.62	19
103	-1237	116	Min.	0.00	0.00	19	0.00	19	0.00	19	-3816.39	19	-1737.22	19	60.62	19
103	-1237	116	Min.	56.00	0.00	19	0.00	19	0.00	19	-4804.94	19	-4151.20	19	60.62	19
103	116	117	Max	17.50	0.00	19	0.00	19	0.00	19	6427.66	19	-3341.49	19	281.79	19
103	116	117	Max	204.93									2696.35	19		
103	116	117	Max	428.00	0.00	19	0.00	19	0.00	19	-7616.78	19	-5782.17	19	281.79	19
103	116	117	Min.	17.50	0.00	19	0.00	19	0.00	19	6427.66	19	-3341.49	19	281.79	19
103	116	117	Min.	204.93									2696.35	19		
103	116	117	Min.	428.00	0.00	19	0.00	19	0.00	19	-7616.78	19	-5782.17	19	281.79	19
103	117	118	Max	35.00	0.00	19	0.00	19	0.00	19	5797.93	19	-2896.42	19	-229.89	19
103	117	118	Max	206.84									2149.45	19		
103	117	118	Max	396.00	0.00	19	0.00	19	0.00	19	-6225.13	19	-3667.51	19	-229.89	19
103	117	118	Min.	35.00	0.00	19	0.00	19	0.00	19	5797.93	19	-2896.42	19	-229.89	19
103	117	118	Min.	206.84									2149.45	19		
103	117	118	Min.	396.00	0.00	19	0.00	19	0.00	19	-6225.13	19	-3667.51	19	-229.89	19
104	101	-1133	Max	15.00	0.00	19	0.00	19	0.00	19	-2479.09	19	4148.83	19	255.44	19
104	101	-1133	Max	163.00	0.00	19	0.00	19	0.00	19	-4591.79	19	-1083.62	19	255.44	19
104	101	-1133	Min.	15.00	0.00	19	0.00	19	0.00	19	-2479.09	19	4148.83	19	255.44	19
104	101	-1133	Min.	163.00	0.00	19	0.00	19	0.00	19	-4591.79	19	-1083.62	19	255.44	19
104	101	107	Max	105.00	0.00	19	0.00	19	0.00	19	4975.14	19	-3727.10	19	55.65	19
104	101	107	Max	318.78									1597.04	19		
104	101	107	Max	444.00	0.00	19	0.00	19	0.00	19	-2904.93	19	-218.09	19	55.65	19
104	101	107	Min.	105.00	0.00	19	0.00	19	0.00	19	4975.14	19	-3727.10	19	55.65	19
104	101	107	Min.	318.78									1597.04	19		
104	101	107	Min.	444.00	0.00	19	0.00	19	0.00	19	-2904.93	19	-218.09	19	55.65	19
104	107	-1197	Max	60.00	0.00	19	0.00	19	0.00	19	4902.11	19	-3246.34	19	-42.85	19
104	107	-1197	Max	161.00	0.00	19	0.00	19	0.00	19	2554.36	19	519.18	19	-42.85	19
104	107	-1197	Min.	60.00	0.00	19	0.00	19	0.00	19	4902.11	19	-3246.34	19	-42.85	19
104	107	-1197	Min.	161.00	0.00	19	0.00	19	0.00	19	2554.36	19	519.18	19	-42.85	19
104	-1197	113	Max	0.00	0.00	19	0.00	19	0.00	19	2554.36	19	519.18	19	-42.85	19
104	-1197	113	Max	109.89									1922.65	19		
104	-1197	113	Max	306.00	0.00	19	0.00	19	0.00	19	-4558.62	19	-2547.34	19	-42.85	19
104	-1197	113	Min.	0.00	0.00	19	0.00	19	0.00	19	2554.36	19	519.18	19	-42.85	19
104	-1197	113	Min.	109.89									1922.65	19		
104	-1197	113	Min.	306.00	0.00	19	0.00	19	0.00	19	-4558.62	19	-2547.34	19	-42.85	19
104	113	-1243	Max	15.00	0.00	19	0.00	19	0.00	19	-7382.35	19	7101.38	19	-322.68	19
104	113	-1243	Max	118.00	0.00	19	0.00	19	0.00	19	-8852.68	19	-1259.66	19	-322.68	19
104	113	-1243	Min.	15.00	0.00	19	0.00	19	0.00	19	-7382.35	19	7101.38	19	-322.68	19
104	113	-1243	Min.	118.00	0.00	19	0.00	19	0.00	19	-8852.68	19	-1259.66	19	-322.68	19
105	102	108	Max	15.00	0.00	19	0.00	19	0.00	19	3546.26	19	-2366.36	19	31.46	19
105	102	108	Max	245.41									1724.71	19		
105	102	108	Max	489.00	0.00	19	0.00	19	0.00	19	-3739.12	19	-2823.44	19	31.46	19



105	102	108	Min.	15.00	0.00	19	0.00	19	0.00	19	3546.26	19	-2366.36	19	31.46	19
105	102	108	Min.	245.41									1724.71	19		
105	102	108	Min.	489.00	0.00	19	0.00	19	0.00	19	-3739.12	19	-2823.44	19	31.46	19
105	108	-1198	Max	15.00	0.00	19	0.00	19	0.00	19	4582.96	19	-4283.11	19	-4.40	19
105	108	-1198	Max	161.00	0.00	19	0.00	19	0.00	19	2338.94	19	769.87	19	-4.40	19
105	108	-1198	Min.	15.00	0.00	19	0.00	19	0.00	19	4582.96	19	-4283.11	19	-4.40	19
105	108	-1198	Min.	161.00	0.00	19	0.00	19	0.00	19	2338.94	19	769.87	19	-4.40	19
105	-1198	114	Max	0.00	0.00	19	0.00	19	0.00	19	2338.94	19	769.87	19	-4.40	19
105	-1198	114	Max	152.18									2549.53	19		
105	-1198	114	Max	396.00	0.00	19	0.00	19	0.00	19	-3747.58	19	-2019.23	19	-4.40	19
105	-1198	114	Min.	0.00	0.00	19	0.00	19	0.00	19	2338.94	19	769.87	19	-4.40	19
105	-1198	114	Min.	152.18									2549.53	19		
105	-1198	114	Min.	396.00	0.00	19	0.00	19	0.00	19	-3747.58	19	-2019.23	19	-4.40	19
106	-1140	-1153	Max	30.00	0.00	19	0.00	19	0.00	19	2798.66	19	-2960.41	19	159.66	19
106	-1140	-1153	Max	193.00	0.00	19	0.00	19	0.00	19	1308.84	19	387.20	19	159.66	19
106	-1140	-1153	Min.	30.00	0.00	19	0.00	19	0.00	19	2798.66	19	-2960.41	19	159.66	19
106	-1140	-1153	Min.	193.00	0.00	19	0.00	19	0.00	19	1308.84	19	387.20	19	159.66	19
107	103	109	Max	15.00	0.00	19	0.00	19	0.00	19	8580.08	19	-6617.96	19	-0.34	19
107	103	109	Max	264.52									4086.70	19		
107	103	109	Max	484.00	0.00	19	0.00	19	0.00	19	-7546.90	19	-4195.14	19	-0.34	19
107	103	109	Min.	15.00	0.00	19	0.00	19	0.00	19	8580.08	19	-6617.96	19	-0.34	19
107	103	109	Min.	264.52									4086.70	19		
107	103	109	Min.	484.00	0.00	19	0.00	19	0.00	19	-7546.90	19	-4195.14	19	-0.34	19
107	109	-1183	Max	20.00	0.00	19	0.00	19	0.00	19	5907.65	19	-4529.33	19	286.41	19
107	109	-1183	Max	82.00	0.00	19	0.00	19	0.00	19	4719.73	19	-1234.84	19	286.41	19
107	109	-1183	Min.	20.00	0.00	19	0.00	19	0.00	19	5907.65	19	-4529.33	19	286.41	19
107	109	-1183	Min.	82.00	0.00	19	0.00	19	0.00	19	4719.73	19	-1234.84	19	286.41	19
107	-1183	-1199	Max	0.00	0.00	19	0.00	19	0.00	19	3581.32	19	-359.68	19	113.67	19
107	-1183	-1199	Max	82.00	0.00	19	0.00	19	0.00	19	2010.20	19	1932.84	19	113.67	19
107	-1183	-1199	Min.	0.00	0.00	19	0.00	19	0.00	19	3581.32	19	-359.68	19	113.67	19
107	-1183	-1199	Min.	82.00	0.00	19	0.00	19	0.00	19	2010.20	19	1932.84	19	113.67	19
107	-1199	-2021	Max	0.00	0.00	19	0.00	19	0.00	19	1010.36	19	2502.70	19	-180.89	19
107	-1199	-2021	Max	52.70									2769.09	19		
107	-1199	-2021	Max	223.00	0.00	19	0.00	19	0.00	19	-3262.32	19	-8.24	19	-180.89	19
107	-1199	-2021	Min.	0.00	0.00	19	0.00	19	0.00	19	1010.36	19	2502.70	19	-180.89	19
107	-1199	-2021	Min.	52.70									2769.09	19		
107	-1199	-2021	Min.	223.00	0.00	19	0.00	19	0.00	19	-3262.32	19	-8.24	19	-180.89	19
108	104	110	Max	15.00	0.00	19	0.00	19	0.00	19	8371.44	19	-6047.35	19	16.71	19
108	104	110	Max	258.46									4143.02	19		
108	104	110	Max	484.00	0.00	19	0.00	19	0.00	19	-7755.54	19	-4603.07	19	16.71	19
108	104	110	Min.	15.00	0.00	19	0.00	19	0.00	19	8371.44	19	-6047.35	19	16.71	19
108	104	110	Min.	258.46									4143.02	19		
108	104	110	Min.	484.00	0.00	19	0.00	19	0.00	19	-7755.54	19	-4603.07	19	16.71	19
108	110	-1184	Max	20.00	0.00	19	0.00	19	0.00	19	4089.25	19	-3384.06	19	-310.92	19
108	110	-1184	Max	95.33	0.00	19	0.00	19	0.00	19	2645.87	19	-847.16	19	-310.92	19
108	110	-1184	Min.	20.00	0.00	19	0.00	19	0.00	19	4089.25	19	-3384.06	19	-310.92	19
108	110	-1184	Min.	95.33	0.00	19	0.00	19	0.00	19	2645.87	19	-847.16	19	-310.92	19
108	-1184	-1202	Max	0.00	0.00	19	0.00	19	0.00	19	2044.91	19	-240.64	19	45.31	19
108	-1184	-1202	Max	95.33	0.00	19	0.00	19	0.00	19	218.33	19	838.18	19	45.31	19
108	-1184	-1202	Min.	0.00	0.00	19	0.00	19	0.00	19	2044.91	19	-240.64	19	45.31	19
108	-1184	-1202	Min.	95.33	0.00	19	0.00	19	0.00	19	218.33	19	838.18	19	45.31	19
108	-1202	-1213	Max	0.00	0.00	19	0.00	19	0.00	19	738.94	19	1016.09	19	27.27	19
108	-1202	-1213	Max	38.30									1158.58	19		
108	-1202	-1213	Max	95.33	0.00	19	0.00	19	0.00	19	-1087.65	19	849.88	19	27.27	19
108	-1202	-1213	Min.	0.00	0.00	19	0.00	19	0.00	19	738.94	19	1016.09	19	27.27	19
108	-1202	-1213	Min.	38.30									1158.58	19		
108	-1202	-1213	Min.	95.33	0.00	19	0.00	19	0.00	19	-1087.65	19	849.88	19	27.27	19
108	-1213	-2022	Max	0.00	0.00	19	0.00	19	0.00	19	-780.49	19	461.25	19	119.99	19
108	-1213	-2022	Max	101.00	0.00	19	0.00	19	0.00	19	-2715.65	19	-1304.30	19	119.99	19
108	-1213	-2022	Min.	0.00	0.00	19	0.00	19	0.00	19	-780.49	19	461.25	19	119.99	19
108	-1213	-2022	Min.	101.00	0.00	19	0.00	19	0.00	19	-2715.65	19	-1304.30	19	119.99	19
109	105	111	Max	15.00	0.00	19	0.00	19	0.00	19	3567.88	19	-2509.32	19	1.68	19
109	105	111	Max	246.77									1631.79	19		
109	105	111	Max	489.00	0.00	19	0.00	19	0.00	19	-3717.50	19	-2863.90	19	1.68	19
109	105	111	Min.	15.00	0.00	19	0.00	19	0.00	19	3567.88	19	-2509.32	19	1.68	19
109	105	111	Min.	246.77									1631.79	19		
109	105	111	Min.	489.00	0.00	19	0.00	19	0.00	19	-3717.50	19	-2863.90	19	1.68	19
109	111	-1190	Max	15.00	0.00	19	0.00	19	0.00	19	4583.50	19	-4297.20	19	-11.87	19
109	111	-1190	Max	133.00	0.00	19	0.00	19	0.00	19	2769.85	19	41.28	19	-11.87	19
109	111	-1190	Min.	15.00	0.00	19	0.00	19	0.00	19	4583.50	19	-4297.20	19	-11.87	19
109	111	-1190	Min.	133.00	0.00	19	0.00	19	0.00	19	2769.85	19	41.28	19	-11.87	19
109	-1190	117	Max	0.00	0.00	19	0.00	19	0.00	19	2769.85	19	41.28	19	-11.87	19
109	-1190	117	Max	179.47									2537.02	19		
109	-1190	117	Max	424.00	0.00	19	0.00	19	0.00	19	-3747.04	19	-2030.36	19	-11.87	19
109	-1190	117	Min.	0.00	0.00	19	0.00	19	0.00	19	2769.85	19	41.28	19	-11.87	19
109	-1190	117	Min.	179.47									2537.02	19		



109	-1190	117	Min.	424.00	0.00	19	0.00	19	0.00	19	-3747.04	19	-2030.36	19	-11.87	19
110	106	112	Max	105.00	0.00	19	0.00	19	0.00	19	4819.09	19	-3600.14	19	-198.61	19
110	106	112	Max	313.14									1414.40	19		
110	106	112	Max	444.00	0.00	19	0.00	19	0.00	19	-3030.89	19	-569.14	19	-198.61	19
110	106	112	Min.	105.00	0.00	19	0.00	19	0.00	19	4819.09	19	-3600.14	19	-198.61	19
110	106	112	Min.	313.14									1414.40	19		
110	106	112	Min.	444.00	0.00	19	0.00	19	0.00	19	-3030.89	19	-569.14	19	-198.61	19
110	112	118	Max	60.00	0.00	19	0.00	19	0.00	19	5086.01	19	-3670.34	19	37.99	19
110	112	118	Max	279.64									1915.09	19		
110	112	118	Max	467.00	0.00	19	0.00	19	0.00	19	-4338.59	19	-2149.33	19	37.99	19
110	112	118	Min.	60.00	0.00	19	0.00	19	0.00	19	5086.01	19	-3670.34	19	37.99	19
110	112	118	Min.	279.64									1915.09	19		
110	112	118	Min.	467.00	0.00	19	0.00	19	0.00	19	-4338.59	19	-2149.33	19	37.99	19
110	118	-1268	Max	15.00	0.00	19	0.00	19	0.00	19	-5176.52	19	5124.53	19	224.95	19
110	118	-1268	Max	118.00	0.00	19	0.00	19	0.00	19	-6637.70	19	-959.79	19	224.95	19
110	118	-1268	Min.	15.00	0.00	19	0.00	19	0.00	19	-5176.52	19	5124.53	19	224.95	19
110	118	-1268	Min.	118.00	0.00	19	0.00	19	0.00	19	-6637.70	19	-959.79	19	224.95	19
201	201	202	Max	15.00	0.00	19	0.00	19	0.00	19	5459.41	19	-4038.20	19	-170.32	19
201	201	202	Max	220.54									1572.50	19		
201	201	202	Max	405.00	0.00	19	0.00	19	0.00	19	-4899.35	19	-2946.09	19	-170.32	19
201	201	202	Min.	15.00	0.00	19	0.00	19	0.00	19	5459.41	19	-4038.20	19	-170.32	19
201	201	202	Min.	220.54									1572.50	19		
201	201	202	Min.	405.00	0.00	19	0.00	19	0.00	19	-4899.35	19	-2946.09	19	-170.32	19
201	202	203	Max	35.00	0.00	19	0.00	19	0.00	19	5604.82	19	-3764.99	19	-265.02	19
201	202	203	Max	240.85									2003.76	19		
201	202	203	Max	431.00	0.00	19	0.00	19	0.00	19	-5177.38	19	-2918.65	19	-265.02	19
201	202	203	Min.	35.00	0.00	19	0.00	19	0.00	19	5604.82	19	-3764.99	19	-265.02	19
201	202	203	Min.	240.85									2003.76	19		
201	202	203	Min.	431.00	0.00	19	0.00	19	0.00	19	-5177.38	19	-2918.65	19	-265.02	19
201	203	204	Max	12.00	0.00	19	0.00	19	0.00	19	4491.57	19	-3788.09	19	85.13	19
201	203	204	Max	260.02									1781.82	19		
201	203	204	Max	496.00	0.00	19	0.00	19	0.00	19	-4273.67	19	-3260.76	19	85.13	19
201	203	204	Min.	12.00	0.00	19	0.00	19	0.00	19	4491.57	19	-3788.09	19	85.13	19
201	203	204	Min.	260.02									1781.82	19		
201	203	204	Min.	496.00	0.00	19	0.00	19	0.00	19	-4273.67	19	-3260.76	19	85.13	19
201	204	205	Max	58.00	0.00	19	0.00	19	0.00	19	4476.22	19	-1939.33	19	190.31	19
201	204	205	Max	223.83									1786.06	19		
201	204	205	Max	428.00	0.00	19	0.00	19	0.00	19	-5473.64	19	-3784.55	19	190.31	19
201	204	205	Min.	58.00	0.00	19	0.00	19	0.00	19	4476.22	19	-1939.33	19	190.31	19
201	204	205	Min.	223.83									1786.06	19		
201	204	205	Min.	428.00	0.00	19	0.00	19	0.00	19	-5473.64	19	-3784.55	19	190.31	19
201	205	206	Max	35.00	0.00	19	0.00	19	0.00	19	4516.40	19	-2185.14	19	183.69	19
201	205	206	Max	207.59									1723.76	19		
201	205	206	Max	396.00	0.00	19	0.00	19	0.00	19	-4902.58	19	-2882.19	19	183.69	19
201	205	206	Min.	35.00	0.00	19	0.00	19	0.00	19	4516.40	19	-2185.14	19	183.69	19
201	205	206	Min.	207.59									1723.76	19		
201	205	206	Min.	396.00	0.00	19	0.00	19	0.00	19	-4902.58	19	-2882.19	19	183.69	19
202	207	208	Max	15.00	0.00	19	0.00	19	0.00	19	11082.40	19	-9074.60	19	-9.85	19
202	207	208	Max	229.79									2827.53	19		
202	207	208	Max	405.00	0.00	19	0.00	19	0.00	19	-9039.98	19	-5091.82	19	-9.85	19
202	207	208	Min.	15.00	0.00	19	0.00	19	0.00	19	11082.40	19	-9074.60	19	-9.85	19
202	207	208	Min.	229.79									2827.53	19		
202	207	208	Min.	405.00	0.00	19	0.00	19	0.00	19	-9039.98	19	-5091.82	19	-9.85	19
202	208	209	Max	35.00	0.00	19	0.00	19	0.00	19	10694.20	19	-8703.04	19	163.89	19
202	208	209	Max	267.64									3736.30	19		
202	208	209	Max	432.00	0.00	19	0.00	19	0.00	19	-7555.72	19	-2473.12	19	163.89	19
202	208	209	Min.	35.00	0.00	19	0.00	19	0.00	19	10694.20	19	-8703.04	19	163.89	19
202	208	209	Min.	267.64									3736.30	19		
202	208	209	Min.	432.00	0.00	19	0.00	19	0.00	19	-7555.72	19	-2473.12	19	163.89	19
202	209	-1322	Max	13.00	0.00	19	0.00	19	0.00	19	4501.57	19	-3275.63	19	38.49	19
202	209	-1322	Max	84.67	0.00	19	0.00	19	0.00	19	3074.69	19	-560.81	19	38.49	19
202	209	-1322	Min.	13.00	0.00	19	0.00	19	0.00	19	4501.57	19	-3275.63	19	38.49	19
202	209	-1322	Min.	84.67	0.00	19	0.00	19	0.00	19	3074.69	19	-560.81	19	38.49	19
202	-1322	-1323	Max	0.00	0.00	19	0.00	19	0.00	19	2802.39	19	-95.79	19	284.99	19
202	-1322	-1323	Max	84.67	0.00	19	0.00	19	0.00	19	1116.68	19	1563.29	19	284.99	19
202	-1322	-1323	Min.	0.00	0.00	19	0.00	19	0.00	19	2802.39	19	-95.79	19	284.99	19
202	-1322	-1323	Min.	84.67	0.00	19	0.00	19	0.00	19	1116.68	19	1563.29	19	284.99	19
202	-1323	-1324	Max	0.00	0.00	19	0.00	19	0.00	19	1314.60	19	1682.35	19	168.36	19
202	-1323	-1324	Max	66.03									2116.34	19		
202	-1323	-1324	Max	84.67	0.00	19	0.00	19	0.00	19	-371.12	19	2081.75	19	168.36	19
202	-1323	-1324	Min.	0.00	0.00	19	0.00	19	0.00	19	1314.60	19	1682.35	19	168.36	19
202	-1323	-1324	Min.	66.03									2116.34	19		
202	-1323	-1324	Min.	84.67	0.00	19	0.00	19	0.00	19	-371.12	19	2081.75	19	168.36	19
202	-1324	-1325	Max	0.00	0.00	19	0.00	19	0.00	19	-58.81	19	2011.26	19	-100.11	19
202	-1324	-1325	Max	84.67	0.00	19	0.00	19	0.00	19	-1744.53	19	1247.85	19	-100.11	19
202	-1324	-1325	Min.	0.00	0.00	19	0.00	19	0.00	19	-58.81	19	2011.26	19	-100.11	19



202	-1324	-1325	Min.	84.67	0.00	19	0.00	19	0.00	19	-1744.53	19	1247.85	19	-100.11	19
202	-1325	-1326	Max	0.00	0.00	19	0.00	19	0.00	19	-1355.13	19	901.17	19	-250.67	19
202	-1325	-1326	Max	84.67	0.00	19	0.00	19	0.00	19	-3040.84	19	-959.79	19	-250.67	19
202	-1325	-1326	Min.	0.00	0.00	19	0.00	19	0.00	19	-1355.13	19	901.17	19	-250.67	19
202	-1325	-1326	Min.	84.67	0.00	19	0.00	19	0.00	19	-3040.84	19	-959.79	19	-250.67	19
202	-1326	210	Max	0.00	0.00	19	0.00	19	0.00	19	-3577.93	19	-1613.69	19	-27.54	19
202	-1326	210	Max	71.67	0.00	19	0.00	19	0.00	19	-5004.81	19	-4689.16	19	-27.54	19
202	-1326	210	Min.	0.00	0.00	19	0.00	19	0.00	19	-3577.93	19	-1613.69	19	-27.54	19
202	-1326	210	Min.	71.67	0.00	19	0.00	19	0.00	19	-5004.81	19	-4689.16	19	-27.54	19
202	210	211	Max	57.00	0.00	19	0.00	19	0.00	19	5352.23	19	-1410.76	19	-189.92	19
202	210	211	Max	206.56									2606.72	19		
202	210	211	Max	428.00	0.00	19	0.00	19	0.00	19	-7874.55	19	-6089.66	19	-189.92	19
202	210	211	Min.	57.00	0.00	19	0.00	19	0.00	19	5352.23	19	-1410.76	19	-189.92	19
202	210	211	Min.	206.56									2606.72	19		
202	210	211	Min.	428.00	0.00	19	0.00	19	0.00	19	-7874.55	19	-6089.66	19	-189.92	19
202	211	212	Max	35.00	0.00	19	0.00	19	0.00	19	5106.81	19	-1472.01	19	42.26	19
202	211	212	Max	184.87									2369.55	19		
202	211	212	Max	396.00	0.00	19	0.00	19	0.00	19	-7146.76	19	-5154.11	19	42.26	19
202	211	212	Min.	35.00	0.00	19	0.00	19	0.00	19	5106.81	19	-1472.01	19	42.26	19
202	211	212	Min.	184.87									2369.55	19		
202	211	212	Min.	396.00	0.00	19	0.00	19	0.00	19	-7146.76	19	-5154.11	19	42.26	19
203	213	-1395	Max	15.00	0.00	19	0.00	19	0.00	19	4713.63	19	-4437.95	19	-2658.53	19
203	213	-1395	Max	88.00	0.00	19	0.00	19	0.00	19	2634.23	19	-1755.99	19	-2658.53	19
203	213	-1395	Min.	15.00	0.00	19	0.00	19	0.00	19	4713.63	19	-4437.95	19	-2658.53	19
203	213	-1395	Min.	88.00	0.00	19	0.00	19	0.00	19	2634.23	19	-1755.99	19	-2658.53	19
203	-1395	-1396	Max	0.00	0.00	19	0.00	19	0.00	19	3515.70	19	-989.92	19	-1107.07	19
203	-1395	-1396	Max	88.00	0.00	19	0.00	19	0.00	19	1009.02	19	1000.95	19	-1107.07	19
203	-1395	-1396	Min.	0.00	0.00	19	0.00	19	0.00	19	3515.70	19	-989.92	19	-1107.07	19
203	-1395	-1396	Min.	88.00	0.00	19	0.00	19	0.00	19	1009.02	19	1000.95	19	-1107.07	19
203	-1396	-1397	Max	0.00	0.00	19	0.00	19	0.00	19	1442.80	19	1579.33	19	-260.14	19
203	-1396	-1397	Max	50.65									1944.73	19		
203	-1396	-1397	Max	88.00	0.00	19	0.00	19	0.00	19	-1063.89	19	1746.05	19	-260.14	19
203	-1396	-1397	Min.	0.00	0.00	19	0.00	19	0.00	19	1442.80	19	1579.33	19	-260.14	19
203	-1396	-1397	Min.	50.65									1944.73	19		
203	-1396	-1397	Min.	88.00	0.00	19	0.00	19	0.00	19	-1063.89	19	1746.05	19	-260.14	19
203	-1397	-1398	Max	0.00	0.00	19	0.00	19	0.00	19	-413.59	19	1398.47	19	529.38	19
203	-1397	-1398	Max	88.00	0.00	19	0.00	19	0.00	19	-2920.27	19	-68.43	19	529.38	19
203	-1397	-1398	Min.	0.00	0.00	19	0.00	19	0.00	19	-413.59	19	1398.47	19	529.38	19
203	-1397	-1398	Min.	88.00	0.00	19	0.00	19	0.00	19	-2920.27	19	-68.43	19	529.38	19
203	-1398	214	Max	0.00	0.00	19	0.00	19	0.00	19	-4159.59	19	-670.04	19	2319.27	19
203	-1398	214	Max	53.00	0.00	19	0.00	19	0.00	19	-5669.30	19	-3274.70	19	2319.27	19
203	-1398	214	Min.	0.00	0.00	19	0.00	19	0.00	19	-4159.59	19	-670.04	19	2319.27	19
203	-1398	214	Min.	53.00	0.00	19	0.00	19	0.00	19	-5669.30	19	-3274.70	19	2319.27	19
203	214	-1399	Max	35.00	0.00	19	0.00	19	0.00	19	7536.95	19	-5649.92	19	-4384.21	19
203	214	-1399	Max	97.80	0.00	19	0.00	19	0.00	19	5700.57	19	-1493.34	19	-4384.21	19
203	214	-1399	Min.	35.00	0.00	19	0.00	19	0.00	19	7536.95	19	-5649.92	19	-4384.21	19
203	214	-1399	Min.	97.80	0.00	19	0.00	19	0.00	19	5700.57	19	-1493.34	19	-4384.21	19
203	-1399	-1400	Max	0.00	0.00	19	0.00	19	0.00	19	3254.87	19	-83.77	19	-2272.63	19
203	-1399	-1400	Max	97.80	0.00	19	0.00	19	0.00	19	395.01	19	1701.02	19	-2272.63	19
203	-1399	-1400	Min.	0.00	0.00	19	0.00	19	0.00	19	3254.87	19	-83.77	19	-2272.63	19
203	-1399	-1400	Min.	97.80	0.00	19	0.00	19	0.00	19	395.01	19	1701.02	19	-2272.63	19
203	-1400	-1401	Max	0.00	0.00	19	0.00	19	0.00	19	1356.75	19	2784.74	19	-1386.03	19
203	-1400	-1401	Max	45.87									3099.45	19		
203	-1400	-1401	Max	97.80	0.00	19	0.00	19	0.00	19	-1503.10	19	2713.18	19	-1386.03	19
203	-1400	-1401	Min.	0.00	0.00	19	0.00	19	0.00	19	1356.75	19	2784.74	19	-1386.03	19
203	-1400	-1401	Min.	45.87									3099.45	19		
203	-1400	-1401	Min.	97.80	0.00	19	0.00	19	0.00	19	-1503.10	19	2713.18	19	-1386.03	19
203	-1401	-1402	Max	0.00	0.00	19	0.00	19	0.00	19	-571.92	19	2262.82	19	-631.54	19
203	-1401	-1402	Max	97.80	0.00	19	0.00	19	0.00	19	-3431.77	19	305.01	19	-631.54	19
203	-1401	-1402	Min.	0.00	0.00	19	0.00	19	0.00	19	-571.92	19	2262.82	19	-631.54	19
203	-1401	-1402	Min.	97.80	0.00	19	0.00	19	0.00	19	-3431.77	19	305.01	19	-631.54	19
203	-1402	21	Max	0.00	0.00	19	0.00	19	0.00	19	-4388.87	19	-1160.01	19	736.18	19
203	-1402	21	Max	80.30	0.00	19	0.00	19	0.00	19	-6736.99	19	-5627.04	19	736.18	19
203	-1402	21	Min.	0.00	0.00	19	0.00	19	0.00	19	-4388.87	19	-1160.01	19	736.18	19
203	-1402	21	Min.	80.30	0.00	19	0.00	19	0.00	19	-6736.99	19	-5627.04	19	736.18	19
203	21	-1403	Max	12.50	0.00	19	0.00	19	0.00	19	6133.07	19	-6438.19	19	-982.44	19
203	21	-1403	Max	92.75	0.00	19	0.00	19	0.00	19	5085.80	19	-1936.62	19	-982.44	19
203	21	-1403	Min.	12.50	0.00	19	0.00	19	0.00	19	6133.07	19	-6438.19	19	-982.44	19
203	21	-1403	Min.	92.75	0.00	19	0.00	19	0.00	19	5085.80	19	-1936.62	19	-982.44	19
203	-1403	-1404	Max	0.00	0.00	19	0.00	19	0.00	19	3462.84	19	-621.88	19	652.67	19
203	-1403	-1404	Max	92.75	0.00	19	0.00	19	0.00	19	2252.45	19	2028.59	19	652.67	19
203	-1403	-1404	Min.	0.00	0.00	19	0.00	19	0.00	19	3462.84	19	-621.88	19	652.67	19
203	-1403	-1404	Min.	92.75	0.00	19	0.00	19	0.00	19	2252.45	19	2028.59	19	652.67	19
203	-1404	-1405	Max	0.00	0.00	19	0.00	19	0.00	19	1870.49	19	2695.56	19	1816.65	19
203	-1404	-1405	Max	92.75	0.00	19	0.00	19	0.00	19	660.11	19	3869.13	19	1816.65	19
203	-1404	-1405	Min.	0.00	0.00	19	0.00	19	0.00	19	1870.49	19	2695.56	19	1816.65	19





203	-1404	-1405	Min.	92.75	0.00	19	0.00	19	0.00	19	660.11	19	3869.13	19	1816.65	19
203	-1405	-1406	Max	0.00	0.00	19	0.00	19	0.00	19	503.09	19	3702.59	19	3042.82	19
203	-1405	-1406	Max	37.10									3799.43	19		
203	-1405	-1406	Max	92.75	0.00	19	0.00	19	0.00	19	-707.29	19	3607.89	19	3042.82	19
203	-1405	-1406	Min.	0.00	0.00	19	0.00	19	0.00	19	503.09	19	3702.59	19	3042.82	19
203	-1405	-1406	Min.	37.10									3799.43	19		
203	-1405	-1406	Min.	92.75	0.00	19	0.00	19	0.00	19	-707.29	19	3607.89	19	3042.82	19
203	-1406	-1407	Max	0.00	0.00	19	0.00	19	0.00	19	-2290.49	19	2557.95	19	3141.57	19
203	-1406	-1407	Max	68.50	0.00	19	0.00	19	0.00	19	-3184.41	19	682.80	19	3141.57	19
203	-1406	-1407	Min.	0.00	0.00	19	0.00	19	0.00	19	-2290.49	19	2557.95	19	3141.57	19
203	-1406	-1407	Min.	68.50	0.00	19	0.00	19	0.00	19	-3184.41	19	682.80	19	3141.57	19
203	-1407	216	Max	0.00	0.00	19	0.00	19	0.00	19	-9064.05	19	-1128.29	19	1686.40	19
203	-1407	216	Max	56.00	0.00	19	0.00	19	0.00	19	-9794.86	19	-6408.79	19	1686.40	19
203	-1407	216	Min.	0.00	0.00	19	0.00	19	0.00	19	-9064.05	19	-1128.29	19	1686.40	19
203	-1407	216	Min.	56.00	0.00	19	0.00	19	0.00	19	-9794.86	19	-6408.79	19	1686.40	19
203	216	-1408	Max	17.50	0.00	19	0.00	19	0.00	19	6547.11	19	-5253.90	19	-2143.19	19
203	216	-1408	Max	92.60	0.00	19	0.00	19	0.00	19	4379.71	19	-1150.88	19	-2143.19	19
203	216	-1408	Min.	17.50	0.00	19	0.00	19	0.00	19	6547.11	19	-5253.90	19	-2143.19	19
203	216	-1408	Min.	92.60	0.00	19	0.00	19	0.00	19	4379.71	19	-1150.88	19	-2143.19	19
203	-1408	-1409	Max	0.00	0.00	19	0.00	19	0.00	19	3396.28	19	-160.53	19	-449.60	19
203	-1408	-1409	Max	92.60	0.00	19	0.00	19	0.00	19	723.83	19	1747.09	19	-449.60	19
203	-1408	-1409	Min.	0.00	0.00	19	0.00	19	0.00	19	3396.28	19	-160.53	19	-449.60	19
203	-1408	-1409	Min.	92.60	0.00	19	0.00	19	0.00	19	723.83	19	1747.09	19	-449.60	19
203	-1409	-1410	Max	0.00	0.00	19	0.00	19	0.00	19	1323.85	19	2138.53	19	375.67	19
203	-1409	-1410	Max	45.29									2442.11	19		
203	-1409	-1410	Max	92.60	0.00	19	0.00	19	0.00	19	-1348.60	19	2127.07	19	375.67	19
203	-1409	-1410	Min.	0.00	0.00	19	0.00	19	0.00	19	1323.85	19	2138.53	19	375.67	19
203	-1409	-1410	Min.	45.29									2442.11	19		
203	-1409	-1410	Min.	92.60	0.00	19	0.00	19	0.00	19	-1348.60	19	2127.07	19	375.67	19
203	-1410	-1411	Max	0.00	0.00	19	0.00	19	0.00	19	-784.03	19	1474.77	19	1257.90	19
203	-1410	-1411	Max	92.60	0.00	19	0.00	19	0.00	19	-3456.48	19	-488.59	19	1257.90	19
203	-1410	-1411	Min.	0.00	0.00	19	0.00	19	0.00	19	-784.03	19	1474.77	19	1257.90	19
203	-1410	-1411	Min.	92.60	0.00	19	0.00	19	0.00	19	-3456.48	19	-488.59	19	1257.90	19
203	-1411	217	Max	0.00	0.00	19	0.00	19	0.00	19	-5656.36	19	-1375.68	19	3160.56	19
203	-1411	217	Max	57.60	0.00	19	0.00	19	0.00	19	-7318.71	19	-5112.51	19	3160.56	19
203	-1411	217	Min.	0.00	0.00	19	0.00	19	0.00	19	-5656.36	19	-1375.68	19	3160.56	19
203	-1411	217	Min.	57.60	0.00	19	0.00	19	0.00	19	-7318.71	19	-5112.51	19	3160.56	19
203	217	-1412	Max	35.00	0.00	19	0.00	19	0.00	19	5523.70	19	-2490.49	19	-2499.58	19
203	217	-1412	Max	82.20	0.00	19	0.00	19	0.00	19	4204.36	19	-194.67	19	-2499.58	19
203	217	-1412	Min.	35.00	0.00	19	0.00	19	0.00	19	5523.70	19	-2490.49	19	-2499.58	19
203	217	-1412	Min.	82.20	0.00	19	0.00	19	0.00	19	4204.36	19	-194.67	19	-2499.58	19
203	-1412	-1413	Max	0.00	0.00	19	0.00	19	0.00	19	2993.53	19	421.38	19	-803.88	19
203	-1412	-1413	Max	82.20	0.00	19	0.00	19	0.00	19	695.87	19	1937.72	19	-803.88	19
203	-1412	-1413	Min.	0.00	0.00	19	0.00	19	0.00	19	2993.53	19	421.38	19	-803.88	19
203	-1412	-1413	Min.	82.20	0.00	19	0.00	19	0.00	19	695.87	19	1937.72	19	-803.88	19
203	-1413	-1414	Max	0.00	0.00	19	0.00	19	0.00	19	1228.99	19	2278.26	19	65.13	19
203	-1413	-1414	Max	43.97									2548.45	19		
203	-1413	-1414	Max	82.20	0.00	19	0.00	19	0.00	19	-1068.66	19	2344.16	19	65.13	19
203	-1413	-1414	Min.	0.00	0.00	19	0.00	19	0.00	19	1228.99	19	2278.26	19	65.13	19
203	-1413	-1414	Min.	43.97									2548.45	19		
203	-1413	-1414	Min.	82.20	0.00	19	0.00	19	0.00	19	-1068.66	19	2344.16	19	65.13	19
203	-1414	-1415	Max	0.00	0.00	19	0.00	19	0.00	19	-638.72	19	1918.55	19	982.86	19
203	-1414	-1415	Max	82.20	0.00	19	0.00	19	0.00	19	-2936.38	19	449.19	19	982.86	19
203	-1414	-1415	Min.	0.00	0.00	19	0.00	19	0.00	19	-638.72	19	1918.55	19	982.86	19
203	-1414	-1415	Min.	82.20	0.00	19	0.00	19	0.00	19	-2936.38	19	449.19	19	982.86	19
203	-1415	218	Max	0.00	0.00	19	0.00	19	0.00	19	-4261.15	19	-948.15	19	3208.57	19
203	-1415	218	Max	67.20	0.00	19	0.00	19	0.00	19	-6139.54	19	-4442.79	19	3208.57	19
203	-1415	218	Min.	0.00	0.00	19	0.00	19	0.00	19	-4261.15	19	-948.15	19	3208.57	19
203	-1415	218	Min.	67.20	0.00	19	0.00	19	0.00	19	-6139.54	19	-4442.79	19	3208.57	19
204	201	-1303	Max	0.00	0.00	19	0.00	19	0.00	19	5093.84	19	-6177.14	19	-3469.69	19
204	201	-1303	Max	84.00	0.00	19	0.00	19	0.00	19	3572.60	19	-2537.24	19	-3469.69	19
204	201	-1303	Min.	0.00	0.00	19	0.00	19	0.00	19	5093.84	19	-6177.14	19	-3469.69	19
204	201	-1303	Min.	84.00	0.00	19	0.00	19	0.00	19	3572.60	19	-2537.24	19	-3469.69	19
204	-1303	-1306	Max	0.00	0.00	19	0.00	19	0.00	19	2643.17	19	-552.81	19	-1162.64	19
204	-1303	-1306	Max	84.00	0.00	19	0.00	19	0.00	19	1121.93	19	1028.53	19	-1162.64	19
204	-1303	-1306	Min.	0.00	0.00	19	0.00	19	0.00	19	2643.17	19	-552.81	19	-1162.64	19
204	-1303	-1306	Min.	84.00	0.00	19	0.00	19	0.00	19	1121.93	19	1028.53	19	-1162.64	19
204	-1306	-1309	Max	0.00	0.00	19	0.00	19	0.00	19	1522.66	19	1830.48	19	-97.21	19
204	-1306	-1309	Max	84.00	0.00	19	0.00	19	0.00	19	1.42	19	2470.59	19	-97.21	19
204	-1306	-1309	Min.	0.00	0.00	19	0.00	19	0.00	19	1522.66	19	1830.48	19	-97.21	19
204	-1306	-1309	Min.	84.00	0.00	19	0.00	19	0.00	19	1.42	19	2470.59	19	-97.21	19
204	-1309	-1314	Max	0.00	0.00	19	0.00	19	0.00	19	24.00	19	2448.44	19	721.08	19
204	-1309	-1314	Max	1.30									2448.60	19		
204	-1309	-1314	Max	84.00	0.00	19	0.00	19	0.00	19	-1497.24	19	1829.67	19	721.08	19
204	-1309	-1314	Min.	0.00	0.00	19	0.00	19	0.00	19	24.00	19	2448.44	19	721.08	19
204	-1309	-1314	Min.	1.30									2448.60	19		



204	-1309	-1314	Min.	84.00	0.00	19	0.00	19	0.00	19	-1497.24	19	1829.67	19	721.08	19
204	-1314	-1318	Max	0.00	0.00	19	0.00	19	0.00	19	-1346.01	19	1124.29	19	1875.17	19
204	-1314	-1318	Max	84.00	0.00	19	0.00	19	0.00	19	-2867.25	19	-645.27	19	1875.17	19
204	-1314	-1318	Min.	0.00	0.00	19	0.00	19	0.00	19	-1346.01	19	-1244.29	19	1875.17	19
204	-1314	-1318	Min.	84.00	0.00	19	0.00	19	0.00	19	-2867.25	19	-645.27	19	1875.17	19
204	-1318	207	Max	0.00	0.00	19	0.00	19	0.00	19	-6278.39	19	-1222.66	19	4441.60	19
204	-1318	207	Max	24.00	0.00	19	0.00	19	0.00	19	-6713.03	19	-2781.63	19	4441.60	19
204	-1318	207	Min.	0.00	0.00	19	0.00	19	0.00	19	-6278.39	19	-1222.66	19	4441.60	19
204	-1318	207	Min.	24.00	0.00	19	0.00	19	0.00	19	-6713.03	19	-2781.63	19	4441.60	19
204	207	-1337	Max	60.00	0.00	19	0.00	19	0.00	19	8732.78	19	-5274.80	19	-4145.83	19
204	207	-1337	Max	95.33	0.00	19	0.00	19	0.00	19	8092.90	19	-2302.26	19	-4145.83	19
204	207	-1337	Min.	60.00	0.00	19	0.00	19	0.00	19	8732.78	19	-5274.80	19	-4145.83	19
204	207	-1337	Min.	95.33	0.00	19	0.00	19	0.00	19	8092.90	19	-2302.26	19	-4145.83	19
204	-1337	-1354	Max	0.00	0.00	19	0.00	19	0.00	19	3456.45	19	-1770.77	19	-1478.13	19
204	-1337	-1354	Max	95.33	0.00	19	0.00	19	0.00	19	1729.96	19	701.42	19	-1478.13	19
204	-1337	-1354	Min.	0.00	0.00	19	0.00	19	0.00	19	3456.45	19	-1770.77	19	-1478.13	19
204	-1337	-1354	Min.	95.33	0.00	19	0.00	19	0.00	19	1729.96	19	701.42	19	-1478.13	19
204	-1354	-1367	Max	0.00	0.00	19	0.00	19	0.00	19	1838.48	19	1694.87	19	-347.55	19
204	-1354	-1367	Max	95.33	0.00	19	0.00	19	0.00	19	111.99	19	2624.60	19	-347.55	19
204	-1354	-1367	Min.	0.00	0.00	19	0.00	19	0.00	19	1838.48	19	1694.87	19	-347.55	19
204	-1354	-1367	Min.	95.33	0.00	19	0.00	19	0.00	19	111.99	19	2624.60	19	-347.55	19
204	-1367	-1378	Max	0.00	0.00	19	0.00	19	0.00	19	317.71	19	2695.14	19	379.17	19
204	-1367	-1378	Max	17.54									2723.01	19		
204	-1367	-1378	Max	95.33	0.00	19	0.00	19	0.00	19	-1408.77	19	2175.07	19	379.17	19
204	-1367	-1378	Min.	0.00	0.00	19	0.00	19	0.00	19	317.71	19	2695.14	19	379.17	19
204	-1367	-1378	Min.	17.54									2723.01	19		
204	-1367	-1378	Min.	95.33	0.00	19	0.00	19	0.00	19	-1408.77	19	2175.07	19	379.17	19
204	-1378	-1389	Max	0.00	0.00	19	0.00	19	0.00	19	-1136.15	19	1345.85	19	1152.46	19
204	-1378	-1389	Max	95.33	0.00	19	0.00	19	0.00	19	-2862.64	19	-560.24	19	1152.46	19
204	-1378	-1389	Min.	0.00	0.00	19	0.00	19	0.00	19	-1136.15	19	1345.85	19	1152.46	19
204	-1378	-1389	Min.	95.33	0.00	19	0.00	19	0.00	19	-2862.64	19	-560.24	19	1152.46	19
204	-1389	213	Max	0.00	0.00	19	0.00	19	0.00	19	-2018.83	19	-1965.63	19	2608.87	19
204	-1389	213	Max	95.33	0.00	19	0.00	19	0.00	19	-3745.32	19	-4713.21	19	2608.87	19
204	-1389	213	Min.	0.00	0.00	19	0.00	19	0.00	19	-2018.83	19	-1965.63	19	2608.87	19
204	-1389	213	Min.	95.33	0.00	19	0.00	19	0.00	19	-3745.32	19	-4713.21	19	2608.87	19
205	202	208	Max	15.00	0.00	19	0.00	19	0.00	19	4146.52	19	-3307.57	19	31.42	19
205	202	208	Max	258.63									1743.45	19		
205	202	208	Max	489.00	0.00	19	0.00	19	0.00	19	-3920.96	19	-2772.97	19	31.42	19
205	202	208	Min.	15.00	0.00	19	0.00	19	0.00	19	4146.52	19	-3307.57	19	31.42	19
205	202	208	Min.	258.63									1743.45	19		
205	202	208	Min.	489.00	0.00	19	0.00	19	0.00	19	-3920.96	19	-2772.97	19	31.42	19
205	208	214	Max	15.00	0.00	19	0.00	19	0.00	19	4358.55	19	-3649.86	19	1.16	19
205	208	214	Max	270.28									1930.86	19		
205	208	214	Max	557.00	0.00	19	0.00	19	0.00	19	-4866.29	19	-5025.84	19	1.16	19
205	208	214	Min.	15.00	0.00	19	0.00	19	0.00	19	4358.55	19	-3649.86	19	1.16	19
205	208	214	Min.	270.28									1930.86	19		
205	208	214	Min.	557.00	0.00	19	0.00	19	0.00	19	-4866.29	19	-5025.84	19	1.16	19
207	203	209	Max	15.00	0.00	19	0.00	19	0.00	19	10381.40	19	-7987.50	19	3.41	19
207	203	209	Max	255.95									4519.39	19		
207	203	209	Max	489.00	0.00	19	0.00	19	0.00	19	-10041.30	19	-7181.34	19	3.41	19
207	203	209	Min.	15.00	0.00	19	0.00	19	0.00	19	10381.40	19	-7987.50	19	3.41	19
207	203	209	Min.	255.95									4519.39	19		
207	203	209	Min.	489.00	0.00	19	0.00	19	0.00	19	-10041.30	19	-7181.34	19	3.41	19
207	209	-1334	Max	15.00	0.00	19	0.00	19	0.00	19	5377.64	19	-4543.98	19	-31.76	19
207	209	-1334	Max	82.00	0.00	19	0.00	19	0.00	19	4093.92	19	-1371.01	19	-31.76	19
207	209	-1334	Min.	15.00	0.00	19	0.00	19	0.00	19	5377.64	19	-4543.98	19	-31.76	19
207	209	-1334	Min.	82.00	0.00	19	0.00	19	0.00	19	4093.92	19	-1371.01	19	-31.76	19
207	-1334	-1348	Max	0.00	0.00	19	0.00	19	0.00	19	3491.43	19	-536.96	19	83.99	19
207	-1334	-1348	Max	82.00	0.00	19	0.00	19	0.00	19	1920.31	19	1681.86	19	83.99	19
207	-1334	-1348	Min.	0.00	0.00	19	0.00	19	0.00	19	3491.43	19	-536.96	19	83.99	19
207	-1334	-1348	Min.	82.00	0.00	19	0.00	19	0.00	19	1920.31	19	1681.86	19	83.99	19
207	-1348	-2023	Max	0.00	0.00	19	0.00	19	0.00	19	1340.37	19	2183.83	19	44.65	19
207	-1348	-2023	Max	69.96									2652.67	19		
207	-1348	-2023	Max	223.00	0.00	19	0.00	19	0.00	19	-2932.31	19	408.81	19	44.65	19
207	-1348	-2023	Min.	0.00	0.00	19	0.00	19	0.00	19	1340.37	19	2183.83	19	44.65	19
207	-1348	-2023	Min.	69.96									2652.67	19		
207	-1348	-2023	Min.	223.00	0.00	19	0.00	19	0.00	19	-2932.31	19	408.81	19	44.65	19
208	204	210	Max	15.00	0.00	19	0.00	19	0.00	19	8700.78	19	-6719.55	19	-24.21	19
208	204	210	Max	256.45									3784.35	19		
208	204	210	Max	489.00	0.00	19	0.00	19	0.00	19	-8380.23	19	-5959.86	19	-24.21	19
208	204	210	Min.	15.00	0.00	19	0.00	19	0.00	19	8700.78	19	-6719.55	19	-24.21	19
208	204	210	Min.	256.45									3784.35	19		
208	204	210	Min.	489.00	0.00	19	0.00	19	0.00	19	-8380.23	19	-5959.86	19	-24.21	19
208	210	-1338	Max	15.00	0.00	19	0.00	19	0.00	19	3071.45	19	-2506.48	19	33.16	19
208	210	-1338	Max	95.33	0.00	19	0.00	19	0.00	19	1532.27	19	-657.33	19	33.16	19
208	210	-1338	Min.	15.00	0.00	19	0.00	19	0.00	19	3071.45	19	-2506.48	19	33.16	19



208	210	-1338	Min.	95.33	0.00	19	0.00	19	0.00	19	1532.27	19	-657.33	19	33.16	19
208	-1338	-1355	Max	0.00	0.00	19	0.00	19	0.00	19	1506.52	19	-272.99	19	149.03	19
208	-1338	-1355	Max	76.72									318.94	19		
208	-1338	-1355	Max	95.33	0.00	19	0.00	19	0.00	19	-320.07	19	292.55	19	149.03	19
208	-1338	-1355	Min.	0.00	0.00	19	0.00	19	0.00	19	1506.52	19	-272.99	19	149.03	19
208	-1338	-1355	Min.	76.72									318.94	19		
208	-1338	-1355	Min.	95.33	0.00	19	0.00	19	0.00	19	-320.07	19	292.55	19	149.03	19
208	-1355	-1368	Max	0.00	0.00	19	0.00	19	0.00	19	379.58	19	302.16	19	-63.30	19
208	-1355	-1368	Max	19.23									339.73	19		
208	-1355	-1368	Max	95.33	0.00	19	0.00	19	0.00	19	-1447.00	19	-206.64	19	-63.30	19
208	-1355	-1368	Min.	0.00	0.00	19	0.00	19	0.00	19	379.58	19	302.16	19	-63.30	19
208	-1355	-1368	Min.	19.23									339.73	19		
208	-1355	-1368	Min.	95.33	0.00	19	0.00	19	0.00	19	-1447.00	19	-206.64	19	-63.30	19
208	-1368	-2030	Max	0.00	0.00	19	0.00	19	0.00	19	-1227.16	19	-697.83	19	-80.16	19
208	-1368	-2030	Max	101.00	0.00	19	0.00	19	0.00	19	-3162.32	19	-2914.52	19	-80.16	19
208	-1368	-2030	Min.	0.00	0.00	19	0.00	19	0.00	19	-1227.16	19	-697.83	19	-80.16	19
208	-1368	-2030	Min.	101.00	0.00	19	0.00	19	0.00	19	-3162.32	19	-2914.52	19	-80.16	19
209	205	211	Max	15.00	0.00	19	0.00	19	0.00	19	4136.97	19	-3289.94	19	-37.66	19
209	205	211	Max	258.06									1737.83	19		
209	205	211	Max	489.00	0.00	19	0.00	19	0.00	19	-3930.51	19	-2800.62	19	-37.66	19
209	205	211	Min.	15.00	0.00	19	0.00	19	0.00	19	4136.97	19	-3289.94	19	-37.66	19
209	205	211	Min.	258.06									1737.83	19		
209	205	211	Min.	489.00	0.00	19	0.00	19	0.00	19	-3930.51	19	-2800.62	19	-37.66	19
209	211	217	Max	15.00	0.00	19	0.00	19	0.00	19	4472.77	19	-3897.64	19	28.59	19
209	211	217	Max	277.47									1979.47	19		
209	211	217	Max	557.00	0.00	19	0.00	19	0.00	19	-4752.07	19	-4654.53	19	28.59	19
209	211	217	Min.	15.00	0.00	19	0.00	19	0.00	19	4472.77	19	-3897.64	19	28.59	19
209	211	217	Min.	277.47									1979.47	19		
209	211	217	Min.	557.00	0.00	19	0.00	19	0.00	19	-4752.07	19	-4654.53	19	28.59	19
210	206	212	Max	105.00	0.00	19	0.00	19	0.00	19	4073.59	19	-3191.64	19	-16.61	19
210	206	212	Max	329.41									1389.81	19		
210	206	212	Max	444.00	0.00	19	0.00	19	0.00	19	-2065.70	19	211.72	19	-16.61	19
210	206	212	Min.	105.00	0.00	19	0.00	19	0.00	19	4073.59	19	-3191.64	19	-16.61	19
210	206	212	Min.	329.41									1389.81	19		
210	206	212	Min.	444.00	0.00	19	0.00	19	0.00	19	-2065.70	19	211.72	19	-16.61	19
210	212	218	Max	60.00	0.00	19	0.00	19	0.00	19	4126.04	19	-3242.12	19	-57.66	19
210	212	218	Max	287.83									1458.10	19		
210	212	218	Max	467.00	0.00	19	0.00	19	0.00	19	-3244.73	19	-1448.66	19	-57.66	19
210	212	218	Min.	60.00	0.00	19	0.00	19	0.00	19	4126.04	19	-3242.12	19	-57.66	19
210	212	218	Min.	287.83									1458.10	19		
210	212	218	Min.	467.00	0.00	19	0.00	19	0.00	19	-3244.73	19	-1448.66	19	-57.66	19
301	301	302	Max	15.00	0.00	19	0.00	19	0.00	19	5668.35	19	-4316.95	19	-163.78	19
301	301	302	Max	228.41									1731.45	19		
301	301	302	Max	405.00	0.00	19	0.00	19	0.00	19	-4690.40	19	-2409.95	19	-163.78	19
301	301	302	Min.	15.00	0.00	19	0.00	19	0.00	19	5668.35	19	-4316.95	19	-163.78	19
301	301	302	Min.	228.41									1731.45	19		
301	301	302	Min.	405.00	0.00	19	0.00	19	0.00	19	-4690.40	19	-2409.95	19	-163.78	19
301	302	303	Max	35.00	0.00	19	0.00	19	0.00	19	5900.03	19	-4321.65	19	-134.06	19
301	302	303	Max	251.69									2070.78	19		
301	302	303	Max	431.00	0.00	19	0.00	19	0.00	19	-4882.17	19	-2306.30	19	-134.06	19
301	302	303	Min.	35.00	0.00	19	0.00	19	0.00	19	5900.03	19	-4321.65	19	-134.06	19
301	302	303	Min.	251.69									2070.78	19		
301	302	303	Min.	431.00	0.00	19	0.00	19	0.00	19	-4882.17	19	-2306.30	19	-134.06	19
301	303	304	Max	12.00	0.00	19	0.00	19	0.00	19	4614.41	19	-4119.76	19	-24.29	19
301	303	304	Max	266.80									1758.97	19		
301	303	304	Max	496.00	0.00	19	0.00	19	0.00	19	-4150.83	19	-2997.90	19	-24.29	19
301	303	304	Min.	12.00	0.00	19	0.00	19	0.00	19	4614.41	19	-4119.76	19	-24.29	19
301	303	304	Min.	266.80									1758.97	19		
301	303	304	Min.	496.00	0.00	19	0.00	19	0.00	19	-4150.83	19	-2997.90	19	-24.29	19
301	304	305	Max	58.00	0.00	19	0.00	19	0.00	19	4610.79	19	-2149.40	19	196.82	19
301	304	305	Max	228.88									1803.37	19		
301	304	305	Max	428.00	0.00	19	0.00	19	0.00	19	-5339.06	19	-3496.70	19	196.82	19
301	304	305	Min.	58.00	0.00	19	0.00	19	0.00	19	4610.79	19	-2149.40	19	196.82	19
301	304	305	Min.	228.88									1803.37	19		
301	304	305	Min.	428.00	0.00	19	0.00	19	0.00	19	-5339.06	19	-3496.70	19	196.82	19
301	305	306	Max	35.00	0.00	19	0.00	19	0.00	19	4360.40	19	-1961.81	19	190.17	19
301	305	306	Max	201.55									1681.72	19		
301	305	306	Max	396.00	0.00	19	0.00	19	0.00	19	-5058.57	19	-3221.99	19	190.17	19
301	305	306	Min.	35.00	0.00	19	0.00	19	0.00	19	4360.40	19	-1961.81	19	190.17	19
301	305	306	Min.	201.55									1681.72	19		
301	305	306	Min.	396.00	0.00	19	0.00	19	0.00	19	-5058.57	19	-3221.99	19	190.17	19
302	307	308	Max	15.00	0.00	19	0.00	19	0.00	19	11296.30	19	-9226.16	19	-10.81	19
302	307	308	Max	233.94									3139.88	19		
302	307	308	Max	405.00	0.00	19	0.00	19	0.00	19	-8826.06	19	-4409.10	19	-10.81	19
302	307	308	Min.	15.00	0.00	19	0.00	19	0.00	19	11296.30	19	-9226.16	19	-10.81	19
302	307	308	Min.	233.94									3139.88	19		



302	307	308	Min.	405.00	0.00	19	0.00	19	0.00	19	-8826.06	19	-4409.10	19	-10.81	19
302	308	309	Max	35.00	0.00	19	0.00	19	0.00	19	11124.30	19	-9412.36	19	206.29	19
302	308	309	Max	276.38									4047.51	19		
302	308	309	Max	432.00	0.00	19	0.00	19	0.00	19	-7125.66	19	-1475.08	19	206.29	19
302	308	309	Min.	35.00	0.00	19	0.00	19	0.00	19	11124.30	19	-9412.36	19	206.29	19
302	308	309	Min.	276.38									4047.51	19		
302	308	309	Min.	432.00	0.00	19	0.00	19	0.00	19	-7125.66	19	-1475.08	19	206.29	19
302	-1534	-1534	Max	13.00	0.00	19	0.00	19	0.00	19	4387.18	19	-3279.54	19	584.13	19
302	309	-1534	Max	84.67	0.00	19	0.00	19	0.00	19	2960.30	19	-646.69	19	584.13	19
302	309	-1534	Min.	13.00	0.00	19	0.00	19	0.00	19	4387.18	19	-3279.54	19	584.13	19
302	309	-1534	Min.	84.67	0.00	19	0.00	19	0.00	19	2960.30	19	-646.69	19	584.13	19
302	-1534	-1535	Max	0.00	0.00	19	0.00	19	0.00	19	2639.85	19	-457.56	19	727.36	19
302	-1534	-1535	Max	84.67	0.00	19	0.00	19	0.00	19	954.13	19	1063.90	19	727.36	19
302	-1534	-1535	Min.	0.00	0.00	19	0.00	19	0.00	19	2639.85	19	-457.56	19	727.36	19
302	-1534	-1535	Min.	84.67	0.00	19	0.00	19	0.00	19	954.13	19	1063.90	19	727.36	19
302	-1535	-1536	Max	0.00	0.00	19	0.00	19	0.00	19	1324.01	19	1084.40	19	417.61	19
302	-1535	-1536	Max	66.50									1524.63	19		
302	-1535	-1536	Max	84.67	0.00	19	0.00	19	0.00	19	-361.70	19	1491.78	19	417.61	19
302	-1535	-1536	Min.	0.00	0.00	19	0.00	19	0.00	19	1324.01	19	1084.40	19	417.61	19
302	-1535	-1536	Min.	66.50									1524.63	19		
302	-1535	-1536	Min.	84.67	0.00	19	0.00	19	0.00	19	-361.70	19	1491.78	19	417.61	19
302	-1536	-1537	Max	0.00	0.00	19	0.00	19	0.00	19	158.20	19	1446.31	19	-99.58	19
302	-1536	-1537	Max	7.41									1452.57	19		
302	-1536	-1537	Max	84.67	0.00	19	0.00	19	0.00	19	-1527.51	19	866.64	19	-99.58	19
302	-1536	-1537	Min.	0.00	0.00	19	0.00	19	0.00	19	158.20	19	1446.31	19	-99.58	19
302	-1536	-1537	Min.	7.41									1452.57	19		
302	-1536	-1537	Min.	84.67	0.00	19	0.00	19	0.00	19	-1527.51	19	866.64	19	-99.58	19
302	-1537	-1538	Max	0.00	0.00	19	0.00	19	0.00	19	-895.85	19	647.85	19	-431.90	19
302	-1537	-1538	Max	84.67	0.00	19	0.00	19	0.00	19	-2581.57	19	-824.26	19	-431.90	19
302	-1537	-1538	Min.	0.00	0.00	19	0.00	19	0.00	19	-895.85	19	647.85	19	-431.90	19
302	-1537	-1538	Min.	84.67	0.00	19	0.00	19	0.00	19	-2581.57	19	-824.26	19	-431.90	19
302	-1538	310	Max	0.00	0.00	19	0.00	19	0.00	19	-3007.69	19	-1300.44	19	-350.92	19
302	-1538	310	Max	71.67	0.00	19	0.00	19	0.00	19	-4434.57	19	-3967.24	19	-350.92	19
302	-1538	310	Min.	0.00	0.00	19	0.00	19	0.00	19	-3007.69	19	-1300.44	19	-350.92	19
302	-1538	310	Min.	71.67	0.00	19	0.00	19	0.00	19	-4434.57	19	-3967.24	19	-350.92	19
302	310	311	Max	57.00	0.00	19	0.00	19	0.00	19	5456.83	19	-1486.10	19	-370.27	19
302	310	311	Max	208.68									2689.66	19		
302	310	311	Max	428.00	0.00	19	0.00	19	0.00	19	-7769.95	19	-5776.94	19	-370.27	19
302	310	311	Min.	57.00	0.00	19	0.00	19	0.00	19	5456.83	19	-1486.10	19	-370.27	19
302	310	311	Min.	208.68									2689.66	19		
302	310	311	Min.	428.00	0.00	19	0.00	19	0.00	19	-7769.95	19	-5776.94	19	-370.27	19
302	311	312	Max	35.00	0.00	19	0.00	19	0.00	19	4903.34	19	-984.63	19	34.05	19
302	311	312	Max	179.50									2556.97	19		
302	311	312	Max	396.00	0.00	19	0.00	19	0.00	19	-7350.22	19	-5401.25	19	34.05	19
302	311	312	Min.	35.00	0.00	19	0.00	19	0.00	19	4903.34	19	-984.63	19	34.05	19
302	311	312	Min.	179.50									2556.97	19		
302	311	312	Min.	396.00	0.00	19	0.00	19	0.00	19	-7350.22	19	-5401.25	19	34.05	19
303	313	-1607	Max	15.00	0.00	19	0.00	19	0.00	19	4858.41	19	-4603.22	19	-2355.09	19
303	313	-1607	Max	88.00	0.00	19	0.00	19	0.00	19	2779.01	19	-1815.56	19	-2355.09	19
303	313	-1607	Min.	15.00	0.00	19	0.00	19	0.00	19	4858.41	19	-4603.22	19	-2355.09	19
303	313	-1607	Min.	88.00	0.00	19	0.00	19	0.00	19	2779.01	19	-1815.56	19	-2355.09	19
303	-1607	-1608	Max	0.00	0.00	19	0.00	19	0.00	19	3628.30	19	-1057.23	19	-942.87	19
303	-1607	-1608	Max	88.00	0.00	19	0.00	19	0.00	19	1121.62	19	1032.74	19	-942.87	19
303	-1607	-1608	Min.	0.00	0.00	19	0.00	19	0.00	19	3628.30	19	-1057.23	19	-942.87	19
303	-1607	-1608	Min.	88.00	0.00	19	0.00	19	0.00	19	1121.62	19	1032.74	19	-942.87	19
303	-1608	-1609	Max	0.00	0.00	19	0.00	19	0.00	19	1577.57	19	1618.52	19	-161.71	19
303	-1608	-1609	Max	54.97									2055.35	19		
303	-1608	-1609	Max	88.00	0.00	19	0.00	19	0.00	19	-929.11	19	1903.84	19	-161.71	19
303	-1608	-1609	Min.	0.00	0.00	19	0.00	19	0.00	19	1577.57	19	1618.52	19	-161.71	19
303	-1608	-1609	Min.	54.97									2055.35	19		
303	-1608	-1609	Min.	88.00	0.00	19	0.00	19	0.00	19	-929.11	19	1903.84	19	-161.71	19
303	-1609	-1610	Max	0.00	0.00	19	0.00	19	0.00	19	-272.86	19	1586.64	19	595.82	19
303	-1609	-1610	Max	88.00	0.00	19	0.00	19	0.00	19	-2779.54	19	243.59	19	595.82	19
303	-1609	-1610	Min.	0.00	0.00	19	0.00	19	0.00	19	-272.86	19	1586.64	19	595.82	19
303	-1609	-1610	Min.	88.00	0.00	19	0.00	19	0.00	19	-2779.54	19	243.59	19	595.82	19
303	-1610	314	Max	0.00	0.00	19	0.00	19	0.00	19	-3773.51	19	-376.36	19	2385.38	19
303	-1610	314	Max	53.00	0.00	19	0.00	19	0.00	19	-5283.21	19	-2776.39	19	2385.38	19
303	-1610	314	Min.	0.00	0.00	19	0.00	19	0.00	19	-3773.51	19	-376.36	19	2385.38	19
303	-1610	314	Min.	53.00	0.00	19	0.00	19	0.00	19	-5283.21	19	-2776.39	19	2385.38	19
303	314	-1611	Max	35.00	0.00	19	0.00	19	0.00	19	7557.50	19	-5688.38	19	-4593.98	19
303	314	-1611	Max	97.80	0.00	19	0.00	19	0.00	19	5721.11	19	-1518.89	19	-4593.98	19
303	314	-1611	Min.	35.00	0.00	19	0.00	19	0.00	19	7557.50	19	-5688.38	19	-4593.98	19
303	314	-1611	Min.	97.80	0.00	19	0.00	19	0.00	19	5721.11	19	-1518.89	19	-4593.98	19
303	-1611	-1612	Max	0.00	0.00	19	0.00	19	0.00	19	3243.30	19	-80.86	19	-2439.28	19
303	-1611	-1612	Max	97.80	0.00	19	0.00	19	0.00	19	383.45	19	1692.62	19	-2439.28	19
303	-1611	-1612	Min.	0.00	0.00	19	0.00	19	0.00	19	3243.30	19	-80.86	19	-2439.28	19



303	-1611	-1612	Min.	97.80	0.00	19	0.00	19	0.00	19	383.45	19	1692.62	19	-2439.28	19
303	-1612	-1613	Max	0.00	0.00	19	0.00	19	0.00	19	1341.74	19	2808.60	19	-1565.18	19
303	-1612	-1613	Max	43.93									3115.86	19		
303	-1612	-1613	Max	97.80	0.00	19	0.00	19	0.00	19	-1518.11	19	2722.36	19	-1565.18	19
303	-1612	-1613	Min.	0.00	0.00	19	0.00	19	0.00	19	1341.74	19	2808.60	19	-1565.18	19
303	-1612	-1613	Min.	43.93									3115.86	19		
303	-1612	-1613	Min.	97.80	0.00	19	0.00	19	0.00	19	-1518.11	19	2722.36	19	-1565.18	19
303	-1613	-1614	Max	0.00	0.00	19	0.00	19	0.00	19	-600.81	19	2305.30	19	-876.57	19
303	-1613	-1614	Max	97.80	0.00	19	0.00	19	0.00	19	-3460.66	19	319.24	19	-876.57	19
303	-1613	-1614	Min.	0.00	0.00	19	0.00	19	0.00	19	-600.81	19	2305.30	19	-876.57	19
303	-1613	-1614	Min.	97.80	0.00	19	0.00	19	0.00	19	-3460.66	19	319.24	19	-876.57	19
303	-1614	315	Max	0.00	0.00	19	0.00	19	0.00	19	-4378.86	19	-1114.75	19	258.11	19
303	-1614	315	Max	80.30	0.00	19	0.00	19	0.00	19	-6726.98	19	-5573.74	19	258.11	19
303	-1614	315	Min.	0.00	0.00	19	0.00	19	0.00	19	-4378.86	19	-1114.75	19	258.11	19
303	-1614	315	Min.	80.30	0.00	19	0.00	19	0.00	19	-6726.98	19	-5573.74	19	258.11	19
303	315	-1615	Max	12.50	0.00	19	0.00	19	0.00	19	6006.35	19	-6790.74	19	-621.04	19
303	315	-1615	Max	92.75	0.00	19	0.00	19	0.00	19	4959.09	19	-2390.86	19	-621.04	19
303	315	-1615	Min.	12.50	0.00	19	0.00	19	0.00	19	6006.35	19	-6790.74	19	-621.04	19
303	315	-1615	Min.	92.75	0.00	19	0.00	19	0.00	19	4959.09	19	-2390.86	19	-621.04	19
303	-1615	-1616	Max	0.00	0.00	19	0.00	19	0.00	19	3620.04	19	-1088.83	19	670.51	19
303	-1615	-1616	Max	92.75	0.00	19	0.00	19	0.00	19	2409.65	19	1707.44	19	670.51	19
303	-1615	-1616	Min.	0.00	0.00	19	0.00	19	0.00	19	3620.04	19	-1088.83	19	670.51	19
303	-1615	-1616	Min.	92.75	0.00	19	0.00	19	0.00	19	2409.65	19	1707.44	19	670.51	19
303	-1616	-1617	Max	0.00	0.00	19	0.00	19	0.00	19	2126.34	19	2505.72	19	1711.48	19
303	-1616	-1617	Max	92.75	0.00	19	0.00	19	0.00	19	915.96	19	3916.59	19	1711.48	19
303	-1616	-1617	Min.	0.00	0.00	19	0.00	19	0.00	19	2126.34	19	2505.72	19	1711.48	19
303	-1616	-1617	Min.	92.75	0.00	19	0.00	19	0.00	19	915.96	19	3916.59	19	1711.48	19
303	-1617	-1618	Max	0.00	0.00	19	0.00	19	0.00	19	662.08	19	3880.07	19	3036.16	19
303	-1617	-1618	Max	50.73									4048.02	19		
303	-1617	-1618	Max	92.75	0.00	19	0.00	19	0.00	19	-548.31	19	3932.83	19	3036.16	19
303	-1617	-1618	Min.	0.00	0.00	19	0.00	19	0.00	19	662.08	19	3880.07	19	3036.16	19
303	-1617	-1618	Min.	50.73									4048.02	19		
303	-1617	-1618	Min.	92.75	0.00	19	0.00	19	0.00	19	-548.31	19	3932.83	19	3036.16	19
303	-1618	-1619	Max	0.00	0.00	19	0.00	19	0.00	19	-2414.44	19	2924.64	19	3331.66	19
303	-1618	-1619	Max	68.50	0.00	19	0.00	19	0.00	19	-3308.36	19	964.58	19	3331.66	19
303	-1618	-1619	Min.	0.00	0.00	19	0.00	19	0.00	19	-2414.44	19	2924.64	19	3331.66	19
303	-1618	-1619	Min.	68.50	0.00	19	0.00	19	0.00	19	-3308.36	19	964.58	19	3331.66	19
303	-1619	316	Max	0.00	0.00	19	0.00	19	0.00	19	-9873.27	19	-972.96	19	1830.35	19
303	-1619	316	Max	56.00	0.00	19	0.00	19	0.00	19	-10604.10	19	-6706.61	19	1830.35	19
303	-1619	316	Min.	0.00	0.00	19	0.00	19	0.00	19	-9873.27	19	-972.96	19	1830.35	19
303	-1619	316	Min.	56.00	0.00	19	0.00	19	0.00	19	-10604.10	19	-6706.61	19	1830.35	19
303	316	-1620	Max	17.50	0.00	19	0.00	19	0.00	19	6847.16	19	-5663.95	19	-2122.38	19
303	316	-1620	Max	92.60	0.00	19	0.00	19	0.00	19	4679.76	19	-1335.59	19	-2122.38	19
303	316	-1620	Min.	17.50	0.00	19	0.00	19	0.00	19	6847.16	19	-5663.95	19	-2122.38	19
303	316	-1620	Min.	92.60	0.00	19	0.00	19	0.00	19	4679.76	19	-1335.59	19	-2122.38	19
303	-1620	-1621	Max	0.00	0.00	19	0.00	19	0.00	19	3563.95	19	-353.86	19	-292.13	19
303	-1620	-1621	Max	92.60	0.00	19	0.00	19	0.00	19	891.50	19	1709.02	19	-292.13	19
303	-1620	-1621	Min.	0.00	0.00	19	0.00	19	0.00	19	3563.95	19	-353.86	19	-292.13	19
303	-1620	-1621	Min.	92.60	0.00	19	0.00	19	0.00	19	891.50	19	1709.02	19	-292.13	19
303	-1621	-1622	Max	0.00	0.00	19	0.00	19	0.00	19	1499.07	19	2107.74	19	577.35	19
303	-1621	-1622	Max	51.94									2497.07	19		
303	-1621	-1622	Max	92.60	0.00	19	0.00	19	0.00	19	-1173.39	19	2258.53	19	577.35	19
303	-1621	-1622	Min.	0.00	0.00	19	0.00	19	0.00	19	1499.07	19	2107.74	19	577.35	19
303	-1621	-1622	Min.	51.94									2497.07	19		
303	-1621	-1622	Min.	92.60	0.00	19	0.00	19	0.00	19	-1173.39	19	2258.53	19	577.35	19
303	-1622	-1623	Max	0.00	0.00	19	0.00	19	0.00	19	-597.16	19	1617.21	19	1479.73	19
303	-1622	-1623	Max	92.60	0.00	19	0.00	19	0.00	19	-3269.61	19	-173.10	19	1479.73	19
303	-1622	-1623	Min.	0.00	0.00	19	0.00	19	0.00	19	-597.16	19	1617.21	19	1479.73	19
303	-1622	-1623	Min.	92.60	0.00	19	0.00	19	0.00	19	-3269.61	19	-173.10	19	1479.73	19
303	-1623	317	Max	0.00	0.00	19	0.00	19	0.00	19	-5257.85	19	-1102.89	19	3413.34	19
303	-1623	317	Max	57.60	0.00	19	0.00	19	0.00	19	-6920.20	19	-4610.17	19	3413.34	19
303	-1623	317	Min.	0.00	0.00	19	0.00	19	0.00	19	-5257.85	19	-1102.89	19	3413.34	19
303	-1623	317	Min.	57.60	0.00	19	0.00	19	0.00	19	-6920.20	19	-4610.17	19	3413.34	19
303	317	-1624	Max	35.00	0.00	19	0.00	19	0.00	19	5293.54	19	-2227.54	19	-2548.89	19
303	317	-1624	Max	82.20	0.00	19	0.00	19	0.00	19	3974.20	19	-40.35	19	-2548.89	19
303	317	-1624	Min.	35.00	0.00	19	0.00	19	0.00	19	5293.54	19	-2227.54	19	-2548.89	19
303	317	-1624	Min.	82.20	0.00	19	0.00	19	0.00	19	3974.20	19	-40.35	19	-2548.89	19
303	-1624	-1625	Max	0.00	0.00	19	0.00	19	0.00	19	2883.39	19	567.17	19	-845.95	19
303	-1624	-1625	Max	82.20	0.00	19	0.00	19	0.00	19	585.73	19	1992.98	19	-845.95	19
303	-1624	-1625	Min.	0.00	0.00	19	0.00	19	0.00	19	2883.39	19	567.17	19	-845.95	19
303	-1624	-1625	Min.	82.20	0.00	19	0.00	19	0.00	19	585.73	19	1992.98	19	-845.95	19
303	-1625	-1626	Max	0.00	0.00	19	0.00	19	0.00	19	1108.21	19	2309.57	19	-0.34	19
303	-1625	-1626	Max	39.13									2529.22	19		
303	-1625	-1626	Max	82.20	0.00	19	0.00	19	0.00	19	-1189.45	19	2276.18	19	-0.34	19
303	-1625	-1626	Min.	0.00	0.00	19	0.00	19	0.00	19	1108.21	19	2309.57	19	-0.34	19
303	-1625	-1626	Min.	39.13									2529.22	19		



303	-1625	-1626	Min.	82.20	0.00	19	0.00	19	0.00	19	-1189.45	19	2276.18	19	-0.34	19
303	-1626	-1627	Max	0.00	0.00	19	0.00	19	0.00	19	-754.10	19	1831.93	19	851.37	19
303	-1626	-1627	Max	82.20	0.00	19	0.00	19	0.00	19	-3051.76	19	267.71	19	851.37	19
303	-1626	-1627	Min.	0.00	0.00	19	0.00	19	0.00	19	-754.10	19	1831.93	19	851.37	19
303	-1626	-1627	Min.	82.20	0.00	19	0.00	19	0.00	19	-3051.76	19	267.71	19	851.37	19
303	-1627	318	Max	0.00	0.00	19	0.00	19	0.00	19	-4343.74	19	-1108.08	19	2876.59	19
303	-1627	318	Max	67.20	0.00	19	0.00	19	0.00	19	-6222.12	19	-4658.21	19	2876.59	19
303	-1627	318	Min.	0.00	0.00	19	0.00	19	0.00	19	-4343.74	19	-1108.08	19	2876.59	19
303	-1627	318	Min.	67.20	0.00	19	0.00	19	0.00	19	-6222.12	19	-4658.21	19	2876.59	19
304	301	-1515	Max	0.00	0.00	19	0.00	19	0.00	19	4713.47	19	-5112.15	19	-3438.36	19
304	301	-1515	Max	84.00	0.00	19	0.00	19	0.00	19	3192.23	19	-1791.75	19	-3438.36	19
304	301	-1515	Min.	0.00	0.00	19	0.00	19	0.00	19	4713.47	19	-5112.15	19	-3438.36	19
304	301	-1515	Min.	84.00	0.00	19	0.00	19	0.00	19	3192.23	19	-1791.75	19	-3438.36	19
304	-1515	-1518	Max	0.00	0.00	19	0.00	19	0.00	19	2362.37	19	6.21	19	-1178.38	19
304	-1515	-1518	Max	84.00	0.00	19	0.00	19	0.00	19	841.13	19	1351.68	19	-1178.38	19
304	-1515	-1518	Min.	0.00	0.00	19	0.00	19	0.00	19	2362.37	19	6.21	19	-1178.38	19
304	-1515	-1518	Min.	84.00	0.00	19	0.00	19	0.00	19	841.13	19	1351.68	19	-1178.38	19
304	-1518	-1521	Max	0.00	0.00	19	0.00	19	0.00	19	1215.26	19	2029.58	19	-128.62	19
304	-1518	-1521	Max	67.20									2437.32	19		
304	-1518	-1521	Max	84.00	0.00	19	0.00	19	0.00	19	-305.98	19	2411.48	19	-128.62	19
304	-1518	-1521	Min.	0.00	0.00	19	0.00	19	0.00	19	1215.26	19	2029.58	19	-128.62	19
304	-1518	-1521	Min.	67.20									2437.32	19		
304	-1518	-1521	Min.	84.00	0.00	19	0.00	19	0.00	19	-305.98	19	2411.48	19	-128.62	19
304	-1521	-1526	Max	0.00	0.00	19	0.00	19	0.00	19	-298.27	19	2292.92	19	700.70	19
304	-1521	-1526	Max	84.00	0.00	19	0.00	19	0.00	19	-1819.51	19	1403.45	19	700.70	19
304	-1521	-1526	Min.	0.00	0.00	19	0.00	19	0.00	19	-298.27	19	2292.92	19	700.70	19
304	-1521	-1526	Min.	84.00	0.00	19	0.00	19	0.00	19	-1819.51	19	1403.45	19	700.70	19
304	-1526	-1530	Max	0.00	0.00	19	0.00	19	0.00	19	-1681.76	19	602.63	19	1912.04	19
304	-1526	-1530	Max	84.00	0.00	19	0.00	19	0.00	19	-3203.00	19	-1448.97	19	1912.04	19
304	-1526	-1530	Min.	0.00	0.00	19	0.00	19	0.00	19	-1681.76	19	602.63	19	1912.04	19
304	-1526	-1530	Min.	84.00	0.00	19	0.00	19	0.00	19	-3203.00	19	-1448.97	19	1912.04	19
304	-1530	307	Max	0.00	0.00	19	0.00	19	0.00	19	-7250.01	19	-1986.42	19	4626.55	19
304	-1530	307	Max	24.00	0.00	19	0.00	19	0.00	19	-7684.65	19	-3778.58	19	4626.55	19
304	-1530	307	Min.	0.00	0.00	19	0.00	19	0.00	19	-7250.01	19	-1986.42	19	4626.55	19
304	-1530	307	Min.	24.00	0.00	19	0.00	19	0.00	19	-7684.65	19	-3778.58	19	4626.55	19
304	307	-1549	Max	60.00	0.00	19	0.00	19	0.00	19	7892.65	19	-4245.56	19	-4283.13	19
304	307	-1549	Max	95.33	0.00	19	0.00	19	0.00	19	7252.76	19	-1569.87	19	-4283.13	19
304	307	-1549	Min.	60.00	0.00	19	0.00	19	0.00	19	7892.65	19	-4245.56	19	-4283.13	19
304	307	-1549	Min.	95.33	0.00	19	0.00	19	0.00	19	7252.76	19	-1569.87	19	-4283.13	19
304	-1549	-1566	Max	0.00	0.00	19	0.00	19	0.00	19	3191.90	19	-938.95	19	-1571.89	19
304	-1549	-1566	Max	95.33	0.00	19	0.00	19	0.00	19	1465.41	19	1281.03	19	-1571.89	19
304	-1549	-1566	Min.	0.00	0.00	19	0.00	19	0.00	19	3191.90	19	-938.95	19	-1571.89	19
304	-1549	-1566	Min.	95.33	0.00	19	0.00	19	0.00	19	1465.41	19	1281.03	19	-1571.89	19
304	-1566	-1579	Max	0.00	0.00	19	0.00	19	0.00	19	1575.12	19	2170.59	19	-402.99	19
304	-1566	-1579	Max	86.97									2855.57	19		
304	-1566	-1579	Max	95.33	0.00	19	0.00	19	0.00	19	-151.37	19	2849.24	19	-402.99	19
304	-1566	-1579	Min.	0.00	0.00	19	0.00	19	0.00	19	1575.12	19	2170.59	19	-402.99	19
304	-1566	-1579	Min.	86.97									2855.57	19		
304	-1566	-1579	Min.	95.33	0.00	19	0.00	19	0.00	19	-151.37	19	2849.24	19	-402.99	19
304	-1579	-1590	Max	0.00	0.00	19	0.00	19	0.00	19	41.45	19	2801.75	19	361.10	19
304	-1579	-1590	Max	1.91									2802.21	19		
304	-1579	-1590	Max	95.33	0.00	19	0.00	19	0.00	19	-1685.03	19	2018.31	19	361.10	19
304	-1579	-1590	Min.	0.00	0.00	19	0.00	19	0.00	19	41.45	19	2801.75	19	361.10	19
304	-1579	-1590	Min.	1.91									2802.21	19		
304	-1579	-1590	Min.	95.33	0.00	19	0.00	19	0.00	19	-1685.03	19	2018.31	19	361.10	19
304	-1590	-1601	Max	0.00	0.00	19	0.00	19	0.00	19	-1423.06	19	1056.41	19	1174.90	19
304	-1590	-1601	Max	95.33	0.00	19	0.00	19	0.00	19	-3149.54	19	-1123.19	19	1174.90	19
304	-1590	-1601	Min.	0.00	0.00	19	0.00	19	0.00	19	-1423.06	19	1056.41	19	1174.90	19
304	-1590	-1601	Min.	95.33	0.00	19	0.00	19	0.00	19	-3149.54	19	-1123.19	19	1174.90	19
304	-1601	313	Max	0.00	0.00	19	0.00	19	0.00	19	-2433.15	19	-2712.27	19	2721.58	19
304	-1601	313	Max	95.33	0.00	19	0.00	19	0.00	19	-4159.64	19	-5854.83	19	2721.58	19
304	-1601	313	Min.	0.00	0.00	19	0.00	19	0.00	19	-2433.15	19	-2712.27	19	2721.58	19
304	-1601	313	Min.	95.33	0.00	19	0.00	19	0.00	19	-4159.64	19	-5854.83	19	2721.58	19
305	302	308	Max	15.00	0.00	19	0.00	19	0.00	19	4021.24	19	-3012.08	19	38.92	19
305	302	308	Max	250.69									1738.30	19		
305	302	308	Max	489.00	0.00	19	0.00	19	0.00	19	-4046.24	19	-3071.32	19	38.92	19
305	302	308	Min.	15.00	0.00	19	0.00	19	0.00	19	4021.24	19	-3012.08	19	38.92	19
305	302	308	Min.	250.69									1738.30	19		
305	302	308	Min.	489.00	0.00	19	0.00	19	0.00	19	-4046.24	19	-3071.32	19	38.92	19
305	308	314	Max	15.00	0.00	19	0.00	19	0.00	19	4320.50	19	-3455.97	19	-4.33	19
305	308	314	Max	268.03									2027.73	19		
305	308	314	Max	557.00	0.00	19	0.00	19	0.00	19	-4904.34	19	-5038.17	19	-4.33	19
305	308	314	Min.	15.00	0.00	19	0.00	19	0.00	19	4320.50	19	-3455.97	19	-4.33	19
305	308	314	Min.	268.03									2027.73	19		
305	308	314	Min.	557.00	0.00	19	0.00	19	0.00	19	-4904.34	19	-5038.17	19	-4.33	19
307	303	309	Max	15.00	0.00	19	0.00	19	0.00	19	8113.72	19	-6301.71	19	-12.73	19





307	303	309	Max	257.30								3528.17	19			
307	303	309	Max	489.00	0.00	19	0.00	19	0.00	19	-7758.59	19	-5460.06	19	-12.73	19
307	303	309	Min.	15.00	0.00	19	0.00	19	0.00	19	8113.72	19	-6301.71	19	-12.73	19
307	303	309	Min.	257.30									3528.17	19		
307	303	309	Min.	489.00	0.00	19	0.00	19	0.00	19	-7758.59	19	-5460.06	19	-12.73	19
307	309	-1546	Max	15.00	0.00	19	0.00	19	0.00	19	4363.11	19	-2918.13	19	-388.09	19
307	309	-1546	Max	82.00	0.00	19	0.00	19	0.00	19	3079.39	19	-424.90	19	-388.09	19
307	309	-1546	Min.	15.00	0.00	19	0.00	19	0.00	19	4363.11	19	-2918.13	19	-388.09	19
307	309	-1546	Min.	82.00	0.00	19	0.00	19	0.00	19	3079.39	19	-424.90	19	-388.09	19
307	-1546	-1560	Max	0.00	0.00	19	0.00	19	0.00	19	3126.20	19	280.79	19	30.13	19
307	-1546	-1560	Max	82.00	0.00	19	0.00	19	0.00	19	1555.08	19	2200.12	19	30.13	19
307	-1546	-1560	Min.	0.00	0.00	19	0.00	19	0.00	19	3126.20	19	280.79	19	30.13	19
307	-1546	-1560	Min.	82.00	0.00	19	0.00	19	0.00	19	1555.08	19	2200.12	19	30.13	19
307	-1560	-2024	Max	0.00	0.00	19	0.00	19	0.00	19	1079.15	19	2614.64	19	141.73	19
307	-1560	-2024	Max	55.75									2918.51	19		
307	-1560	-2024	Max	223.00	0.00	19	0.00	19	0.00	19	-3193.53	19	257.09	19	141.73	19
307	-1560	-2024	Min.	0.00	0.00	19	0.00	19	0.00	19	1079.15	19	2614.64	19	141.73	19
307	-1560	-2024	Min.	55.75									2918.51	19		
307	-1560	-2024	Min.	223.00	0.00	19	0.00	19	0.00	19	-3193.53	19	257.09	19	141.73	19
308	304	310	Max	15.00	0.00	19	0.00	19	0.00	19	8682.54	19	-6579.73	19	0.16	19
308	304	310	Max	255.94									3880.19	19		
308	304	310	Max	489.00	0.00	19	0.00	19	0.00	19	-8398.47	19	-5906.48	19	0.16	19
308	304	310	Min.	15.00	0.00	19	0.00	19	0.00	19	8682.54	19	-6579.73	19	0.16	19
308	304	310	Min.	255.94									3880.19	19		
308	304	310	Min.	489.00	0.00	19	0.00	19	0.00	19	-8398.47	19	-5906.48	19	0.16	19
308	310	-1550	Max	15.00	0.00	19	0.00	19	0.00	19	2243.94	19	-1455.47	19	251.44	19
308	310	-1550	Max	95.33	0.00	19	0.00	19	0.00	19	704.75	19	-271.08	19	251.44	19
308	310	-1550	Min.	15.00	0.00	19	0.00	19	0.00	19	2243.94	19	-1455.47	19	251.44	19
308	310	-1550	Min.	95.33	0.00	19	0.00	19	0.00	19	704.75	19	-271.08	19	251.44	19
308	-1550	-1567	Max	0.00	0.00	19	0.00	19	0.00	19	1011.95	19	-136.69	19	190.63	19
308	-1550	-1567	Max	52.82									130.55	19		
308	-1550	-1567	Max	95.33	0.00	19	0.00	19	0.00	19	-814.63	19	-42.63	19	190.63	19
308	-1550	-1567	Min.	0.00	0.00	19	0.00	19	0.00	19	1011.95	19	-136.69	19	190.63	19
308	-1550	-1567	Min.	52.82									130.55	19		
308	-1550	-1567	Min.	95.33	0.00	19	0.00	19	0.00	19	-814.63	19	-42.63	19	190.63	19
308	-1567	-1580	Max	0.00	0.00	19	0.00	19	0.00	19	36.58	19	-184.23	19	-152.16	19
308	-1567	-1580	Max	1.91									-183.88	19		
308	-1567	-1580	Max	95.33	0.00	19	0.00	19	0.00	19	-1790.00	19	-1020.02	19	-152.16	19
308	-1567	-1580	Min.	0.00	0.00	19	0.00	19	0.00	19	36.58	19	-184.23	19	-152.16	19
308	-1567	-1580	Min.	1.91									-183.88	19		
308	-1567	-1580	Min.	95.33	0.00	19	0.00	19	0.00	19	-1790.00	19	-1020.02	19	-152.16	19
308	-1580	-2027	Max	0.00	0.00	19	0.00	19	0.00	19	-1525.97	19	-1587.76	19	-216.54	19
308	-1580	-2027	Max	101.00	0.00	19	0.00	19	0.00	19	-3461.13	19	-4106.25	19	-216.54	19
308	-1580	-2027	Min.	0.00	0.00	19	0.00	19	0.00	19	-1525.97	19	-1587.76	19	-216.54	19
308	-1580	-2027	Min.	101.00	0.00	19	0.00	19	0.00	19	-3461.13	19	-4106.25	19	-216.54	19
309	305	311	Max	15.00	0.00	19	0.00	19	0.00	19	4022.23	19	-3015.91	19	-26.17	19
309	305	311	Max	250.75									1736.80	19		
309	305	311	Max	489.00	0.00	19	0.00	19	0.00	19	-4045.25	19	-3070.48	19	-26.17	19
309	305	311	Min.	15.00	0.00	19	0.00	19	0.00	19	4022.23	19	-3015.91	19	-26.17	19
309	305	311	Min.	250.75									1736.80	19		
309	305	311	Min.	489.00	0.00	19	0.00	19	0.00	19	-4045.25	19	-3070.48	19	-26.17	19
309	311	317	Max	15.00	0.00	19	0.00	19	0.00	19	4434.16	19	-3722.86	19	27.67	19
309	311	317	Max	275.28									2053.22	19		
309	311	317	Max	557.00	0.00	19	0.00	19	0.00	19	-4790.68	19	-4689.03	19	27.67	19
309	311	317	Min.	15.00	0.00	19	0.00	19	0.00	19	4434.16	19	-3722.86	19	27.67	19
309	311	317	Min.	275.28									2053.22	19		
309	311	317	Min.	557.00	0.00	19	0.00	19	0.00	19	-4790.68	19	-4689.03	19	27.67	19
310	306	312	Max	105.00	0.00	19	0.00	19	0.00	19	3293.60	19	-1927.65	19	-56.15	19
310	306	312	Max	286.87									1067.32	19		
310	306	312	Max	444.00	0.00	19	0.00	19	0.00	19	-2845.69	19	-1168.45	19	-56.15	19
310	306	312	Min.	105.00	0.00	19	0.00	19	0.00	19	3293.60	19	-1927.65	19	-56.15	19
310	306	312	Min.	286.87									1067.32	19		
310	306	312	Min.	444.00	0.00	19	0.00	19	0.00	19	-2845.69	19	-1168.45	19	-56.15	19
310	312	318	Max	60.00	0.00	19	0.00	19	0.00	19	3525.74	19	-1972.04	19	-28.57	19
310	312	318	Max	254.11									1459.97	19		
310	312	318	Max	467.00	0.00	19	0.00	19	0.00	19	-3845.03	19	-2621.79	19	-28.57	19
310	312	318	Min.	60.00	0.00	19	0.00	19	0.00	19	3525.74	19	-1972.04	19	-28.57	19
310	312	318	Min.	254.11									1459.97	19		
310	312	318	Min.	467.00	0.00	19	0.00	19	0.00	19	-3845.03	19	-2621.79	19	-28.57	19
401	401	402	Max	12.50	0.00	19	0.00	19	0.00	19	5513.29	19	-4296.81	19	-139.18	19
401	401	402	Max	231.40									1737.48	19		
401	401	402	Max	405.00	0.00	19	0.00	19	0.00	19	-4372.36	19	-2057.73	19	-139.18	19
401	401	402	Min.	12.50	0.00	19	0.00	19	0.00	19	5513.29	19	-4296.81	19	-139.18	19
401	401	402	Min.	231.40									1737.48	19		
401	401	402	Min.	405.00	0.00	19	0.00	19	0.00	19	-4372.36	19	-2057.73	19	-139.18	19
401	402	403	Max	35.00	0.00	19	0.00	19	0.00	19	5953.87	19	-4462.05	19	-163.99	19



401	402	403	Max	253.67								2047.59	19			
401	402	403	Max	431.00	0.00	19	0.00	19	0.00	19	-4828.33	19	-2233.47	19	-163.99	19
401	402	403	Min.	35.00	0.00	19	0.00	19	0.00	19	5953.87	19	-4462.05	19	-163.99	19
401	402	403	Min.	253.67									2047.59	19		
401	402	403	Min.	431.00	0.00	19	0.00	19	0.00	19	-4828.33	19	-2233.47	19	-163.99	19
401	403	404	Max	12.00	0.00	19	0.00	19	0.00	19	4592.23	19	-4050.22	19	-13.23	19
401	403	404	Max	265.57									1772.15	19		
401	403	404	Max	496.00	0.00	19	0.00	19	0.00	19	-4173.01	19	-3035.69	19	-13.23	19
401	403	404	Min.	12.00	0.00	19	0.00	19	0.00	19	4592.23	19	-4050.22	19	-13.23	19
401	403	404	Min.	265.57									1772.15	19		
401	403	404	Min.	496.00	0.00	19	0.00	19	0.00	19	-4173.01	19	-3035.69	19	-13.23	19
401	404	405	Max	58.00	0.00	19	0.00	19	0.00	19	4552.61	19	-2053.58	19	206.29	19
401	404	405	Max	226.90									1800.07	19		
401	404	405	Max	428.00	0.00	19	0.00	19	0.00	19	-5397.25	19	-3616.17	19	206.29	19
401	404	405	Min.	58.00	0.00	19	0.00	19	0.00	19	4552.61	19	-2053.58	19	206.29	19
401	404	405	Min.	226.90									1800.07	19		
401	404	405	Min.	428.00	0.00	19	0.00	19	0.00	19	-5397.25	19	-3616.17	19	206.29	19
401	405	406	Max	35.00	0.00	19	0.00	19	0.00	19	4179.72	19	-1612.93	19	168.49	19
401	405	406	Max	194.56									1734.88	19		
401	405	406	Max	396.00	0.00	19	0.00	19	0.00	19	-5239.25	19	-3525.40	19	168.49	19
401	405	406	Min.	35.00	0.00	19	0.00	19	0.00	19	4179.72	19	-1612.93	19	168.49	19
401	405	406	Min.	194.56									1734.88	19		
401	405	406	Min.	396.00	0.00	19	0.00	19	0.00	19	-5239.25	19	-3525.40	19	168.49	19
402	407	408	Max	12.50	0.00	19	0.00	19	0.00	19	7906.29	19	-7810.28	19	22.95	19
402	407	408	Max	258.88									1953.28	19		
402	407	408	Max	405.00	0.00	19	0.00	19	0.00	19	-4658.18	19	-1435.86	19	22.95	19
402	407	408	Min.	12.50	0.00	19	0.00	19	0.00	19	7906.29	19	-7810.28	19	22.95	19
402	407	408	Min.	258.88									1953.28	19		
402	407	408	Min.	405.00	0.00	19	0.00	19	0.00	19	-4658.18	19	-1435.86	19	22.95	19
402	408	409	Max	35.00	0.00	19	0.00	19	0.00	19	8969.93	19	-7820.75	19	197.70	19
402	408	409	Max	273.69									3229.17	19		
402	408	409	Max	432.00	0.00	19	0.00	19	0.00	19	-5468.81	19	-871.02	19	197.70	19
402	408	409	Min.	35.00	0.00	19	0.00	19	0.00	19	8969.93	19	-7820.75	19	197.70	19
402	408	409	Min.	273.69									3229.17	19		
402	408	409	Min.	432.00	0.00	19	0.00	19	0.00	19	-5468.81	19	-871.02	19	197.70	19
402	409	-1746	Max	13.00	0.00	19	0.00	19	0.00	19	3988.83	19	-2481.55	19	862.98	19
402	409	-1746	Max	84.67	0.00	19	0.00	19	0.00	19	2561.95	19	-134.19	19	862.98	19
402	409	-1746	Min.	13.00	0.00	19	0.00	19	0.00	19	3988.83	19	-2481.55	19	862.98	19
402	409	-1746	Min.	84.67	0.00	19	0.00	19	0.00	19	2561.95	19	-134.19	19	862.98	19
402	-1746	-1747	Max	0.00	0.00	19	0.00	19	0.00	19	2350.70	19	-71.82	19	916.66	19
402	-1746	-1747	Max	84.67	0.00	19	0.00	19	0.00	19	664.99	19	1204.82	19	916.66	19
402	-1746	-1747	Min.	0.00	0.00	19	0.00	19	0.00	19	2350.70	19	-71.82	19	916.66	19
402	-1746	-1747	Min.	84.67	0.00	19	0.00	19	0.00	19	664.99	19	1204.82	19	916.66	19
402	-1747	-1748	Max	0.00	0.00	19	0.00	19	0.00	19	1151.58	19	1139.61	19	499.06	19
402	-1747	-1748	Max	57.30									1472.61	19		
402	-1747	-1748	Max	84.67	0.00	19	0.00	19	0.00	19	-534.13	19	1400.99	19	499.06	19
402	-1747	-1748	Min.	0.00	0.00	19	0.00	19	0.00	19	1151.58	19	1139.61	19	499.06	19
402	-1747	-1748	Min.	57.30									1472.61	19		
402	-1747	-1748	Min.	84.67	0.00	19	0.00	19	0.00	19	-534.13	19	1400.99	19	499.06	19
402	-1748	-1749	Max	0.00	0.00	19	0.00	19	0.00	19	120.17	19	1339.52	19	-170.72	19
402	-1748	-1749	Max	5.58									1343.12	19		
402	-1748	-1749	Max	84.67	0.00	19	0.00	19	0.00	19	-1565.55	19	727.64	19	-170.72	19
402	-1748	-1749	Min.	0.00	0.00	19	0.00	19	0.00	19	120.17	19	1339.52	19	-170.72	19
402	-1748	-1749	Min.	5.58									1343.12	19		
402	-1748	-1749	Min.	84.67	0.00	19	0.00	19	0.00	19	-1565.55	19	727.64	19	-170.72	19
402	-1749	-1750	Max	0.00	0.00	19	0.00	19	0.00	19	-785.03	19	556.92	19	-620.66	19
402	-1749	-1750	Max	84.67	0.00	19	0.00	19	0.00	19	-2470.74	19	-821.35	19	-620.66	19
402	-1749	-1750	Min.	0.00	0.00	19	0.00	19	0.00	19	-785.03	19	556.92	19	-620.66	19
402	-1749	-1750	Min.	84.67	0.00	19	0.00	19	0.00	19	-2470.74	19	-821.35	19	-620.66	19
402	-1750	410	Max	0.00	0.00	19	0.00	19	0.00	19	-2858.53	19	-1211.12	19	-616.46	19
402	-1750	410	Max	71.67	0.00	19	0.00	19	0.00	19	-4285.41	19	-3771.03	19	-616.46	19
402	-1750	410	Min.	0.00	0.00	19	0.00	19	0.00	19	-2858.53	19	-1211.12	19	-616.46	19
402	-1750	410	Min.	71.67	0.00	19	0.00	19	0.00	19	-4285.41	19	-3771.03	19	-616.46	19
402	410	411	Max	57.00	0.00	19	0.00	19	0.00	19	5567.27	19	-1702.98	19	-373.52	19
402	410	411	Max	205.74									2634.06	19		
402	410	411	Max	428.00	0.00	19	0.00	19	0.00	19	-7659.51	19	-5584.08	19	-373.52	19
402	410	411	Min.	57.00	0.00	19	0.00	19	0.00	19	5567.27	19	-1702.98	19	-373.52	19
402	410	411	Min.	205.74									2634.06	19		
402	410	411	Min.	428.00	0.00	19	0.00	19	0.00	19	-7659.51	19	-5584.08	19	-373.52	19
402	411	412	Max	35.00	0.00	19	0.00	19	0.00	19	4533.67	19	-303.46	19	-0.64	19
402	411	412	Max	168.57									2724.25	19		
402	411	412	Max	396.00	0.00	19	0.00	19	0.00	19	-7719.90	19	-6054.61	19	-0.64	19
402	411	412	Min.	35.00	0.00	19	0.00	19	0.00	19	4533.67	19	-303.46	19	-0.64	19
402	411	412	Min.	168.57									2724.25	19		
402	411	412	Min.	396.00	0.00	19	0.00	19	0.00	19	-7719.90	19	-6054.61	19	-0.64	19
403	413	-1819	Max	12.50	0.00	19	0.00	19	0.00	19	4870.68	19	-4732.58	19	-2224.86	19



403	413	-1819	Max	88.00	0.00	19	0.00	19	0.00	19	2837.84	19	-1822.62	19	-2224.86	19
403	413	-1819	Min.	12.50	0.00	19	0.00	19	0.00	19	4870.68	19	-4732.58	19	-2224.86	19
403	413	-1819	Min.	88.00	0.00	19	0.00	19	0.00	19	2837.84	19	-1822.62	19	-2224.86	19
403	-1819	-1820	Max	0.00	0.00	19	0.00	19	0.00	19	3496.20	19	-955.91	19	-988.06	19
403	-1819	-1820	Max	88.00	0.00	19	0.00	19	0.00	19	1126.80	19	1078.20	19	-988.06	19
403	-1819	-1820	Min.	0.00	0.00	19	0.00	19	0.00	19	3496.20	19	-955.91	19	-988.06	19
403	-1819	-1820	Min.	88.00	0.00	19	0.00	19	0.00	19	1126.80	19	1078.20	19	-988.06	19
403	-1820	-1821	Max	0.00	0.00	19	0.00	19	0.00	19	1516.17	19	1688.71	19	-271.74	19
403	-1820	-1821	Max	55.87									2115.56	19		
403	-1820	-1821	Max	88.00	0.00	19	0.00	19	0.00	19	-853.23	19	1980.40	19	-271.74	19
403	-1820	-1821	Min.	0.00	0.00	19	0.00	19	0.00	19	1516.17	19	1688.71	19	-271.74	19
403	-1820	-1821	Min.	55.87									2115.56	19		
403	-1820	-1821	Min.	88.00	0.00	19	0.00	19	0.00	19	-853.23	19	1980.40	19	-271.74	19
403	-1821	-1822	Max	0.00	0.00	19	0.00	19	0.00	19	-302.52	19	1709.57	19	448.17	19
403	-1821	-1822	Max	88.00	0.00	19	0.00	19	0.00	19	-2671.92	19	400.82	19	448.17	19
403	-1821	-1822	Min.	0.00	0.00	19	0.00	19	0.00	19	-302.52	19	1709.57	19	448.17	19
403	-1821	-1822	Min.	88.00	0.00	19	0.00	19	0.00	19	-2671.92	19	400.82	19	448.17	19
403	-1822	414	Max	0.00	0.00	19	0.00	19	0.00	19	-3602.30	19	-217.77	19	2121.02	19
403	-1822	414	Max	53.00	0.00	19	0.00	19	0.00	19	-5029.32	19	-2505.15	19	2121.02	19
403	-1822	414	Min.	0.00	0.00	19	0.00	19	0.00	19	-3602.30	19	-217.77	19	2121.02	19
403	-1822	414	Min.	53.00	0.00	19	0.00	19	0.00	19	-5029.32	19	-2505.15	19	2121.02	19
403	414	-1823	Max	35.00	0.00	19	0.00	19	0.00	19	7676.83	19	-5717.50	19	-4079.19	19
403	414	-1823	Max	97.80	0.00	19	0.00	19	0.00	19	5840.44	19	-1473.08	19	-4079.19	19
403	414	-1823	Min.	35.00	0.00	19	0.00	19	0.00	19	7676.83	19	-5717.50	19	-4079.19	19
403	414	-1823	Min.	97.80	0.00	19	0.00	19	0.00	19	5840.44	19	-1473.08	19	-4079.19	19
403	-1823	-1824	Max	0.00	0.00	19	0.00	19	0.00	19	3315.64	19	-79.39	19	-2037.92	19
403	-1823	-1824	Max	97.80	0.00	19	0.00	19	0.00	19	455.79	19	1764.84	19	-2037.92	19
403	-1823	-1824	Min.	0.00	0.00	19	0.00	19	0.00	19	3315.64	19	-79.39	19	-2037.92	19
403	-1823	-1824	Min.	97.80	0.00	19	0.00	19	0.00	19	455.79	19	1764.84	19	-2037.92	19
403	-1824	-1825	Max	0.00	0.00	19	0.00	19	0.00	19	1400.21	19	2825.05	19	-1186.68	19
403	-1824	-1825	Max	47.20									3160.22	19		
403	-1824	-1825	Max	97.80	0.00	19	0.00	19	0.00	19	-1459.64	19	2795.99	19	-1186.68	19
403	-1824	-1825	Min.	0.00	0.00	19	0.00	19	0.00	19	1400.21	19	2825.05	19	-1186.68	19
403	-1824	-1825	Min.	47.20									3160.22	19		
403	-1824	-1825	Min.	97.80	0.00	19	0.00	19	0.00	19	-1459.64	19	2795.99	19	-1186.68	19
403	-1825	-1826	Max	0.00	0.00	19	0.00	19	0.00	19	-536.99	19	2319.55	19	-492.88	19
403	-1825	-1826	Max	97.80	0.00	19	0.00	19	0.00	19	-3396.84	19	395.91	19	-492.88	19
403	-1825	-1826	Min.	0.00	0.00	19	0.00	19	0.00	19	-536.99	19	2319.55	19	-492.88	19
403	-1825	-1826	Min.	97.80	0.00	19	0.00	19	0.00	19	-3396.84	19	395.91	19	-492.88	19
403	-1826	415	Max	0.00	0.00	19	0.00	19	0.00	19	-4287.68	19	-1093.83	19	704.70	19
403	-1826	415	Max	80.30	0.00	19	0.00	19	0.00	19	-6635.80	19	-5479.60	19	704.70	19
403	-1826	415	Min.	0.00	0.00	19	0.00	19	0.00	19	-4287.68	19	-1093.83	19	704.70	19
403	-1826	415	Min.	80.30	0.00	19	0.00	19	0.00	19	-6635.80	19	-5479.60	19	704.70	19
403	415	-1827	Max	12.50	0.00	19	0.00	19	0.00	19	5654.38	19	-6428.93	19	-703.49	19
403	415	-1827	Max	92.75	0.00	19	0.00	19	0.00	19	4607.12	19	-2311.50	19	-703.49	19
403	415	-1827	Min.	12.50	0.00	19	0.00	19	0.00	19	5654.38	19	-6428.93	19	-703.49	19
403	415	-1827	Min.	92.75	0.00	19	0.00	19	0.00	19	4607.12	19	-2311.50	19	-703.49	19
403	-1827	-1828	Max	0.00	0.00	19	0.00	19	0.00	19	3359.73	19	-1121.36	19	591.55	19
403	-1827	-1828	Max	92.75	0.00	19	0.00	19	0.00	19	2149.34	19	1433.47	19	591.55	19
403	-1827	-1828	Min.	0.00	0.00	19	0.00	19	0.00	19	3359.73	19	-1121.36	19	591.55	19
403	-1827	-1828	Min.	92.75	0.00	19	0.00	19	0.00	19	2149.34	19	1433.47	19	591.55	19
403	-1828	-1829	Max	0.00	0.00	19	0.00	19	0.00	19	1909.91	19	2134.85	19	1540.87	19
403	-1828	-1829	Max	92.75	0.00	19	0.00	19	0.00	19	699.52	19	3344.97	19	1540.87	19
403	-1828	-1829	Min.	0.00	0.00	19	0.00	19	0.00	19	1909.91	19	2134.85	19	1540.87	19
403	-1828	-1829	Min.	92.75	0.00	19	0.00	19	0.00	19	699.52	19	3344.97	19	1540.87	19
403	-1829	-1830	Max	0.00	0.00	19	0.00	19	0.00	19	560.24	19	3274.35	19	2640.82	19
403	-1829	-1830	Max	41.08									3394.39	19		
403	-1829	-1830	Max	92.75	0.00	19	0.00	19	0.00	19	-650.14	19	3232.66	19	2640.82	19
403	-1829	-1830	Min.	0.00	0.00	19	0.00	19	0.00	19	560.24	19	3274.35	19	2640.82	19
403	-1829	-1830	Min.	41.08									3394.39	19		
403	-1829	-1830	Min.	92.75	0.00	19	0.00	19	0.00	19	-650.14	19	3232.66	19	2640.82	19
403	-1830	-1831	Max	0.00	0.00	19	0.00	19	0.00	19	-2093.12	19	2301.64	19	2789.59	19
403	-1830	-1831	Max	68.50	0.00	19	0.00	19	0.00	19	-2987.04	19	561.68	19	2789.59	19
403	-1830	-1831	Min.	0.00	0.00	19	0.00	19	0.00	19	-2093.12	19	2301.64	19	2789.59	19
403	-1830	-1831	Min.	68.50	0.00	19	0.00	19	0.00	19	-2987.04	19	561.68	19	2789.59	19
403	-1831	416	Max	0.00	0.00	19	0.00	19	0.00	19	-8567.85	19	-1107.18	19	1554.79	19
403	-1831	416	Max	56.00	0.00	19	0.00	19	0.00	19	-9298.65	19	-6109.80	19	1554.79	19
403	-1831	416	Min.	0.00	0.00	19	0.00	19	0.00	19	-8567.85	19	-1107.18	19	1554.79	19
403	-1831	416	Min.	56.00	0.00	19	0.00	19	0.00	19	-9298.65	19	-6109.80	19	1554.79	19
403	416	-1832	Max	17.50	0.00	19	0.00	19	0.00	19	6742.15	19	-5484.02	19	-2164.84	19
403	416	-1832	Max	92.60	0.00	19	0.00	19	0.00	19	4574.75	19	-1234.53	19	-2164.84	19
403	416	-1832	Min.	17.50	0.00	19	0.00	19	0.00	19	6742.15	19	-5484.02	19	-2164.84	19
403	416	-1832	Min.	92.60	0.00	19	0.00	19	0.00	19	4574.75	19	-1234.53	19	-2164.84	19
403	-1832	-1833	Max	0.00	0.00	19	0.00	19	0.00	19	3500.33	19	-191.76	19	-490.32	19
403	-1832	-1833	Max	92.60	0.00	19	0.00	19	0.00	19	827.88	19	1812.20	19	-490.32	19
403	-1832	-1833	Min.	0.00	0.00	19	0.00	19	0.00	19	3500.33	19	-191.76	19	-490.32	19



403	-1832	-1833	Min.	92.60	0.00	19	0.00	19	0.00	19	827.88	19	1812.20	19	-490.32	19
403	-1833	-1834	Max	0.00	0.00	19	0.00	19	0.00	19	1419.25	19	2262.94	19	321.94	19
403	-1833	-1834	Max	49.18									2611.91	19		
403	-1833	-1834	Max	92.60	0.00	19	0.00	19	0.00	19	-1253.21	19	2339.82	19	321.94	19
403	-1833	-1834	Min.	0.00	0.00	19	0.00	19	0.00	19	1419.25	19	2262.94	19	321.94	19
403	-1833	-1834	Min.	49.18									2611.91	19		
403	-1833	-1834	Min.	92.60	0.00	19	0.00	19	0.00	19	-1253.21	19	2339.82	19	321.94	19
403	-1834	-1835	Max	0.00	0.00	19	0.00	19	0.00	19	-697.88	19	1743.99	19	1180.70	19
403	-1834	-1835	Max	92.60	0.00	19	0.00	19	0.00	19	-3370.33	19	-139.59	19	1180.70	19
403	-1834	-1835	Min.	0.00	0.00	19	0.00	19	0.00	19	-697.88	19	1743.99	19	1180.70	19
403	-1834	-1835	Min.	92.60	0.00	19	0.00	19	0.00	19	-3370.33	19	-139.59	19	1180.70	19
403	-1835	417	Max	0.00	0.00	19	0.00	19	0.00	19	-5405.63	19	-1036.19	19	3011.12	19
403	-1835	417	Max	57.60	0.00	19	0.00	19	0.00	19	-7067.97	19	-4628.58	19	3011.12	19
403	-1835	417	Min.	0.00	0.00	19	0.00	19	0.00	19	-5405.63	19	-1036.19	19	3011.12	19
403	-1835	417	Min.	57.60	0.00	19	0.00	19	0.00	19	-7067.97	19	-4628.58	19	3011.12	19
403	417	-1836	Max	35.00	0.00	19	0.00	19	0.00	19	5133.72	19	-1938.52	19	-2267.39	19
403	417	-1836	Max	82.20	0.00	19	0.00	19	0.00	19	3814.38	19	173.23	19	-2267.39	19
403	417	-1836	Min.	35.00	0.00	19	0.00	19	0.00	19	5133.72	19	-1938.52	19	-2267.39	19
403	417	-1836	Min.	82.20	0.00	19	0.00	19	0.00	19	3814.38	19	173.23	19	-2267.39	19
403	-1836	-1837	Max	0.00	0.00	19	0.00	19	0.00	19	2825.54	19	763.61	19	-677.20	19
403	-1836	-1837	Max	82.20	0.00	19	0.00	19	0.00	19	527.88	19	2141.86	19	-677.20	19
403	-1836	-1837	Min.	0.00	0.00	19	0.00	19	0.00	19	2825.54	19	763.61	19	-677.20	19
403	-1836	-1837	Min.	82.20	0.00	19	0.00	19	0.00	19	527.88	19	2141.86	19	-677.20	19
403	-1837	-1838	Max	0.00	0.00	19	0.00	19	0.00	19	1029.62	19	2404.33	19	126.11	19
403	-1837	-1838	Max	35.68									2593.77	19		
403	-1837	-1838	Max	82.20	0.00	19	0.00	19	0.00	19	-1268.03	19	2306.34	19	126.11	19
403	-1837	-1838	Min.	0.00	0.00	19	0.00	19	0.00	19	1029.62	19	2404.33	19	126.11	19
403	-1837	-1838	Min.	35.68									2593.77	19		
403	-1837	-1838	Min.	82.20	0.00	19	0.00	19	0.00	19	-1268.03	19	2306.34	19	126.11	19
403	-1838	-1839	Max	0.00	0.00	19	0.00	19	0.00	19	-873.40	19	1798.28	19	950.88	19
403	-1838	-1839	Max	82.20	0.00	19	0.00	19	0.00	19	-3171.06	19	136.01	19	950.88	19
403	-1838	-1839	Min.	0.00	0.00	19	0.00	19	0.00	19	-873.40	19	1798.28	19	950.88	19
403	-1838	-1839	Min.	82.20	0.00	19	0.00	19	0.00	19	-3171.06	19	136.01	19	950.88	19
403	-1839	418	Max	0.00	0.00	19	0.00	19	0.00	19	-4450.01	19	-1288.84	19	2852.14	19
403	-1839	418	Max	67.20	0.00	19	0.00	19	0.00	19	-6328.39	19	-4910.38	19	2852.14	19
403	-1839	418	Min.	0.00	0.00	19	0.00	19	0.00	19	-4450.01	19	-1288.84	19	2852.14	19
403	-1839	418	Min.	67.20	0.00	19	0.00	19	0.00	19	-6328.39	19	-4910.38	19	2852.14	19
404	401	-1727	Max	0.00	0.00	19	0.00	19	0.00	19	4675.90	19	-5243.97	19	-3058.94	19
404	401	-1727	Max	84.00	0.00	19	0.00	19	0.00	19	3201.70	19	-1935.38	19	-3058.94	19
404	401	-1727	Min.	0.00	0.00	19	0.00	19	0.00	19	4675.90	19	-5243.97	19	-3058.94	19
404	401	-1727	Min.	84.00	0.00	19	0.00	19	0.00	19	3201.70	19	-1935.38	19	-3058.94	19
404	-1727	-1730	Max	0.00	0.00	19	0.00	19	0.00	19	2464.06	19	-102.25	19	-1142.84	19
404	-1727	-1730	Max	84.00	0.00	19	0.00	19	0.00	19	989.87	19	1348.40	19	-1142.84	19
404	-1727	-1730	Min.	0.00	0.00	19	0.00	19	0.00	19	2464.06	19	-102.25	19	-1142.84	19
404	-1727	-1730	Min.	84.00	0.00	19	0.00	19	0.00	19	989.87	19	1348.40	19	-1142.84	19
404	-1730	-1733	Max	0.00	0.00	19	0.00	19	0.00	19	1328.09	19	2094.57	19	-238.00	19
404	-1730	-1733	Max	75.67									2597.09	19		
404	-1730	-1733	Max	84.00	0.00	19	0.00	19	0.00	19	-146.11	19	2591.00	19	-238.00	19
404	-1730	-1733	Min.	0.00	0.00	19	0.00	19	0.00	19	1328.09	19	2094.57	19	-238.00	19
404	-1730	-1733	Min.	75.67									2597.09	19		
404	-1730	-1733	Min.	84.00	0.00	19	0.00	19	0.00	19	-146.11	19	2591.00	19	-238.00	19
404	-1733	-1738	Max	0.00	0.00	19	0.00	19	0.00	19	-165.84	19	2555.60	19	441.37	19
404	-1733	-1738	Max	84.00	0.00	19	0.00	19	0.00	19	-1640.04	19	1797.13	19	441.37	19
404	-1733	-1738	Min.	0.00	0.00	19	0.00	19	0.00	19	-165.84	19	2555.60	19	441.37	19
404	-1733	-1738	Min.	84.00	0.00	19	0.00	19	0.00	19	-1640.04	19	1797.13	19	441.37	19
404	-1738	-1742	Max	0.00	0.00	19	0.00	19	0.00	19	-1519.73	19	1105.27	19	1329.22	19
404	-1738	-1742	Max	84.00	0.00	19	0.00	19	0.00	19	-2993.93	19	-790.46	19	1329.22	19
404	-1738	-1742	Min.	0.00	0.00	19	0.00	19	0.00	19	-1519.73	19	1105.27	19	1329.22	19
404	-1738	-1742	Min.	84.00	0.00	19	0.00	19	0.00	19	-2993.93	19	-790.46	19	1329.22	19
404	-1742	407	Max	0.00	0.00	19	0.00	19	0.00	19	-4903.83	19	-1529.88	19	3188.40	19
404	-1742	407	Max	54.00	0.00	19	0.00	19	0.00	19	-5851.52	19	-4433.83	19	3188.40	19
404	-1742	407	Min.	0.00	0.00	19	0.00	19	0.00	19	-4903.83	19	-1529.88	19	3188.40	19
404	-1742	407	Min.	54.00	0.00	19	0.00	19	0.00	19	-5851.52	19	-4433.83	19	3188.40	19
404	407	-1761	Max	30.00	0.00	19	0.00	19	0.00	19	5836.10	19	-4539.72	19	-3044.79	19
404	407	-1761	Max	95.33	0.00	19	0.00	19	0.00	19	4689.50	19	-1101.36	19	-3044.79	19
404	407	-1761	Min.	30.00	0.00	19	0.00	19	0.00	19	5836.10	19	-4539.72	19	-3044.79	19
404	407	-1761	Min.	95.33	0.00	19	0.00	19	0.00	19	4689.50	19	-1101.36	19	-3044.79	19
404	-1761	-1778	Max	0.00	0.00	19	0.00	19	0.00	19	2920.51	19	-116.43	19	-1157.51	19
404	-1761	-1778	Max	95.33	0.00	19	0.00	19	0.00	19	1247.41	19	1870.28	19	-1157.51	19
404	-1761	-1778	Min.	0.00	0.00	19	0.00	19	0.00	19	2920.51	19	-116.43	19	-1157.51	19
404	-1761	-1778	Min.	95.33	0.00	19	0.00	19	0.00	19	1247.41	19	1870.28	19	-1157.51	19
404	-1778	-1791	Max	0.00	0.00	19	0.00	19	0.00	19	1326.69	19	2617.19	19	-285.45	19
404	-1778	-1791	Max	75.59									3118.64	19		
404	-1778	-1791	Max	95.33	0.00	19	0.00	19	0.00	19	-346.41	19	3084.45	19	-285.45	19
404	-1778	-1791	Min.	0.00	0.00	19	0.00	19	0.00	19	1326.69	19	2617.19	19	-285.45	19
404	-1778	-1791	Min.	75.59									3118.64	19		



404	-1778	-1791	Min.	95.33	0.00	19	0.00	19	0.00	19	-346.41	19	3084.45	19	-285.45	19
404	-1791	-1802	Max	0.00	0.00	19	0.00	19	0.00	19	-158.10	19	2949.37	19	361.96	19
404	-1791	-1802	Max	95.33	0.00	19	0.00	19	0.00	19	-1831.20	19	2001.14	19	361.96	19
404	-1791	-1802	Min.	0.00	0.00	19	0.00	19	0.00	19	-158.10	19	2949.37	19	361.96	19
404	-1791	-1802	Min.	95.33	0.00	19	0.00	19	0.00	19	-1831.20	19	2001.14	19	361.96	19
404	-1802	-1813	Max	0.00	0.00	19	0.00	19	0.00	19	-1651.28	19	964.77	19	1125.54	19
404	-1802	-1813	Max	95.33	0.00	19	0.00	19	0.00	19	-3324.38	19	-1406.96	19	1125.54	19
404	-1802	-1813	Min.	0.00	0.00	19	0.00	19	0.00	19	-1651.28	19	964.77	19	1125.54	19
404	-1802	-1813	Min.	95.33	0.00	19	0.00	19	0.00	19	-3324.38	19	-1406.96	19	1125.54	19
404	-1813	413	Max	0.00	0.00	19	0.00	19	0.00	19	-2862.66	19	-3166.39	19	2591.68	19
404	-1813	413	Max	95.33	0.00	19	0.00	19	0.00	19	-4535.76	19	-6692.97	19	2591.68	19
404	-1813	413	Min.	0.00	0.00	19	0.00	19	0.00	19	-2862.66	19	-3166.39	19	2591.68	19
404	-1813	413	Min.	95.33	0.00	19	0.00	19	0.00	19	-4535.76	19	-6692.97	19	2591.68	19
405	402	408	Max	15.00	0.00	19	0.00	19	0.00	19	3921.57	19	-2983.99	19	51.62	19
405	402	408	Max	253.25									1687.55	19		
405	402	408	Max	489.00	0.00	19	0.00	19	0.00	19	-3880.47	19	-2886.59	19	51.62	19
405	402	408	Min.	15.00	0.00	19	0.00	19	0.00	19	3921.57	19	-2983.99	19	51.62	19
405	402	408	Min.	253.25									1687.55	19		
405	402	408	Min.	489.00	0.00	19	0.00	19	0.00	19	-3880.47	19	-2886.59	19	51.62	19
405	408	414	Max	15.00	0.00	19	0.00	19	0.00	19	4079.57	19	-3164.40	19	-17.31	19
405	408	414	Max	262.28									1891.12	19		
405	408	414	Max	557.00	0.00	19	0.00	19	0.00	19	-4841.75	19	-5229.92	19	-17.31	19
405	408	414	Min.	15.00	0.00	19	0.00	19	0.00	19	4079.57	19	-3164.40	19	-17.31	19
405	408	414	Min.	262.28									1891.12	19		
405	408	414	Min.	557.00	0.00	19	0.00	19	0.00	19	-4841.75	19	-5229.92	19	-17.31	19
407	403	409	Max	15.00	0.00	19	0.00	19	0.00	19	8104.36	19	-6260.16	19	13.12	19
407	403	409	Max	257.02									3547.06	19		
407	403	409	Max	489.00	0.00	19	0.00	19	0.00	19	-7767.95	19	-5462.86	19	13.12	19
407	403	409	Min.	15.00	0.00	19	0.00	19	0.00	19	8104.36	19	-6260.16	19	13.12	19
407	403	409	Min.	257.02									3547.06	19		
407	403	409	Min.	489.00	0.00	19	0.00	19	0.00	19	-7767.95	19	-5462.86	19	13.12	19
407	409	-1758	Max	15.00	0.00	19	0.00	19	0.00	19	3980.88	19	-2347.29	19	-597.27	19
407	409	-1758	Max	82.00	0.00	19	0.00	19	0.00	19	2697.16	19	-110.14	19	-597.27	19
407	409	-1758	Min.	15.00	0.00	19	0.00	19	0.00	19	3980.88	19	-2347.29	19	-597.27	19
407	409	-1758	Min.	82.00	0.00	19	0.00	19	0.00	19	2697.16	19	-110.14	19	-597.27	19
407	-1758	-1772	Max	0.00	0.00	19	0.00	19	0.00	19	2945.72	19	482.99	19	-35.76	19
407	-1758	-1772	Max	82.00	0.00	19	0.00	19	0.00	19	1374.60	19	2254.32	19	-35.76	19
407	-1758	-1772	Min.	0.00	0.00	19	0.00	19	0.00	19	2945.72	19	482.99	19	-35.76	19
407	-1758	-1772	Min.	82.00	0.00	19	0.00	19	0.00	19	1374.60	19	2254.32	19	-35.76	19
407	-1772	-2025	Max	0.00	0.00	19	0.00	19	0.00	19	987.12	19	2612.96	19	176.54	19
407	-1772	-2025	Max	50.29									2867.09	19		
407	-1772	-2025	Max	223.00	0.00	19	0.00	19	0.00	19	-3285.56	19	50.19	19	176.54	19
407	-1772	-2025	Min.	0.00	0.00	19	0.00	19	0.00	19	987.12	19	2612.96	19	176.54	19
407	-1772	-2025	Min.	50.29									2867.09	19		
407	-1772	-2025	Min.	223.00	0.00	19	0.00	19	0.00	19	-3285.56	19	50.19	19	176.54	19
408	404	410	Max	15.00	0.00	19	0.00	19	0.00	19	8687.90	19	-6579.78	19	-6.08	19
408	404	410	Max	256.09									3893.06	19		
408	404	410	Max	489.00	0.00	19	0.00	19	0.00	19	-8393.11	19	-5881.12	19	-6.08	19
408	404	410	Min.	15.00	0.00	19	0.00	19	0.00	19	8687.90	19	-6579.78	19	-6.08	19
408	404	410	Min.	256.09									3893.06	19		
408	404	410	Min.	489.00	0.00	19	0.00	19	0.00	19	-8393.11	19	-5881.12	19	-6.08	19
408	410	-1762	Max	15.00	0.00	19	0.00	19	0.00	19	1938.71	19	-1009.18	19	459.61	19
408	410	-1762	Max	95.33	0.00	19	0.00	19	0.00	19	399.52	19	-69.99	19	459.61	19
408	410	-1762	Min.	15.00	0.00	19	0.00	19	0.00	19	1938.71	19	-1009.18	19	459.61	19
408	410	-1762	Min.	95.33	0.00	19	0.00	19	0.00	19	399.52	19	-69.99	19	459.61	19
408	-1762	-1779	Max	0.00	0.00	19	0.00	19	0.00	19	888.43	19	-49.29	19	289.24	19
408	-1762	-1779	Max	45.74									156.65	19		
408	-1762	-1779	Max	95.33	0.00	19	0.00	19	0.00	19	-938.16	19	-73.00	19	289.24	19
408	-1762	-1779	Min.	0.00	0.00	19	0.00	19	0.00	19	888.43	19	-49.29	19	289.24	19
408	-1762	-1779	Min.	45.74									156.65	19		
408	-1762	-1779	Min.	95.33	0.00	19	0.00	19	0.00	19	-938.16	19	-73.00	19	289.24	19
408	-1779	-1792	Max	0.00	0.00	19	0.00	19	0.00	19	88.42	19	-237.65	19	-192.57	19
408	-1779	-1792	Max	3.66									-235.70	19		
408	-1779	-1792	Max	95.33	0.00	19	0.00	19	0.00	19	-1738.17	19	-1024.03	19	-192.57	19
408	-1779	-1792	Min.	0.00	0.00	19	0.00	19	0.00	19	88.42	19	-237.65	19	-192.57	19
408	-1779	-1792	Min.	3.66									-235.70	19		
408	-1779	-1792	Min.	95.33	0.00	19	0.00	19	0.00	19	-1738.17	19	-1024.03	19	-192.57	19
408	-1792	-2028	Max	0.00	0.00	19	0.00	19	0.00	19	-1272.90	19	-1486.47	19	-388.22	19
408	-1792	-2028	Max	101.00	0.00	19	0.00	19	0.00	19	-3208.06	19	-3749.35	19	-388.22	19
408	-1792	-2028	Min.	0.00	0.00	19	0.00	19	0.00	19	-1272.90	19	-1486.47	19	-388.22	19
408	-1792	-2028	Min.	101.00	0.00	19	0.00	19	0.00	19	-3208.06	19	-3749.35	19	-388.22	19
409	405	411	Max	15.00	0.00	19	0.00	19	0.00	19	4045.65	19	-3066.63	19	-33.27	19
409	405	411	Max	252.70									1741.62	19		
409	405	411	Max	489.00	0.00	19	0.00	19	0.00	19	-4021.83	19	-3010.18	19	-33.27	19
409	405	411	Min.	15.00	0.00	19	0.00	19	0.00	19	4045.65	19	-3066.63	19	-33.27	19
409	405	411	Min.	252.70									1741.62	19		



409	405	411	Min.	489.00	0.00	19	0.00	19	0.00	19	-4021.83	19	-3010.18	19	-33.27	19
409	411	417	Max	15.00	0.00	19	0.00	19	0.00	19	4334.48	19	-3538.92	19	31.27	19
409	411	417	Max	268.86									1980.33	19		
409	411	417	Max	557.00	0.00	19	0.00	19	0.00	19	-4890.36	19	-5045.36	19	31.27	19
409	411	417	Min.	15.00	0.00	19	0.00	19	0.00	19	4334.48	19	-3538.92	19	31.27	19
409	411	417	Min.	268.86									1980.33	19		
409	411	417	Min.	557.00	0.00	19	0.00	19	0.00	19	-4890.36	19	-5045.36	19	31.27	19
410	406	412	Max	105.00	0.00	19	0.00	19	0.00	19	3116.81	19	-1628.53	19	-57.89	19
410	406	412	Max	277.10									1053.55	19		
410	406	412	Max	444.00	0.00	19	0.00	19	0.00	19	-3022.48	19	-1468.64	19	-57.89	19
410	406	412	Min.	105.00	0.00	19	0.00	19	0.00	19	3116.81	19	-1628.53	19	-57.89	19
410	406	412	Min.	277.10									1053.55	19		
410	406	412	Min.	444.00	0.00	19	0.00	19	0.00	19	-3022.48	19	-1468.64	19	-57.89	19
410	412	418	Max	60.00	0.00	19	0.00	19	0.00	19	3352.61	19	-1624.42	19	-31.02	19
410	412	418	Max	244.75									1478.83	19		
410	412	418	Max	467.00	0.00	19	0.00	19	0.00	19	-4018.16	19	-2978.80	19	-31.02	19
410	412	418	Min.	60.00	0.00	19	0.00	19	0.00	19	3352.61	19	-1624.42	19	-31.02	19
410	412	418	Min.	244.75									1478.83	19		
410	412	418	Min.	467.00	0.00	19	0.00	19	0.00	19	-4018.16	19	-2978.80	19	-31.02	19
501	502	503	Max	35.00	0.00	19	0.00	19	0.00	19	3451.00	19	-2418.66	19	-229.44	19
501	502	503	Max	252.84									1340.18	19		
501	502	503	Max	431.00	0.00	19	0.00	19	0.00	19	-2822.39	19	-1174.00	19	-229.44	19
501	502	503	Min.	35.00	0.00	19	0.00	19	0.00	19	3451.00	19	-2418.66	19	-229.44	19
501	502	503	Min.	252.84									1340.18	19		
501	502	503	Min.	431.00	0.00	19	0.00	19	0.00	19	-2822.39	19	-1174.00	19	-229.44	19
501	503	504	Max	12.00	0.00	19	0.00	19	0.00	19	2536.81	19	-2340.24	19	25.42	19
501	503	504	Max	270.86									943.14	19		
501	503	504	Max	496.00	0.00	19	0.00	19	0.00	19	-2206.39	19	-1540.61	19	25.42	19
501	503	504	Min.	12.00	0.00	19	0.00	19	0.00	19	2536.81	19	-2340.24	19	25.42	19
501	503	504	Min.	270.86									943.14	19		
501	503	504	Min.	496.00	0.00	19	0.00	19	0.00	19	-2206.39	19	-1540.61	19	25.42	19
501	504	505	Max	58.00	0.00	19	0.00	19	0.00	19	2508.43	19	-847.83	19	129.59	19
501	504	505	Max	218.08									1166.43	19		
501	504	505	Max	428.00	0.00	19	0.00	19	0.00	19	-3270.62	19	-2257.88	19	129.59	19
501	504	505	Min.	58.00	0.00	19	0.00	19	0.00	19	2508.43	19	-847.83	19	129.59	19
501	504	505	Min.	218.08									1166.43	19		
501	504	505	Min.	428.00	0.00	19	0.00	19	0.00	19	-3270.62	19	-2257.88	19	129.59	19
501	505	506	Max	35.00	0.00	19	0.00	19	0.00	19	2268.96	19	-596.32	19	250.12	19
501	505	506	Max	184.75									1109.61	19		
501	505	506	Max	396.00	0.00	19	0.00	19	0.00	19	-3178.11	19	-2237.33	19	250.12	19
501	505	506	Min.	35.00	0.00	19	0.00	19	0.00	19	2268.96	19	-596.32	19	250.12	19
501	505	506	Min.	184.75									1109.61	19		
501	505	506	Min.	396.00	0.00	19	0.00	19	0.00	19	-3178.11	19	-2237.33	19	250.12	19
502	508	509	Max	35.00	0.00	19	0.00	19	0.00	19	6026.40	19	-4868.09	19	369.50	19
502	508	509	Max	277.33									2433.83	19		
502	508	509	Max	432.00	0.00	19	0.00	19	0.00	19	-3846.37	19	-540.73	19	369.50	19
502	508	509	Min.	35.00	0.00	19	0.00	19	0.00	19	6026.40	19	-4868.09	19	369.50	19
502	508	509	Min.	277.33									2433.83	19		
502	508	509	Min.	432.00	0.00	19	0.00	19	0.00	19	-3846.37	19	-540.73	19	369.50	19
502	509	-1937	Max	13.00	0.00	19	0.00	19	0.00	19	1184.77	19	-808.42	19	556.92	19
502	509	-1937	Max	84.67	0.00	19	0.00	19	0.00	19	640.11	19	-154.51	19	556.92	19
502	509	-1937	Min.	13.00	0.00	19	0.00	19	0.00	19	1184.77	19	-808.42	19	556.92	19
502	509	-1937	Min.	84.67	0.00	19	0.00	19	0.00	19	640.11	19	-154.51	19	556.92	19
502	-1937	-1938	Max	0.00	0.00	19	0.00	19	0.00	19	672.08	19	-190.58	19	381.75	19
502	-1937	-1938	Max	84.67	0.00	19	0.00	19	0.00	19	28.61	19	106.04	19	381.75	19
502	-1937	-1938	Min.	0.00	0.00	19	0.00	19	0.00	19	672.08	19	-190.58	19	381.75	19
502	-1937	-1938	Min.	84.67	0.00	19	0.00	19	0.00	19	28.61	19	106.04	19	381.75	19
502	-1938	-1939	Max	0.00	0.00	19	0.00	19	0.00	19	361.93	19	60.30	19	128.42	19
502	-1938	-1939	Max	47.62									146.48	19		
502	-1938	-1939	Max	84.67	0.00	19	0.00	19	0.00	19	-281.54	19	94.33	19	128.42	19
502	-1938	-1939	Min.	0.00	0.00	19	0.00	19	0.00	19	361.93	19	60.30	19	128.42	19
502	-1938	-1939	Min.	47.62									146.48	19		
502	-1938	-1939	Min.	84.67	0.00	19	0.00	19	0.00	19	-281.54	19	94.33	19	128.42	19
502	-1939	-1940	Max	0.00	0.00	19	0.00	19	0.00	19	56.12	19	114.51	19	-268.12	19
502	-1939	-1940	Max	6.54									116.56	19		
502	-1939	-1940	Max	84.67	0.00	19	0.00	19	0.00	19	-587.35	19	-110.38	19	-268.12	19
502	-1939	-1940	Min.	0.00	0.00	19	0.00	19	0.00	19	56.12	19	114.51	19	-268.12	19
502	-1939	-1940	Min.	6.54									116.56	19		
502	-1939	-1940	Min.	84.67	0.00	19	0.00	19	0.00	19	-587.35	19	-110.38	19	-268.12	19
502	-1940	-1941	Max	0.00	0.00	19	0.00	19	0.00	19	-145.05	19	-105.77	19	-523.32	19
502	-1940	-1941	Max	84.67	0.00	19	0.00	19	0.00	19	-788.52	19	-500.98	19	-523.32	19
502	-1940	-1941	Min.	0.00	0.00	19	0.00	19	0.00	19	-145.05	19	-105.77	19	-523.32	19
502	-1940	-1941	Min.	84.67	0.00	19	0.00	19	0.00	19	-788.52	19	-500.98	19	-523.32	19
502	-1941	510	Max	0.00	0.00	19	0.00	19	0.00	19	-1107.73	19	-569.27	19	-528.36	19
502	-1941	510	Max	71.67	0.00	19	0.00	19	0.00	19	-1652.40	19	-1558.31	19	-528.36	19
502	-1941	510	Min.	0.00	0.00	19	0.00	19	0.00	19	-1107.73	19	-569.27	19	-528.36	19





502	-1941	510	Min.	71.67	0.00	19	0.00	19	0.00	19	-1652.40	19	-1558.31	19	-528.36	19
502	510	511	Max	57.00	0.00	19	0.00	19	0.00	19	3744.97	19	-907.51	19	-355.89	19
502	510	511	Max	210.50									1967.29	19		
502	510	511	Max	428.00	0.00	19	0.00	19	0.00	19	-5304.72	19	-3800.83	19	-355.89	19
502	510	511	Min.	57.00	0.00	19	0.00	19	0.00	19	3744.97	19	-907.51	19	-355.89	19
502	510	511	Min.	210.50									1967.29	19		
502	510	511	Min.	428.00	0.00	19	0.00	19	0.00	19	-5304.72	19	-3800.83	19	-355.89	19
502	511	512	Max	35.00	0.00	19	0.00	19	0.00	19	3294.21	19	-557.66	19	60.26	19
502	511	512	Max	176.62									1774.99	19		
502	511	512	Max	396.00	0.00	19	0.00	19	0.00	19	-5102.90	19	-3822.35	19	60.26	19
502	511	512	Min.	35.00	0.00	19	0.00	19	0.00	19	3294.21	19	-557.66	19	60.26	19
502	511	512	Min.	176.62									1774.99	19		
502	511	512	Min.	396.00	0.00	19	0.00	19	0.00	19	-5102.90	19	-3822.35	19	60.26	19
503	514	515	Max	35.00	0.00	19	0.00	19	0.00	19	3689.05	19	-2348.11	19	-629.49	19
503	514	515	Max	249.40									1613.42	19		
503	514	515	Max	471.50	0.00	19	0.00	19	0.00	19	-3808.50	19	-2608.82	19	-629.49	19
503	514	515	Min.	35.00	0.00	19	0.00	19	0.00	19	3689.05	19	-2348.11	19	-629.49	19
503	514	515	Min.	249.40									1613.42	19		
503	514	515	Min.	471.50	0.00	19	0.00	19	0.00	19	-3808.50	19	-2608.82	19	-629.49	19
503	515	-2000	Max	12.50	0.00	19	0.00	19	0.00	19	2738.65	19	-2416.60	19	1329.87	19
503	515	-2000	Max	92.75	0.00	19	0.00	19	0.00	19	2261.16	19	-410.43	19	1329.87	19
503	515	-2000	Min.	12.50	0.00	19	0.00	19	0.00	19	2738.65	19	-2416.60	19	1329.87	19
503	515	-2000	Min.	92.75	0.00	19	0.00	19	0.00	19	2261.16	19	-410.43	19	1329.87	19
503	-2000	-2001	Max	0.00	0.00	19	0.00	19	0.00	19	757.31	19	-16.70	19	163.12	19
503	-2000	-2001	Max	92.75	0.00	19	0.00	19	0.00	19	205.45	19	429.78	19	163.12	19
503	-2000	-2001	Min.	0.00	0.00	19	0.00	19	0.00	19	757.31	19	-16.70	19	163.12	19
503	-2000	-2001	Min.	92.75	0.00	19	0.00	19	0.00	19	205.45	19	429.78	19	163.12	19
503	-2001	-2002	Max	0.00	0.00	19	0.00	19	0.00	19	221.54	19	557.01	19	12.79	19
503	-2001	-2002	Max	37.30									598.25	19		
503	-2001	-2002	Max	92.75	0.00	19	0.00	19	0.00	19	-330.32	19	506.56	19	12.79	19
503	-2001	-2002	Min.	0.00	0.00	19	0.00	19	0.00	19	221.54	19	557.01	19	12.79	19
503	-2001	-2002	Min.	37.30									598.25	19		
503	-2001	-2002	Min.	92.75	0.00	19	0.00	19	0.00	19	-330.32	19	506.56	19	12.79	19
503	-2002	-2003	Max	0.00	0.00	19	0.00	19	0.00	19	-78.36	19	413.94	19	106.43	19
503	-2002	-2003	Max	92.75	0.00	19	0.00	19	0.00	19	-630.22	19	85.33	19	106.43	19
503	-2002	-2003	Min.	0.00	0.00	19	0.00	19	0.00	19	-78.36	19	413.94	19	106.43	19
503	-2002	-2003	Min.	92.75	0.00	19	0.00	19	0.00	19	-630.22	19	85.33	19	106.43	19
503	-2003	-2004	Max	0.00	0.00	19	0.00	19	0.00	19	-561.64	19	-69.88	19	130.94	19
503	-2003	-2004	Max	68.50	0.00	19	0.00	19	0.00	19	-969.22	19	-594.20	19	130.94	19
503	-2003	-2004	Min.	0.00	0.00	19	0.00	19	0.00	19	-561.64	19	-69.88	19	130.94	19
503	-2003	-2004	Min.	68.50	0.00	19	0.00	19	0.00	19	-969.22	19	-594.20	19	130.94	19
503	-2004	516	Max	0.00	0.00	19	0.00	19	0.00	19	-1527.47	19	-784.01	19	19.02	19
503	-2004	516	Max	56.00	0.00	19	0.00	19	0.00	19	-1860.67	19	-1732.69	19	19.02	19
503	-2004	516	Min.	0.00	0.00	19	0.00	19	0.00	19	-1527.47	19	-784.01	19	19.02	19
503	-2004	516	Min.	56.00	0.00	19	0.00	19	0.00	19	-1860.67	19	-1732.69	19	19.02	19
503	516	517	Max	17.50	0.00	19	0.00	19	0.00	19	3434.63	19	-1894.48	19	442.41	19
503	516	517	Max	220.07									1590.78	19		
503	516	517	Max	428.00	0.00	19	0.00	19	0.00	19	-3512.52	19	-2054.35	19	442.41	19
503	516	517	Min.	17.50	0.00	19	0.00	19	0.00	19	3434.63	19	-1894.48	19	442.41	19
503	516	517	Min.	220.07									1590.78	19		
503	516	517	Min.	428.00	0.00	19	0.00	19	0.00	19	-3512.52	19	-2054.35	19	442.41	19
503	517	518	Max	35.00	0.00	19	0.00	19	0.00	19	1976.78	19	200.19	19	-430.62	19
503	517	518	Max	156.11									1397.25	19		
503	517	518	Max	396.00	0.00	19	0.00	19	0.00	19	-3915.41	19	-3299.05	19	-430.62	19
503	517	518	Min.	35.00	0.00	19	0.00	19	0.00	19	1976.78	19	200.19	19	-430.62	19
503	517	518	Min.	156.11									1397.25	19		
503	517	518	Min.	396.00	0.00	19	0.00	19	0.00	19	-3915.41	19	-3299.05	19	-430.62	19
505	502	508	Max	15.00	0.00	19	0.00	19	0.00	19	2375.02	19	-1700.97	19	38.23	19
505	502	508	Max	257.35									1176.95	19		
505	502	508	Max	489.00	0.00	19	0.00	19	0.00	19	-2270.18	19	-1452.51	19	38.23	19
505	502	508	Min.	15.00	0.00	19	0.00	19	0.00	19	2375.02	19	-1700.97	19	38.23	19
505	502	508	Min.	257.35									1176.95	19		
505	502	508	Min.	489.00	0.00	19	0.00	19	0.00	19	-2270.18	19	-1452.51	19	38.23	19
505	508	514	Max	15.00	0.00	19	0.00	19	0.00	19	2762.47	19	-2082.46	19	-37.80	19
505	508	514	Max	296.88									1811.03	19		
505	508	514	Max	557.00	0.00	19	0.00	19	0.00	19	-2549.13	19	-1504.31	19	-37.80	19
505	508	514	Min.	15.00	0.00	19	0.00	19	0.00	19	2762.47	19	-2082.46	19	-37.80	19
505	508	514	Min.	296.88									1811.03	19		
505	508	514	Min.	557.00	0.00	19	0.00	19	0.00	19	-2549.13	19	-1504.31	19	-37.80	19
507	503	509	Max	15.00	0.00	19	0.00	19	0.00	19	4883.82	19	-3786.70	19	-61.23	19
507	503	509	Max	267.53									2379.89	19		
507	503	509	Max	489.00	0.00	19	0.00	19	0.00	19	-4283.08	19	-2362.95	19	-61.23	19
507	503	509	Min.	15.00	0.00	19	0.00	19	0.00	19	4883.82	19	-3786.70	19	-61.23	19
507	503	509	Min.	267.53									2379.89	19		
507	503	509	Min.	489.00	0.00	19	0.00	19	0.00	19	-4283.08	19	-2362.95	19	-61.23	19
507	509	-1948	Max	15.00	0.00	19	0.00	19	0.00	19	378.77	19	-23.38	19	-532.34	19



507	509	-1948	Max	64.84								71.01	19			
507	509	-1948	Max	82.00	0.00	19	0.00	19	0.00	19	-130.43	19	59.82	19	-532.34	19
507	509	-1948	Min.	15.00	0.00	19	0.00	19	0.00	19	378.77	19	-23.38	19	-532.34	19
507	509	-1948	Min.	64.84									71.01	19		
507	509	-1948	Min.	82.00	0.00	19	0.00	19	0.00	19	-130.43	19	59.82	19	-532.34	19
507	-1948	-1959	Max	0.00	0.00	19	0.00	19	0.00	19	163.74	19	-162.53	19	-354.53	19
507	-1948	-1959	Max	19.90									-144.99	19		
507	-1948	-1959	Max	82.00	0.00	19	0.00	19	0.00	19	-459.46	19	-283.78	19	-354.53	19
507	-1948	-1959	Min.	0.00	0.00	19	0.00	19	0.00	19	163.74	19	-162.53	19	-354.53	19
507	-1948	-1959	Min.	19.90									-144.99	19		
507	-1948	-1959	Min.	82.00	0.00	19	0.00	19	0.00	19	-459.46	19	-283.78	19	-354.53	19
507	-1959	-1969	Max	0.00	0.00	19	0.00	19	0.00	19	213.41	19	-367.57	19	113.75	19
507	-1959	-1969	Max	28.08									-337.61	19		
507	-1959	-1969	Max	81.60	0.00	19	0.00	19	0.00	19	-406.75	19	-446.46	19	113.75	19
507	-1959	-1969	Min.	0.00	0.00	19	0.00	19	0.00	19	213.41	19	-367.57	19	113.75	19
507	-1959	-1969	Min.	28.08									-337.61	19		
507	-1959	-1969	Min.	81.60	0.00	19	0.00	19	0.00	19	-406.75	19	-446.46	19	113.75	19
507	-1969	-2026	Max	0.00	0.00	19	0.00	19	0.00	19	438.62	19	-273.41	19	538.61	19
507	-1969	-2026	Max	56.88									-146.87	19		
507	-1969	-2026	Max	141.40	0.00	19	0.00	19	0.00	19	-636.02	19	-412.98	19	538.61	19
507	-1969	-2026	Min.	0.00	0.00	19	0.00	19	0.00	19	438.62	19	-273.41	19	538.61	19
507	-1969	-2026	Min.	56.88									-146.87	19		
507	-1969	-2026	Min.	141.40	0.00	19	0.00	19	0.00	19	-636.02	19	-412.98	19	538.61	19
508	504	510	Max	15.00	0.00	19	0.00	19	0.00	19	4740.06	19	-3503.92	19	40.01	19
508	504	510	Max	260.10									2304.97	19		
508	504	510	Max	489.00	0.00	19	0.00	19	0.00	19	-4426.84	19	-2761.59	19	40.01	19
508	504	510	Min.	15.00	0.00	19	0.00	19	0.00	19	4740.06	19	-3503.92	19	40.01	19
508	504	510	Min.	260.10									2304.97	19		
508	504	510	Min.	489.00	0.00	19	0.00	19	0.00	19	-4426.84	19	-2761.59	19	40.01	19
508	510	-1949	Max	15.00	0.00	19	0.00	19	0.00	19	548.83	19	-392.58	19	451.19	19
508	510	-1949	Max	86.73									-194.42	19		
508	510	-1949	Max	95.33	0.00	19	0.00	19	0.00	19	-61.71	19	-196.92	19	451.19	19
508	510	-1949	Min.	15.00	0.00	19	0.00	19	0.00	19	548.83	19	-392.58	19	451.19	19
508	510	-1949	Min.	86.73									-194.42	19		
508	510	-1949	Min.	95.33	0.00	19	0.00	19	0.00	19	-61.71	19	-196.92	19	451.19	19
508	-1949	-1962	Max	0.00	0.00	19	0.00	19	0.00	19	238.46	19	-354.87	19	238.22	19
508	-1949	-1962	Max	31.38									-317.46	19		
508	-1949	-1962	Max	95.33	0.00	19	0.00	19	0.00	19	-486.07	19	-472.90	19	238.22	19
508	-1949	-1962	Min.	0.00	0.00	19	0.00	19	0.00	19	238.46	19	-354.87	19	238.22	19
508	-1949	-1962	Min.	31.38									-317.46	19		
508	-1949	-1962	Min.	95.33	0.00	19	0.00	19	0.00	19	-486.07	19	-472.90	19	238.22	19
508	-1962	-1973	Max	0.00	0.00	19	0.00	19	0.00	19	158.33	19	-537.57	19	-167.47	19
508	-1962	-1973	Max	19.07									-521.20	19		
508	-1962	-1973	Max	95.33	0.00	19	0.00	19	0.00	19	-566.21	19	-731.99	19	-167.47	19
508	-1962	-1973	Min.	0.00	0.00	19	0.00	19	0.00	19	158.33	19	-537.57	19	-167.47	19
508	-1962	-1973	Min.	19.07									-521.20	19		
508	-1962	-1973	Min.	95.33	0.00	19	0.00	19	0.00	19	-566.21	19	-731.99	19	-167.47	19
508	-1973	-2029	Max	0.00	0.00	19	0.00	19	0.00	19	-314.90	19	-782.11	19	-373.78	19
508	-1973	-2029	Max	101.00	0.00	19	0.00	19	0.00	19	-1082.50	19	-1487.80	19	-373.78	19
508	-1973	-2029	Min.	0.00	0.00	19	0.00	19	0.00	19	-314.90	19	-782.11	19	-373.78	19
508	-1973	-2029	Min.	101.00	0.00	19	0.00	19	0.00	19	-1082.50	19	-1487.80	19	-373.78	19
509	505	511	Max	15.00	0.00	19	0.00	19	0.00	19	3005.33	19	-2064.70	19	-30.35	19
509	505	511	Max	244.14									1382.63	19		
509	505	511	Max	489.00	0.00	19	0.00	19	0.00	19	-3204.07	19	-2535.71	19	-30.35	19
509	505	511	Min.	15.00	0.00	19	0.00	19	0.00	19	3005.33	19	-2064.70	19	-30.35	19
509	505	511	Min.	244.14									1382.63	19		
509	505	511	Min.	489.00	0.00	19	0.00	19	0.00	19	-3204.07	19	-2535.71	19	-30.35	19
509	511	517	Max	15.00	0.00	19	0.00	19	0.00	19	3695.49	19	-3286.92	19	14.67	19
509	511	517	Max	297.10									1925.54	19		
509	511	517	Max	557.00	0.00	19	0.00	19	0.00	19	-3404.71	19	-2498.92	19	14.67	19
509	511	517	Min.	15.00	0.00	19	0.00	19	0.00	19	3695.49	19	-3286.92	19	14.67	19
509	511	517	Min.	297.10									1925.54	19		
509	511	517	Min.	557.00	0.00	19	0.00	19	0.00	19	-3404.71	19	-2498.92	19	14.67	19
510	506	512	Max	105.00	0.00	19	0.00	19	0.00	19	1728.08	19	-945.71	19	-71.64	19
510	506	512	Max	281.33									577.89	19		
510	506	512	Max	444.00	0.00	19	0.00	19	0.00	19	-1594.12	19	-718.66	19	-71.64	19
510	506	512	Min.	105.00	0.00	19	0.00	19	0.00	19	1728.08	19	-945.71	19	-71.64	19
510	506	512	Min.	281.33									577.89	19		
510	506	512	Min.	444.00	0.00	19	0.00	19	0.00	19	-1594.12	19	-718.66	19	-71.64	19
510	512	518	Max	60.00	0.00	19	0.00	19	0.00	19	1681.34	19	-558.62	19	45.85	19
510	512	518	Max	231.25									883.68	19		
510	512	518	Max	467.00	0.00	19	0.00	19	0.00	19	-2307.26	19	-1832.35	19	45.85	19
510	512	518	Min.	60.00	0.00	19	0.00	19	0.00	19	1681.34	19	-558.62	19	45.85	19
510	512	518	Min.	231.25									883.68	19		
510	512	518	Min.	467.00	0.00	19	0.00	19	0.00	19	-2307.26	19	-1832.35	19	45.85	19



Tipo di combinazione di carico: SLE Q

Asta	N1	N2		X <cm>	N <daN>	CC	Ty <daN>	CC	Mz <daNm>	CC	Tz <daN>	CC	My <daNm>	CC	Mx <daNm>	CC
1	1	101	Max	0.00	-67988.00	20	-487.10	20	-519.68	20	-7220.03	20	16885.40	20	4.78	20
1	1	101	Max	220.00	-66008.00	20	-487.10	20	-1591.29	20	-7220.03	20	1001.29	20	4.78	20
1	1	101	Min.	0.00	-67988.00	20	-487.10	20	-519.68	20	-7220.03	20	16885.40	20	4.78	20
1	1	101	Min.	220.00	-66008.00	20	-487.10	20	-1591.29	20	-7220.03	20	1001.29	20	4.78	20
1	101	201	Max	0.00	-54781.30	20	-294.07	20	1027.19	20	-4549.70	20	6717.31	20	-6.49	20
1	101	201	Max	300.00	-52081.30	20	-294.07	20	144.98	20	-4549.70	20	-6931.80	20	-6.49	20
1	101	201	Min.	0.00	-54781.30	20	-294.07	20	1027.19	20	-4549.70	20	6717.31	20	-6.49	20
1	101	201	Min.	300.00	-52081.30	20	-294.07	20	144.98	20	-4549.70	20	-6931.80	20	-6.49	20
1	201	301	Max	0.00	-36307.20	20	299.44	20	-547.54	20	1831.17	20	-7077.74	20	-17.89	20
1	201	301	Max	300.00	-33607.20	20	299.44	20	350.78	20	1831.17	20	-1584.23	20	-17.89	20
1	201	301	Min.	0.00	-36307.20	20	299.44	20	-547.54	20	1831.17	20	-7077.74	20	-17.89	20
1	201	301	Min.	300.00	-33607.20	20	299.44	20	350.78	20	1831.17	20	-1584.23	20	-17.89	20
1	301	401	Max	0.00	-18147.40	20	-78.13	20	68.25	20	505.58	20	-1599.14	20	-18.86	20
1	301	401	Max	300.00	-15447.40	20	-78.13	20	-166.15	20	505.58	20	-82.40	20	-18.86	20
1	301	401	Min.	0.00	-18147.40	20	-78.13	20	68.25	20	505.58	20	-1599.14	20	-18.86	20
1	301	401	Min.	300.00	-15447.40	20	-78.13	20	-166.15	20	505.58	20	-82.40	20	-18.86	20
1	401	501	Max	0.00	-1192.50	20	-4.40	20	13.99	20	-73.05	20	232.31	20	-1.29	20
1	401	501	Max	318.00	0.00	20	-4.40	20	0.00	20	-73.05	20	0.00	20	-1.29	20
1	401	501	Min.	0.00	-1192.50	20	-4.40	20	13.99	20	-73.05	20	232.31	20	-1.29	20
1	401	501	Min.	318.00	0.00	20	-4.40	20	0.00	20	-73.05	20	0.00	20	-1.29	20
2	2	102	Max	0.00	-80536.60	20	-60.88	20	922.25	20	358.44	20	-250.37	20	2.41	20
2	2	102	Max	220.00	-79381.60	20	-60.88	20	788.33	20	358.44	20	538.19	20	2.41	20
2	2	102	Min.	0.00	-80536.60	20	-60.88	20	922.25	20	358.44	20	-250.37	20	2.41	20
2	2	102	Min.	220.00	-79381.60	20	-60.88	20	788.33	20	358.44	20	538.19	20	2.41	20
2	102	202	Max	0.00	-61228.90	20	1482.37	20	-2253.68	20	314.77	20	-723.91	20	-3.33	20
2	102	202	Max	294.00	-59685.40	20	1482.37	20	2104.49	20	314.77	20	201.51	20	-3.33	20
2	102	202	Min.	0.00	-61228.90	20	1482.37	20	-2253.68	20	314.77	20	-723.91	20	-3.33	20
2	102	202	Min.	294.00	-59685.40	20	1482.37	20	2104.49	20	314.77	20	201.51	20	-3.33	20
2	202	302	Max	0.00	-43229.80	20	1066.46	20	-1443.29	20	-800.37	20	1360.12	20	-9.19	20
2	202	302	Max	294.00	-41686.30	20	1066.46	20	1692.10	20	-800.37	20	-992.96	20	-9.19	20
2	202	302	Min.	0.00	-43229.80	20	1066.46	20	-1443.29	20	-800.37	20	1360.12	20	-9.19	20
2	202	302	Min.	294.00	-41686.30	20	1066.46	20	1692.10	20	-800.37	20	-992.96	20	-9.19	20
2	302	402	Max	0.00	-25265.40	20	1016.82	20	-1533.38	20	-726.00	20	1116.13	20	-9.68	20
2	302	402	Max	294.00	-23721.90	20	1016.82	20	1456.06	20	-726.00	20	-1018.31	20	-9.68	20
2	302	402	Min.	0.00	-25265.40	20	1016.82	20	-1533.38	20	-726.00	20	1116.13	20	-9.68	20
2	302	402	Min.	294.00	-23721.90	20	1016.82	20	1456.06	20	-726.00	20	-1018.31	20	-9.68	20
2	402	502	Max	0.00	-7948.13	20	1245.72	20	-1749.79	20	-1713.23	20	1834.23	20	-2.94	20
2	402	502	Max	268.00	-6541.13	20	1245.72	20	1588.73	20	-1713.23	20	-2757.23	20	-2.94	20
2	402	502	Min.	0.00	-7948.13	20	1245.72	20	-1749.79	20	-1713.23	20	1834.23	20	-2.94	20
2	402	502	Min.	268.00	-6541.13	20	1245.72	20	1588.73	20	-1713.23	20	-2757.23	20	-2.94	20
3	3	103	Max	0.00	-86734.30	20	1173.04	20	-179.40	20	2118.86	20	-1530.38	20	2.41	20
3	3	103	Max	220.00	-85579.30	20	1173.04	20	2401.28	20	2118.86	20	3131.10	20	2.41	20
3	3	103	Min.	0.00	-86734.30	20	1173.04	20	-179.40	20	2118.86	20	-1530.38	20	2.41	20
3	3	103	Min.	220.00	-85579.30	20	1173.04	20	2401.28	20	2118.86	20	3131.10	20	2.41	20
3	103	203	Max	0.00	-78396.80	20	3013.62	20	-4361.58	20	1573.96	20	-2948.66	20	-3.33	20
3	103	203	Max	294.00	-76853.30	20	3013.61	20	4498.44	20	1573.96	20	1678.77	20	-3.33	20
3	103	203	Min.	0.00	-78396.80	20	3013.62	20	-4361.58	20	1573.96	20	-2948.66	20	-3.33	20
3	103	203	Min.	294.00	-76853.30	20	3013.61	20	4498.44	20	1573.96	20	1678.77	20	-3.33	20
3	203	303	Max	0.00	-54761.60	20	2476.48	20	-3776.87	20	109.17	20	129.02	20	-9.19	20
3	203	303	Max	294.00	-53218.10	20	2476.48	20	3503.97	20	109.17	20	449.98	20	-9.19	20
3	203	303	Min.	0.00	-54761.60	20	2476.48	20	-3776.87	20	109.17	20	129.02	20	-9.19	20
3	203	303	Min.	294.00	-53218.10	20	2476.48	20	3503.97	20	109.17	20	449.98	20	-9.19	20
3	303	403	Max	0.00	-33699.70	20	2123.00	20	-3123.59	20	219.77	20	-391.75	20	-9.68	20
3	303	403	Max	294.00	-32156.20	20	2123.00	20	3118.04	20	219.77	20	254.38	20	-9.68	20
3	303	403	Min.	0.00	-33699.70	20	2123.00	20	-3123.59	20	219.77	20	-391.75	20	-9.68	20
3	303	403	Min.	294.00	-32156.20	20	2123.00	20	3118.04	20	219.77	20	254.38	20	-9.68	20
3	403	503	Max	0.00	-12715.80	20	2383.58	20	-3496.86	20	292.86	20	-513.00	20	-2.74	20
3	403	503	Max	294.00	-11172.30	20	2383.58	20	3510.85	20	292.86	20	348.02	20	-2.74	20
3	403	503	Min.	0.00	-12715.80	20	2383.58	20	-3496.86	20	292.86	20	-513.00	20	-2.74	20
3	403	503	Min.	294.00	-11172.30	20	2383.58	20	3510.85	20	292.86	20	348.02	20	-2.74	20
4	4	104	Max	0.00	-93591.30	20	1489.41	20	-691.96	20	-1092.67	20	866.40	20	2.41	20
4	4	104	Max	220.00	-92436.30	20	1489.41	20	2584.75	20	-1092.67	20	-1537.47	20	2.41	20
4	4	104	Min.	0.00	-93591.30	20	1489.41	20	-691.96	20	-1092.67	20	866.40	20	2.41	20
4	4	104	Min.	220.00	-92436.30	20	1489.41	20	2584.75	20	-1092.67	20	-1537.47	20	2.41	20
4	104	204	Max	0.00	-74743.00	20	2642.79	20	-3974.50	20	-236.63	20	590.73	20	-3.33	20
4	104	204	Max	294.00	-73199.50	20	2642.79	20	3795.30	20	-236.63	20	-104.95	20	-3.33	20
4	104	204	Min.	0.00	-74743.00	20	2642.79	20	-3974.50	20	-236.63	20	590.73	20	-3.33	20
4	104	204	Min.	294.00	-73199.50	20	2642.79	20	3795.30	20	-236.63	20	-104.95	20	-3.33	20
4	204	304	Max	0.00	-53796.30	20	2297.78	20	-3288.24	20	-544.26	20	950.51	20	-9.19	20
4	204	304	Max	294.00	-52252.80	20	2297.78	20	3467.24	20	-544.26	20	-649.61	20	-9.19	20
4	204	304	Min.	0.00	-53796.30	20	2297.78	20	-3288.24	20	-544.26	20	950.51	20	-9.19	20
4	204	304	Min.	294.00	-52252.80	20	2297.78	20	3467.24	20	-544.26	20	-649.61	20	-9.19	20



4	304	404	Max	0.00	-32858.20	20	2331.18	20	-3456.89	20	-578.36	20	864.66	20	-9.68	20
4	304	404	Max	294.00	-31314.70	20	2331.18	20	3396.77	20	-578.36	20	-835.72	20	-9.68	20
4	304	404	Min.	0.00	-32858.20	20	2331.18	20	-3456.89	20	-578.36	20	864.66	20	-9.68	20
4	304	404	Min.	294.00	-31314.70	20	2331.18	20	3396.77	20	-578.36	20	-835.72	20	-9.68	20
4	404	504	Max	0.00	-11954.20	20	2341.50	20	-3511.86	20	-375.95	20	494.83	20	-2.74	20
4	404	504	Max	294.00	-10410.70	20	2341.50	20	3372.16	20	-375.95	20	-610.46	20	-2.74	20
4	404	504	Min.	0.00	-11954.20	20	2341.50	20	-3511.86	20	-375.95	20	494.83	20	-2.74	20
4	404	504	Min.	294.00	-10410.70	20	2341.50	20	3372.16	20	-375.95	20	-610.46	20	-2.74	20
5	5	105	Max	0.00	-79030.10	20	153.39	20	411.40	20	134.73	20	156.78	20	2.41	20
5	5	105	Max	220.00	-77875.10	20	153.39	20	748.87	20	134.73	20	453.18	20	2.41	20
5	5	105	Min.	0.00	-79030.10	20	153.39	20	411.40	20	134.73	20	156.78	20	2.41	20
5	5	105	Min.	220.00	-77875.10	20	153.39	20	748.87	20	134.73	20	453.18	20	2.41	20
5	105	205	Max	0.00	-62543.90	20	1381.77	20	-2074.52	20	892.45	20	-1321.79	20	-3.33	20
5	105	205	Max	294.00	-61000.40	20	1381.77	20	1987.87	20	892.45	20	1302.01	20	-3.33	20
5	105	205	Min.	0.00	-62543.90	20	1381.77	20	-2074.52	20	892.45	20	-1321.79	20	-3.33	20
5	105	205	Min.	294.00	-61000.40	20	1381.77	20	1987.87	20	892.45	20	1302.01	20	-3.33	20
5	205	305	Max	0.00	-45093.90	20	1076.01	20	-1471.43	20	439.96	20	-393.12	20	-9.19	20
5	205	305	Max	294.00	-43550.40	20	1076.01	20	1692.04	20	439.96	20	900.36	20	-9.19	20
5	205	305	Min.	0.00	-45093.90	20	1076.01	20	-1471.43	20	439.96	20	-393.12	20	-9.19	20
5	205	305	Min.	294.00	-43550.40	20	1076.01	20	1692.04	20	439.96	20	900.36	20	-9.19	20
5	305	405	Max	0.00	-28026.80	20	1054.62	20	-1568.01	20	558.65	20	-869.18	20	-9.68	20
5	305	405	Max	294.00	-26483.30	20	1054.62	20	1532.57	20	558.65	20	773.24	20	-9.68	20
5	305	405	Min.	0.00	-28026.80	20	1054.62	20	-1568.01	20	558.65	20	-869.18	20	-9.68	20
5	305	405	Min.	294.00	-26483.30	20	1054.62	20	1532.57	20	558.65	20	773.24	20	-9.68	20
5	405	505	Max	0.00	-11052.90	20	1294.25	20	-1812.80	20	1101.20	20	-1509.02	20	-2.74	20
5	405	505	Max	294.00	-9509.41	20	1294.25	20	1992.30	20	1101.20	20	1728.50	20	-2.74	20
5	405	505	Min.	0.00	-11052.90	20	1294.25	20	-1812.80	20	1101.20	20	-1509.02	20	-2.74	20
5	405	505	Min.	294.00	-9509.41	20	1294.25	20	1992.30	20	1101.20	20	1728.50	20	-2.74	20
6	6	-1032	Max	0.00	-56039.50	20	-1281.45	20	1539.82	20	-722.60	20	13427.70	20	-4.30	20
6	6	-1032	Max	199.00	-54248.50	20	-1281.45	20	-1010.26	20	-722.60	20	11989.70	20	-4.30	20
6	6	-1032	Min.	0.00	-56039.50	20	-1281.45	20	1539.82	20	-722.60	20	13427.70	20	-4.30	20
6	6	-1032	Min.	199.00	-54248.50	20	-1281.45	20	-1010.26	20	-722.60	20	11989.70	20	-4.30	20
6	-1032	106	Max	0.00	-55674.30	20	23102.90	20	-2015.65	20	-32234.00	20	13561.60	20	151.53	20
6	-1032	106	Max	3.00	-55647.30	20	23102.90	20	-1322.56	20	-32234.00	20	12594.60	20	151.53	20
6	-1032	106	Min.	0.00	-55674.30	20	23102.90	20	-2015.65	20	-32234.00	20	13561.60	20	151.53	20
6	-1032	106	Min.	3.00	-55647.30	20	23102.90	20	-1322.56	20	-32234.00	20	12594.60	20	151.53	20
6	106	206	Max	0.00	-49276.20	20	831.99	20	-790.57	20	-3510.44	20	3381.47	20	-7.09	20
6	106	206	Max	268.00	-46864.20	20	831.99	20	1439.15	20	-3510.44	20	-6026.51	20	-7.09	20
6	106	206	Min.	0.00	-49276.20	20	831.99	20	-790.57	20	-3510.44	20	3381.47	20	-7.09	20
6	106	206	Min.	268.00	-46864.20	20	831.99	20	1439.15	20	-3510.44	20	-6026.51	20	-7.09	20
6	206	306	Max	0.00	-35406.10	20	1246.68	20	-1704.92	20	508.65	20	-4464.02	20	-19.54	20
6	206	306	Max	268.00	-32994.10	20	1246.68	20	1636.18	20	508.65	20	-3100.82	20	-19.54	20
6	206	306	Min.	0.00	-35406.10	20	1246.68	20	-1704.92	20	508.65	20	-4464.02	20	-19.54	20
6	206	306	Min.	268.00	-32994.10	20	1246.68	20	1636.18	20	508.65	20	-3100.82	20	-19.54	20
6	306	406	Max	0.00	-22115.30	20	1236.36	20	-1699.76	20	76.04	20	-1224.58	20	-20.59	20
6	306	406	Max	268.00	-19703.30	20	1236.36	20	1613.67	20	76.04	20	-1020.80	20	-20.59	20
6	306	406	Min.	0.00	-22115.30	20	1236.36	20	-1699.76	20	76.04	20	-1224.58	20	-20.59	20
6	306	406	Min.	268.00	-19703.30	20	1236.36	20	1613.67	20	76.04	20	-1020.80	20	-20.59	20
6	406	506	Max	0.00	-8817.84	20	1490.73	20	-2043.67	20	-251.19	20	161.13	20	-5.82	20
6	406	506	Max	268.00	-6405.84	20	1490.73	20	1951.49	20	-251.19	20	-512.06	20	-5.82	20
6	406	506	Min.	0.00	-8817.84	20	1490.73	20	-2043.67	20	-251.19	20	161.13	20	-5.82	20
6	406	506	Min.	268.00	-6405.84	20	1490.73	20	1951.49	20	-251.19	20	-512.06	20	-5.82	20
7	7	107	Max	0.00	-119896.00	20	-750.15	20	-559.54	20	1689.05	20	-356.17	20	4.78	20
7	7	107	Max	220.00	-117916.00	20	-750.15	20	-2209.88	20	1689.05	20	3359.74	20	4.78	20
7	7	107	Min.	0.00	-119896.00	20	-750.15	20	-559.54	20	1689.05	20	-356.17	20	4.78	20
7	7	107	Min.	220.00	-117916.00	20	-750.15	20	-2209.88	20	1689.05	20	3359.74	20	4.78	20
7	107	207	Max	0.00	-99682.40	20	-292.19	20	1282.28	20	-5531.51	20	8262.39	20	-6.49	20
7	107	207	Max	300.00	-96982.40	20	-292.19	20	405.71	20	-5531.51	20	-8332.14	20	-6.49	20
7	107	207	Min.	0.00	-99682.40	20	-292.19	20	1282.28	20	-5531.51	20	8262.39	20	-6.49	20
7	107	207	Min.	300.00	-96982.40	20	-292.19	20	405.71	20	-5531.51	20	-8332.14	20	-6.49	20
7	207	307	Max	0.00	-64834.40	20	746.77	20	-1271.57	20	1254.43	20	-5987.79	20	-17.89	20
7	207	307	Max	300.00	-62134.40	20	746.77	20	968.75	20	1254.43	20	-2224.51	20	-17.89	20
7	207	307	Min.	0.00	-64834.40	20	746.77	20	-1271.57	20	1254.43	20	-5987.79	20	-17.89	20
7	207	307	Min.	300.00	-62134.40	20	746.77	20	968.75	20	1254.43	20	-2224.51	20	-17.89	20
7	307	407	Max	0.00	-29452.80	20	606.73	20	-819.43	20	406.49	20	-1332.79	20	-18.86	20
7	307	407	Max	300.00	-26752.80	20	606.73	20	1000.76	20	406.49	20	-113.33	20	-18.86	20
7	307	407	Min.	0.00	-29452.80	20	606.73	20	-819.43	20	406.49	20	-1332.79	20	-18.86	20
7	307	407	Min.	300.00	-26752.80	20	606.73	20	1000.76	20	406.49	20	-113.33	20	-18.86	20
7	407	507	Max	0.00	-1192.50	20	55.16	20	-175.41	20	-71.08	20	226.04	20	-1.29	20
7	407	507	Max	254.40					-35.08	20			45.21	20		
7	407	507	Max	318.00	0.00	20	55.16	20	0.00	20	-71.08	20	0.00	20	-1.29	20
7	407	507	Min.	0.00	-1192.50	20	55.16	20	-175.41	20	-71.08	20	226.04	20	-1.29	20
7	407	507	Min.	254.40					-35.08	20			45.21	20		
7	407	507	Min.	318.00	0.00	20	55.16	20	0.00	20	-71.08	20	0.00	20	-1.29	20
8	8	108	Max	0.00	-135147.00	20	148.26	20	6.91	20	-992.79	20	904.65	20	2.41	20
8	8	108	Max	220.00	-133992.00	20	148.26	20	333.09	20	-992.79	20	-1279.48	20	2.41	20



8	8	108	Min.	0.00	-135147.00	20	148.26	20	6.91	20	-992.79	20	904.65	20	2.41	20
8	8	108	Min.	220.00	-133992.00	20	148.26	20	333.09	20	-992.79	20	-1279.48	20	2.41	20
8	108	208	Max	0.00	-103650.00	20	554.10	20	-921.88	20	-692.84	20	849.97	20	-3.33	20
8	108	208	Max	294.00	-102106.00	20	554.10	20	707.16	20	-692.84	20	-1186.97	20	-3.33	20
8	108	208	Min.	0.00	-103650.00	20	554.10	20	-921.88	20	-692.84	20	849.97	20	-3.33	20
8	108	208	Min.	294.00	-102106.00	20	554.10	20	707.16	20	-692.84	20	-1186.97	20	-3.33	20
8	208	308	Max	0.00	-70985.50	20	37.16	20	97.49	20	-1661.46	20	2588.09	20	-9.19	20
8	208	308	Max	294.00	-69442.00	20	37.16	20	206.74	20	-1661.46	20	-2296.59	20	-9.19	20
8	208	308	Min.	0.00	-70985.50	20	37.16	20	97.49	20	-1661.46	20	2588.09	20	-9.19	20
8	208	308	Min.	294.00	-69442.00	20	37.16	20	206.74	20	-1661.46	20	-2296.59	20	-9.19	20
8	308	408	Max	0.00	-38034.80	20	-8.37	20	-2.55	20	-1941.09	20	2798.37	20	-9.68	20
8	308	408	Max	294.00	-36491.30	20	-8.37	20	-27.17	20	-1941.09	20	-2908.44	20	-9.68	20
8	308	408	Min.	0.00	-38034.80	20	-8.37	20	-2.55	20	-1941.09	20	2798.37	20	-9.68	20
8	308	408	Min.	294.00	-36491.30	20	-8.37	20	-27.17	20	-1941.09	20	-2908.44	20	-9.68	20
8	408	508	Max	0.00	-13348.30	20	153.71	20	-165.96	20	-3485.39	20	4380.32	20	-2.94	20
8	408	508	Max	268.00	-11941.30	20	153.71	20	245.97	20	-3485.39	20	-4960.53	20	-2.94	20
8	408	508	Min.	0.00	-13348.30	20	153.71	20	-165.96	20	-3485.39	20	4380.32	20	-2.94	20
8	408	508	Min.	268.00	-11941.30	20	153.71	20	245.97	20	-3485.39	20	-4960.53	20	-2.94	20
9	9	109	Max	0.00	-136952.00	20	1845.60	20	-3723.79	20	-2799.72	20	7021.41	20	4.51	20
9	9	109	Max	252.00	-135188.00	20	1845.60	20	927.13	20	-2799.72	20	-33.88	20	4.51	20
9	9	109	Min.	0.00	-136952.00	20	1845.60	20	-3723.79	20	-2799.72	20	7021.41	20	4.51	20
9	9	109	Min.	252.00	-135188.00	20	1845.60	20	927.13	20	-2799.72	20	-33.88	20	4.51	20
9	109	209	Max	0.00	-106259.00	20	-490.17	20	411.11	20	2073.99	20	-3956.80	20	-6.82	20
9	109	209	Max	300.00	-104159.00	20	-490.17	20	-1059.39	20	2073.99	20	2265.18	20	-6.82	20
9	109	209	Min.	0.00	-106259.00	20	-490.17	20	411.11	20	2073.99	20	-3956.80	20	-6.82	20
9	109	209	Min.	300.00	-104159.00	20	-490.17	20	-1059.39	20	2073.99	20	2265.18	20	-6.82	20
9	209	309	Max	0.00	-71111.10	20	-879.52	20	1436.99	20	486.68	20	-317.74	20	-9.04	20
9	209	309	Max	300.00	-69536.10	20	-879.52	20	-1201.58	20	486.68	20	1142.30	20	-9.04	20
9	209	309	Min.	0.00	-71111.10	20	-879.52	20	1436.99	20	486.68	20	-317.74	20	-9.04	20
9	209	309	Min.	300.00	-69536.10	20	-879.52	20	-1201.58	20	486.68	20	1142.30	20	-9.04	20
9	309	409	Max	0.00	-40585.40	20	-987.90	20	1495.04	20	431.37	20	-935.27	20	-9.53	20
9	309	409	Max	300.00	-39010.40	20	-987.90	20	-1468.65	20	431.37	20	358.83	20	-9.53	20
9	309	409	Min.	0.00	-40585.40	20	-987.90	20	1495.04	20	431.37	20	-935.27	20	-9.53	20
9	309	409	Min.	300.00	-39010.40	20	-987.90	20	-1468.65	20	431.37	20	358.83	20	-9.53	20
9	409	509	Max	0.00	-13064.40	20	-1612.67	20	2144.89	20	1110.08	20	-1154.52	20	-2.70	20
9	409	509	Max	300.00	-11489.40	20	-1612.67	20	-2693.11	20	1110.08	20	2175.71	20	-2.70	20
9	409	509	Min.	0.00	-13064.40	20	-1612.67	20	2144.89	20	1110.08	20	-1154.52	20	-2.70	20
9	409	509	Min.	300.00	-11489.40	20	-1612.67	20	-2693.11	20	1110.08	20	2175.71	20	-2.70	20
10	10	110	Max	0.00	-122200.00	20	1141.94	20	-2906.55	20	1317.07	20	-3940.24	20	4.51	20
10	10	110	Max	252.00	-120436.00	20	1141.94	20	-28.86	20	1317.07	20	-621.23	20	4.51	20
10	10	110	Min.	0.00	-122200.00	20	1141.94	20	-2906.55	20	1317.07	20	-3940.24	20	4.51	20
10	10	110	Min.	252.00	-120436.00	20	1141.94	20	-28.86	20	1317.07	20	-621.23	20	4.51	20
10	110	210	Max	0.00	-94259.10	20	-855.59	20	1065.43	20	-73.74	20	915.99	20	-6.82	20
10	110	210	Max	300.00	-92159.10	20	-855.59	20	-1501.35	20	-73.74	20	694.78	20	-6.82	20
10	110	210	Min.	0.00	-94259.10	20	-855.59	20	1065.43	20	-73.74	20	915.99	20	-6.82	20
10	110	210	Min.	300.00	-92159.10	20	-855.59	20	-1501.35	20	-73.74	20	694.78	20	-6.82	20
10	210	310	Max	0.00	-65834.20	20	-1307.12	20	1906.23	20	53.45	20	-144.10	20	-9.04	20
10	210	310	Max	300.00	-64259.20	20	-1307.12	20	-2015.12	20	53.45	20	16.24	20	-9.04	20
10	210	310	Min.	0.00	-65834.20	20	-1307.12	20	1906.23	20	53.45	20	-144.10	20	-9.04	20
10	210	310	Min.	300.00	-64259.20	20	-1307.12	20	-2015.12	20	53.45	20	16.24	20	-9.04	20
10	310	410	Max	0.00	-39585.50	20	-1769.73	20	2677.07	20	-209.47	20	370.19	20	-9.53	20
10	310	410	Max	300.00	-38010.50	20	-1769.73	20	-2632.12	20	-209.47	20	-258.23	20	-9.53	20
10	310	410	Min.	0.00	-39585.50	20	-1769.73	20	2677.07	20	-209.47	20	370.19	20	-9.53	20
10	310	410	Min.	300.00	-38010.50	20	-1769.73	20	-2632.12	20	-209.47	20	-258.23	20	-9.53	20
10	410	510	Max	0.00	-13791.20	20	-1820.81	20	2752.95	20	-802.74	20	774.93	20	-2.70	20
10	410	510	Max	300.00	-12216.20	20	-1820.81	20	-2709.49	20	-802.74	20	-1633.29	20	-2.70	20
10	410	510	Min.	0.00	-13791.20	20	-1820.81	20	2752.95	20	-802.74	20	774.93	20	-2.70	20
10	410	510	Min.	300.00	-12216.20	20	-1820.81	20	-2709.49	20	-802.74	20	-1633.29	20	-2.70	20
11	11	111	Max	0.00	-121786.00	20	-94.94	20	427.79	20	1190.23	20	-1668.91	20	2.41	20
11	11	111	Max	220.00	-120631.00	20	-94.94	20	218.92	20	1190.23	20	949.59	20	2.41	20
11	11	111	Min.	0.00	-121786.00	20	-94.94	20	427.79	20	1190.23	20	-1668.91	20	2.41	20
11	11	111	Min.	220.00	-120631.00	20	-94.94	20	218.92	20	1190.23	20	949.59	20	2.41	20
11	111	211	Max	0.00	-92693.60	20	622.43	20	-1056.10	20	1557.81	20	-1980.40	20	-3.33	20
11	111	211	Max	294.00	-91150.10	20	622.43	20	773.84	20	1557.81	20	2599.55	20	-3.33	20
11	111	211	Min.	0.00	-92693.60	20	622.43	20	-1056.10	20	1557.81	20	-1980.40	20	-3.33	20
11	111	211	Min.	294.00	-91150.10	20	622.43	20	773.84	20	1557.81	20	2599.55	20	-3.33	20
11	211	311	Max	0.00	-67562.70	20	79.67	20	12.55	20	1647.38	20	-2292.18	20	-9.19	20
11	211	311	Max	294.00	-66019.20	20	79.67	20	246.77	20	1647.38	20	2551.11	20	-9.19	20
11	211	311	Min.	0.00	-67562.70	20	79.67	20	12.55	20	1647.38	20	-2292.18	20	-9.19	20
11	211	311	Min.	294.00	-66019.20	20	79.67	20	246.77	20	1647.38	20	2551.11	20	-9.19	20
11	311	411	Max	0.00	-42650.40	20	23.66	20	-39.40	20	1730.80	20	-2559.94	20	-9.68	20
11	311	411	Max	294.00	-41106.90	20	23.66	20	30.15	20	1730.79	20	2528.59	20	-9.68	20
11	311	411	Min.	0.00	-42650.40	20	23.66	20	-39.40	20	1730.80	20	-2559.94	20	-9.68	20
11	311	411	Min.	294.00	-41106.90	20	23.66	20	30.15	20	1730.79	20	2528.59	20	-9.68	20
11	411	511	Max	0.00	-18305.40	20	176.74	20	-172.12	20	2152.03	20	-3108.64	20	-2.74	20
11	411	511	Max	294.00	-16761.90	20	176.74	20	347.49	20	2152.03	20	3218.33	20	-2.74	20



11	411	511	Min.	0.00	-18305.40	20	176.74	20	-172.12	20	2152.03	20	-3108.64	20	-2.74	20
11	411	511	Min.	294.00	-16761.90	20	176.74	20	347.49	20	2152.03	20	3218.33	20	-2.74	20
12	12	112	Max	0.00	-89714.80	20	555.39	20	456.11	20	2692.02	20	-1447.61	20	4.78	20
12	12	112	Max	220.00	-87734.80	20	555.39	20	1677.98	20	2692.02	20	4474.83	20	4.78	20
12	12	112	Min.	0.00	-89714.80	20	555.39	20	456.11	20	2692.02	20	-1447.61	20	4.78	20
12	12	112	Min.	220.00	-87734.80	20	555.39	20	1677.98	20	2692.02	20	4474.83	20	4.78	20
12	112	212	Max	0.00	-68641.50	20	2092.16	20	-3044.38	20	-6311.70	20	10041.10	20	-7.09	20
12	112	212	Max	268.00	-66229.50	20	2092.16	20	2562.61	20	-6311.70	20	-6874.30	20	-7.09	20
12	112	212	Min.	0.00	-68641.50	20	2092.16	20	-3044.38	20	-6311.70	20	10041.10	20	-7.09	20
12	112	212	Min.	268.00	-66229.50	20	2092.16	20	2562.61	20	-6311.70	20	-6874.30	20	-7.09	20
12	212	312	Max	0.00	-50226.10	20	1806.68	20	-2373.89	20	945.19	20	-5480.59	20	-19.54	20
12	212	312	Max	268.00	-47814.10	20	1806.68	20	2468.02	20	945.19	20	-2947.48	20	-19.54	20
12	212	312	Min.	0.00	-50226.10	20	1806.68	20	-2373.89	20	945.19	20	-5480.59	20	-19.54	20
12	212	312	Min.	268.00	-47814.10	20	1806.68	20	2468.02	20	945.19	20	-2947.48	20	-19.54	20
12	312	412	Max	0.00	-31444.70	20	2042.45	20	-2815.72	20	163.70	20	-1215.48	20	-20.59	20
12	312	412	Max	268.00	-29032.70	20	2042.45	20	2658.04	20	163.70	20	-776.76	20	-20.59	20
12	312	412	Min.	0.00	-31444.70	20	2042.45	20	-2815.72	20	163.70	20	-1215.48	20	-20.59	20
12	312	412	Min.	268.00	-29032.70	20	2042.45	20	2658.04	20	163.70	20	-776.76	20	-20.59	20
12	412	512	Max	0.00	-12308.20	20	2333.47	20	-3180.26	20	82.64	20	-272.44	20	-5.82	20
12	412	512	Max	268.00	-9896.23	20	2333.47	20	3073.44	20	82.64	20	-50.98	20	-5.82	20
12	412	512	Min.	0.00	-12308.20	20	2333.47	20	-3180.26	20	82.64	20	-272.44	20	-5.82	20
12	412	512	Min.	268.00	-9896.23	20	2333.47	20	3073.44	20	82.64	20	-50.98	20	-5.82	20
13	13	113	Max	0.00	-91271.20	20	-890.13	20	40.68	20	16934.30	20	-25198.80	20	4.78	20
13	13	113	Max	220.00	-89291.20	20	-890.13	20	-1917.62	20	16934.30	20	12056.60	20	4.78	20
13	13	113	Min.	0.00	-91271.20	20	-890.13	20	40.68	20	16934.30	20	-25198.80	20	4.78	20
13	13	113	Min.	220.00	-89291.20	20	-890.13	20	-1917.62	20	16934.30	20	12056.60	20	4.78	20
13	113	213	Max	0.00	-82476.30	20	-332.05	20	1065.07	20	-6344.50	20	7278.42	20	-6.49	20
13	113	213	Max	300.00	-79776.30	20	-332.05	20	68.92	20	-6344.49	20	-11755.10	20	-6.49	20
13	113	213	Min.	0.00	-82476.30	20	-332.05	20	1065.07	20	-6344.50	20	7278.42	20	-6.49	20
13	113	213	Min.	300.00	-79776.30	20	-332.05	20	68.92	20	-6344.49	20	-11755.10	20	-6.49	20
13	213	313	Max	0.00	-55178.50	20	357.35	20	-616.10	20	-1894.28	20	-706.84	20	-17.89	20
13	213	313	Max	300.00	-52478.50	20	357.35	20	455.96	20	-1894.29	20	-6389.70	20	-17.89	20
13	213	313	Min.	0.00	-55178.50	20	357.35	20	-616.10	20	-1894.28	20	-706.84	20	-17.89	20
13	213	313	Min.	300.00	-52478.50	20	357.35	20	455.96	20	-1894.29	20	-6389.70	20	-17.89	20
13	313	413	Max	0.00	-27504.70	20	43.62	20	-107.73	20	-3629.54	20	3756.91	20	-18.86	20
13	313	413	Max	300.00	-24804.70	20	43.62	20	23.12	20	-3629.54	20	-7131.72	20	-18.86	20
13	313	413	Min.	0.00	-27504.70	20	43.62	20	-107.73	20	-3629.54	20	3756.91	20	-18.86	20
13	313	413	Min.	300.00	-24804.70	20	43.62	20	23.12	20	-3629.54	20	-7131.72	20	-18.86	20
13	413	513	Max	0.00	-1192.50	20	-2.50	20	7.93	20	-242.68	20	771.72	20	-1.29	20
13	413	513	Max	318.00	0.00	20	-2.50	20	0.00	20	-242.68	20	0.00	20	-1.29	20
13	413	513	Min.	0.00	-1192.50	20	-2.50	20	7.93	20	-242.68	20	771.72	20	-1.29	20
13	413	513	Min.	318.00	0.00	20	-2.50	20	0.00	20	-242.68	20	0.00	20	-1.29	20
14	14	114	Max	0.00	-111550.00	20	-403.25	20	-675.86	20	-971.27	20	990.60	20	2.41	20
14	14	114	Max	220.00	-110395.00	20	-403.25	20	-1563.03	20	-971.27	20	-1146.20	20	2.41	20
14	14	114	Min.	0.00	-111550.00	20	-403.25	20	-675.86	20	-971.27	20	990.60	20	2.41	20
14	14	114	Min.	220.00	-110395.00	20	-403.25	20	-1563.03	20	-971.27	20	-1146.20	20	2.41	20
14	114	214	Max	0.00	-89308.10	20	721.28	20	-148.00	20	-496.08	20	504.87	20	-3.28	20
14	114	214	Max	300.00	-87733.10	20	721.28	20	2015.85	20	-496.08	20	-983.38	20	-3.28	20
14	114	214	Min.	0.00	-89308.10	20	721.28	20	-148.00	20	-496.08	20	504.87	20	-3.28	20
14	114	214	Min.	300.00	-87733.10	20	721.28	20	2015.85	20	-496.08	20	-983.38	20	-3.28	20
14	214	314	Max	0.00	-62019.10	20	1723.61	20	-2702.77	20	-1294.82	20	2120.41	20	-9.04	20
14	214	314	Max	300.00	-60444.10	20	1723.61	20	2468.06	20	-1294.82	20	-1764.04	20	-9.04	20
14	214	314	Min.	0.00	-62019.10	20	1723.61	20	-2702.77	20	-1294.82	20	2120.41	20	-9.04	20
14	214	314	Min.	300.00	-60444.10	20	1723.61	20	2468.06	20	-1294.82	20	-1764.04	20	-9.04	20
14	314	414	Max	0.00	-34842.90	20	1711.86	20	-2384.40	20	-1176.80	20	1833.49	20	-9.53	20
14	314	414	Max	300.00	-33267.90	20	1711.86	20	2751.18	20	-1176.80	20	-1696.91	20	-9.53	20
14	314	414	Min.	0.00	-34842.90	20	1711.86	20	-2384.40	20	-1176.80	20	1833.49	20	-9.53	20
14	314	414	Min.	300.00	-33267.90	20	1711.86	20	2751.18	20	-1176.80	20	-1696.91	20	-9.53	20
14	414	514	Max	0.00	-8390.63	20	-103.04	20	-942.93	20	-1916.36	20	2457.51	20	-2.94	20
14	414	514	Max	268.00	-6983.63	20	-103.04	20	-1219.08	20	-1916.36	20	-2678.34	20	-2.94	20
14	414	514	Min.	0.00	-8390.63	20	-103.04	20	-942.93	20	-1916.36	20	2457.51	20	-2.94	20
14	414	514	Min.	268.00	-6983.63	20	-103.04	20	-1219.08	20	-1916.36	20	-2678.34	20	-2.94	20
17	17	117	Max	0.00	-109232.00	20	-692.10	20	-148.92	20	598.70	20	-328.09	20	2.41	20
17	17	117	Max	220.00	-108077.00	20	-692.10	20	-1671.53	20	598.70	20	989.05	20	2.41	20
17	17	117	Min.	0.00	-109232.00	20	-692.10	20	-148.92	20	598.70	20	-328.09	20	2.41	20
17	17	117	Min.	220.00	-108077.00	20	-692.10	20	-1671.53	20	598.70	20	989.05	20	2.41	20
17	117	217	Max	0.00	-88788.30	20	473.31	20	26.08	20	1295.15	20	-2033.15	20	-3.28	20
17	117	217	Max	300.00	-87213.30	20	473.31	20	1446.00	20	1295.15	20	1852.30	20	-3.28	20
17	117	217	Min.	0.00	-88788.30	20	473.31	20	26.08	20	1295.15	20	-2033.15	20	-3.28	20
17	117	217	Min.	300.00	-87213.30	20	473.31	20	1446.00	20	1295.15	20	1852.30	20	-3.28	20
17	217	317	Max	0.00	-62760.80	20	1245.75	20	-1939.69	20	846.78	20	-1111.26	20	-9.04	20
17	217	317	Max	300.00	-61185.80	20	1245.75	20	1797.57	20	846.78	20	1429.06	20	-9.04	20
17	217	317	Min.	0.00	-62760.80	20	1245.75	20	-1939.69	20	846.78	20	-1111.26	20	-9.04	20
17	217	317	Min.	300.00	-61185.80	20	1245.75	20	1797.57	20	846.78	20	1429.06	20	-9.04	20
17	317	417	Max	0.00	-37088.50	20	1310.26	20	-1776.28	20	897.25	20	-1368.12	20	-9.53	20
17	317	417	Max	300.00	-35513.50	20	1310.26	20	2154.49	20	897.25	20	1323.64	20	-9.53	20





17	317	417	Min.	0.00	-37088.50	20	1310.26	20	-1776.28	20	897.25	20	-1368.12	20	-9.53	20
17	317	417	Min.	300.00	-35513.50	20	1310.26	20	2154.49	20	897.25	20	1323.64	20	-9.53	20
17	417	517	Max	0.00	-11473.60	20	-600.95	20	-172.17	20	1411.78	20	-1850.73	20	-2.74	20
17	417	517	Max	294.00	-9930.12	20	-600.95	20	-1938.97	20	1411.78	20	2299.91	20	-2.74	20
17	417	517	Min.	0.00	-11473.60	20	-600.95	20	-172.17	20	1411.78	20	-1850.73	20	-2.74	20
17	417	517	Min.	294.00	-9930.12	20	-600.95	20	-1938.97	20	1411.78	20	2299.91	20	-2.74	20
18	18	118	Max	0.00	-75829.20	20	614.03	20	-5.32	20	14274.00	20	-20503.40	20	4.78	20
18	18	118	Max	220.00	-73849.20	20	614.03	20	1345.55	20	14274.00	20	10899.50	20	4.78	20
18	18	118	Min.	0.00	-75829.20	20	614.03	20	-5.32	20	14274.00	20	-20503.40	20	4.78	20
18	18	118	Min.	220.00	-73849.20	20	614.03	20	1345.55	20	14274.00	20	10899.50	20	4.78	20
18	118	218	Max	0.00	-65298.60	20	1796.27	20	-2568.26	20	-5475.29	20	8159.65	20	-6.49	20
18	118	218	Max	300.00	-62598.60	20	1796.26	20	2820.54	20	-5475.29	20	-8266.22	20	-6.49	20
18	118	218	Min.	0.00	-65298.60	20	1796.27	20	-2568.26	20	-5475.29	20	8159.65	20	-6.49	20
18	118	218	Min.	300.00	-62598.60	20	1796.26	20	2820.54	20	-5475.29	20	-8266.22	20	-6.49	20
18	218	318	Max	0.00	-47070.70	20	1950.15	20	-2920.17	20	-217.99	20	-3078.54	20	-17.89	20
18	218	318	Max	300.00	-44370.70	20	1950.15	20	2930.29	20	-217.99	20	-3732.52	20	-17.89	20
18	218	318	Min.	0.00	-47070.70	20	1950.15	20	-2920.17	20	-217.99	20	-3078.54	20	-17.89	20
18	218	318	Min.	300.00	-44370.70	20	1950.15	20	2930.29	20	-217.99	20	-3732.52	20	-17.89	20
18	318	418	Max	0.00	-28430.30	20	2001.27	20	-3010.42	20	-971.24	20	345.10	20	-18.86	20
18	318	418	Max	300.00	-25730.30	20	2001.27	20	2993.40	20	-971.24	20	-2568.63	20	-18.86	20
18	318	418	Min.	0.00	-28430.30	20	2001.27	20	-3010.42	20	-971.24	20	345.10	20	-18.86	20
18	318	418	Min.	300.00	-25730.30	20	2001.27	20	2993.40	20	-971.24	20	-2568.63	20	-18.86	20
18	418	518	Max	0.00	-10044.10	20	2184.10	20	-3211.61	20	358.63	20	501.49	20	-5.82	20
18	418	518	Max	268.00	-7632.08	20	2184.09	20	2641.77	20	358.63	20	1462.62	20	-5.82	20
18	418	518	Min.	0.00	-10044.10	20	2184.10	20	-3211.61	20	358.63	20	501.49	20	-5.82	20
18	418	518	Min.	268.00	-7632.08	20	2184.09	20	2641.77	20	358.63	20	1462.62	20	-5.82	20
101	101	102	Max	15.00	0.00	20	0.00	20	0.00	20	5419.10	20	-2205.08	20	-192.75	20
101	101	102	Max	189.19									2532.74	20		
101	101	102	Max	405.00	0.00	20	0.00	20	0.00	20	-6667.52	20	-4639.48	20	-192.75	20
101	101	102	Min.	15.00	0.00	20	0.00	20	0.00	20	5419.10	20	-2205.08	20	-192.75	20
101	101	102	Min.	189.19									2532.74	20		
101	101	102	Min.	405.00	0.00	20	0.00	20	0.00	20	-6667.52	20	-4639.48	20	-192.75	20
101	102	-1153	Max	35.00	0.00	20	0.00	20	0.00	20	5399.60	20	-3607.76	20	-416.43	20
101	102	-1153	Max	165.00	0.00	20	0.00	20	0.00	20	1288.21	20	739.31	20	-416.43	20
101	102	-1153	Min.	35.00	0.00	20	0.00	20	0.00	20	5399.60	20	-3607.76	20	-416.43	20
101	102	-1153	Min.	165.00	0.00	20	0.00	20	0.00	20	1288.21	20	739.31	20	-416.43	20
101	-1153	103	Max	0.00	0.00	20	0.00	20	0.00	20	2584.75	20	579.62	20	-28.05	20
101	-1153	103	Max	97.51									1839.78	20		
101	-1153	103	Max	266.00	0.00	20	0.00	20	0.00	20	-4466.47	20	-1923.07	20	-28.05	20
101	-1153	103	Min.	0.00	0.00	20	0.00	20	0.00	20	2584.75	20	579.62	20	-28.05	20
101	-1153	103	Min.	97.51									1839.78	20		
101	-1153	103	Min.	266.00	0.00	20	0.00	20	0.00	20	-4466.47	20	-1923.07	20	-28.05	20
101	103	-1154	Max	12.00	0.00	20	0.00	20	0.00	20	-8110.87	20	1219.47	20	293.79	20
101	103	-1154	Max	76.00	0.00	20	0.00	20	0.00	20	-9251.99	20	-4336.65	20	293.79	20
101	103	-1154	Min.	12.00	0.00	20	0.00	20	0.00	20	-8110.87	20	1219.47	20	293.79	20
101	103	-1154	Min.	76.00	0.00	20	0.00	20	0.00	20	-9251.99	20	-4336.65	20	293.79	20
101	-1154	-1155	Max	8.31	0.00	20	0.00	20	0.00	20	3172.06	20	-2472.17	20	-201.31	20
101	-1154	-1155	Max	84.50	0.00	20	0.00	20	0.00	20	1813.68	20	-572.97	20	-201.31	20
101	-1154	-1155	Min.	8.31	0.00	20	0.00	20	0.00	20	3172.06	20	-2472.17	20	-201.31	20
101	-1154	-1155	Min.	84.50	0.00	20	0.00	20	0.00	20	1813.68	20	-572.97	20	-201.31	20
101	-1155	-1156	Max	0.00	0.00	20	0.00	20	0.00	20	1622.63	20	-23.21	20	-366.06	20
101	-1155	-1156	Max	84.50	0.00	20	0.00	20	0.00	20	115.99	20	711.36	20	-366.06	20
101	-1155	-1156	Min.	0.00	0.00	20	0.00	20	0.00	20	1622.63	20	-23.21	20	-366.06	20
101	-1155	-1156	Min.	84.50	0.00	20	0.00	20	0.00	20	115.99	20	711.36	20	-366.06	20
101	-1156	-1157	Max	0.00	0.00	20	0.00	20	0.00	20	902.29	20	877.65	20	-141.98	20
101	-1156	-1157	Max	50.70									1105.95	20		
101	-1156	-1157	Max	84.50	0.00	20	0.00	20	0.00	20	-604.34	20	1003.53	20	-141.98	20
101	-1156	-1157	Min.	0.00	0.00	20	0.00	20	0.00	20	902.29	20	877.65	20	-141.98	20
101	-1156	-1157	Min.	50.70									1105.95	20		
101	-1156	-1157	Min.	84.50	0.00	20	0.00	20	0.00	20	-604.34	20	1003.53	20	-141.98	20
101	-1157	-1158	Max	0.00	0.00	20	0.00	20	0.00	20	17.38	20	805.22	20	64.79	20
101	-1157	-1158	Max	0.97									805.30	20		
101	-1157	-1158	Max	83.47	0.00	20	0.00	20	0.00	20	-1470.92	20	198.57	20	64.79	20
101	-1157	-1158	Min.	0.00	0.00	20	0.00	20	0.00	20	17.38	20	805.22	20	64.79	20
101	-1157	-1158	Min.	0.97									805.30	20		
101	-1157	-1158	Min.	83.47	0.00	20	0.00	20	0.00	20	-1470.92	20	198.57	20	64.79	20
101	-1158	104	Max	0.00	0.00	20	0.00	20	0.00	20	-1285.40	20	-96.18	20	412.06	20
101	-1158	104	Max	82.00	0.00	20	0.00	20	0.00	20	-2747.46	20	-1749.66	20	412.06	20
101	-1158	104	Min.	0.00	0.00	20	0.00	20	0.00	20	-1285.40	20	-96.18	20	412.06	20
101	-1158	104	Min.	82.00	0.00	20	0.00	20	0.00	20	-2747.46	20	-1749.66	20	412.06	20
101	104	105	Max	58.00	0.00	20	0.00	20	0.00	20	4340.41	20	-1793.13	20	195.67	20
101	104	105	Max	223.10									1803.68	20		
101	104	105	Max	428.00	0.00	20	0.00	20	0.00	20	-5349.26	20	-3659.50	20	195.67	20
101	104	105	Min.	58.00	0.00	20	0.00	20	0.00	20	4340.41	20	-1793.13	20	195.67	20
101	104	105	Min.	223.10									1803.68	20		
101	104	105	Min.	428.00	0.00	20	0.00	20	0.00	20	-5349.26	20	-3659.50	20	195.67	20



101	105	106	Max	35.00	0.00	20	0.00	20	0.00	20	4264.24	20	-2199.62	20	216.74	20
101	105	106	Max	202.15									1376.07	20		
101	105	106	Max	396.00	0.00	20	0.00	20	0.00	20	-4914.79	20	-3373.86	20	216.74	20
101	105	106	Min.	35.00	0.00	20	0.00	20	0.00	20	4264.24	20	-2199.62	20	216.74	20
101	105	106	Min.	202.15									1376.07	20		
101	105	106	Min.	396.00	0.00	20	0.00	20	0.00	20	-4914.79	20	-3373.86	20	216.74	20
101	106	-1159	Max	15.00	0.00	20	0.00	20	0.00	20	-6491.72	20	5725.88	20	47.72	20
101	106	-1159	Max	118.00	0.00	20	0.00	20	0.00	20	-7375.46	20	-1415.72	20	47.72	20
101	106	-1159	Min.	15.00	0.00	20	0.00	20	0.00	20	-6491.72	20	5725.88	20	47.72	20
101	106	-1159	Min.	118.00	0.00	20	0.00	20	0.00	20	-7375.46	20	-1415.72	20	47.72	20
102	107	108	Max	15.00	0.00	20	0.00	20	0.00	20	6940.49	20	-2877.12	20	-67.69	20
102	107	108	Max	188.80									3177.59	20		
102	107	108	Max	405.00	0.00	20	0.00	20	0.00	20	-8573.18	20	-6060.88	20	-67.69	20
102	107	108	Min.	15.00	0.00	20	0.00	20	0.00	20	6940.49	20	-2877.12	20	-67.69	20
102	107	108	Min.	188.80									3177.59	20		
102	107	108	Min.	405.00	0.00	20	0.00	20	0.00	20	-8573.18	20	-6060.88	20	-67.69	20
102	108	109	Max	35.00	0.00	20	0.00	20	0.00	20	10122.40	20	-8155.37	20	96.05	20
102	108	109	Max	266.72									3572.43	20		
102	108	109	Max	432.00	0.00	20	0.00	20	0.00	20	-7220.05	20	-2394.23	20	96.05	20
102	108	109	Min.	35.00	0.00	20	0.00	20	0.00	20	10122.40	20	-8155.37	20	96.05	20
102	108	109	Min.	266.72									3572.43	20		
102	108	109	Min.	432.00	0.00	20	0.00	20	0.00	20	-7220.05	20	-2394.23	20	96.05	20
102	109	-1170	Max	13.00	0.00	20	0.00	20	0.00	20	2791.55	20	-2611.09	20	-266.27	20
102	109	-1170	Max	84.67	0.00	20	0.00	20	0.00	20	2126.48	20	-848.80	20	-266.27	20
102	109	-1170	Min.	13.00	0.00	20	0.00	20	0.00	20	2791.55	20	-2611.09	20	-266.27	20
102	109	-1170	Min.	84.67	0.00	20	0.00	20	0.00	20	2126.48	20	-848.80	20	-266.27	20
102	-1170	-1171	Max	0.00	0.00	20	0.00	20	0.00	20	1640.12	20	-389.09	20	7.61	20
102	-1170	-1171	Max	84.67	0.00	20	0.00	20	0.00	20	854.41	20	666.93	20	7.61	20
102	-1170	-1171	Min.	0.00	0.00	20	0.00	20	0.00	20	1640.12	20	-389.09	20	7.61	20
102	-1170	-1171	Min.	84.67	0.00	20	0.00	20	0.00	20	854.41	20	666.93	20	7.61	20
102	-1171	-1172	Max	0.00	0.00	20	0.00	20	0.00	20	755.20	20	837.56	20	29.99	20
102	-1171	-1172	Max	81.38									1144.85	20		
102	-1171	-1172	Max	84.67	0.00	20	0.00	20	0.00	20	-30.50	20	1144.35	20	29.99	20
102	-1171	-1172	Min.	0.00	0.00	20	0.00	20	0.00	20	755.20	20	837.56	20	29.99	20
102	-1171	-1172	Min.	81.38									1144.85	20		
102	-1171	-1172	Min.	84.67	0.00	20	0.00	20	0.00	20	-30.50	20	1144.35	20	29.99	20
102	-1172	-1173	Max	0.00	0.00	20	0.00	20	0.00	20	-84.23	20	1094.55	20	18.64	20
102	-1172	-1173	Max	84.67	0.00	20	0.00	20	0.00	20	-869.94	20	690.62	20	18.64	20
102	-1172	-1173	Min.	0.00	0.00	20	0.00	20	0.00	20	-84.23	20	1094.55	20	18.64	20
102	-1172	-1173	Min.	84.67	0.00	20	0.00	20	0.00	20	-869.94	20	690.62	20	18.64	20
102	-1173	-1174	Max	0.00	0.00	20	0.00	20	0.00	20	-893.52	20	372.55	20	49.25	20
102	-1173	-1174	Max	84.67	0.00	20	0.00	20	0.00	20	-1679.23	20	-716.58	20	49.25	20
102	-1173	-1174	Min.	0.00	0.00	20	0.00	20	0.00	20	-893.52	20	372.55	20	49.25	20
102	-1173	-1174	Min.	84.67	0.00	20	0.00	20	0.00	20	-1679.23	20	-716.58	20	49.25	20
102	-1174	110	Max	0.00	0.00	20	0.00	20	0.00	20	-2350.52	20	-1283.05	20	360.16	20
102	-1174	110	Max	71.67	0.00	20	0.00	20	0.00	20	-3015.59	20	-3205.91	20	360.16	20
102	-1174	110	Min.	0.00	0.00	20	0.00	20	0.00	20	-2350.52	20	-1283.05	20	360.16	20
102	-1174	110	Min.	71.67	0.00	20	0.00	20	0.00	20	-3015.59	20	-3205.91	20	360.16	20
102	110	111	Max	57.00	0.00	20	0.00	20	0.00	20	6078.35	20	-1631.37	20	-156.90	20
102	110	111	Max	206.71									2935.43	20		
102	110	111	Max	428.00	0.00	20	0.00	20	0.00	20	-8928.76	20	-6918.89	20	-156.90	20
102	110	111	Min.	57.00	0.00	20	0.00	20	0.00	20	6078.35	20	-1631.37	20	-156.90	20
102	110	111	Min.	206.71									2935.43	20		
102	110	111	Min.	428.00	0.00	20	0.00	20	0.00	20	-8928.76	20	-6918.89	20	-156.90	20
102	111	112	Max	35.00	0.00	20	0.00	20	0.00	20	7432.12	20	-3925.25	20	85.07	20
102	111	112	Max	214.34									2749.91	20		
102	111	112	Max	396.00	0.00	20	0.00	20	0.00	20	-7504.06	20	-4055.11	20	85.07	20
102	111	112	Min.	35.00	0.00	20	0.00	20	0.00	20	7432.12	20	-3925.25	20	85.07	20
102	111	112	Min.	214.34									2749.91	20		
102	111	112	Min.	396.00	0.00	20	0.00	20	0.00	20	-7504.06	20	-4055.11	20	85.07	20
103	113	114	Max	15.00	0.00	20	0.00	20	0.00	20	5877.14	20	-2776.99	20	216.85	20
103	113	114	Max	195.22									2536.64	20		
103	113	114	Max	405.00	0.00	20	0.00	20	0.00	20	-6798.52	20	-4573.67	20	216.85	20
103	113	114	Min.	15.00	0.00	20	0.00	20	0.00	20	5877.14	20	-2776.99	20	216.85	20
103	113	114	Min.	195.22									2536.64	20		
103	113	114	Min.	405.00	0.00	20	0.00	20	0.00	20	-6798.52	20	-4573.67	20	216.85	20
103	114	115	Max	35.00	0.00	20	0.00	20	0.00	20	7884.60	20	-6321.33	20	-695.58	20
103	114	115	Max	272.33									3034.95	20		
103	114	115	Max	471.50	0.00	20	0.00	20	0.00	20	-6616.82	20	-3554.39	20	-695.58	20
103	114	115	Min.	35.00	0.00	20	0.00	20	0.00	20	7884.60	20	-6321.33	20	-695.58	20
103	114	115	Min.	272.33									3034.95	20		
103	114	115	Min.	471.50	0.00	20	0.00	20	0.00	20	-6616.82	20	-3554.39	20	-695.58	20
103	115	-1236	Max	12.50	0.00	20	0.00	20	0.00	20	4672.03	20	-4462.37	20	491.11	20
103	115	-1236	Max	285.77									1921.29	20		
103	115	-1236	Max	371.00	0.00	20	0.00	20	0.00	20	-1457.13	20	1300.35	20	491.11	20
103	115	-1236	Min.	12.50	0.00	20	0.00	20	0.00	20	4672.03	20	-4462.37	20	491.11	20



103	115	-1236	Min.	285.77								1921.29	20			
103	115	-1236	Min.	371.00	0.00	20	0.00	20	0.00	20	-1457.13	20	1300.35	20	491.11	20
103	-1236	-1237	Max	0.00	0.00	20	0.00	20	0.00	20	-2080.61	20	839.81	20	139.84	20
103	-1236	-1237	Max	68.50	0.00	20	0.00	20	0.00	20	-3251.73	20	-986.51	20	139.84	20
103	-1236	-1237	Min.	0.00	0.00	20	0.00	20	0.00	20	-2080.61	20	839.81	20	139.84	20
103	-1236	-1237	Min.	68.50	0.00	20	0.00	20	0.00	20	-3251.73	20	-986.51	20	139.84	20
103	-1237	116	Max	0.00	0.00	20	0.00	20	0.00	20	-3621.06	20	-1678.56	20	66.68	20
103	-1237	116	Max	56.00	0.00	20	0.00	20	0.00	20	-4578.47	20	-3974.43	20	66.68	20
103	-1237	116	Min.	0.00	0.00	20	0.00	20	0.00	20	-3621.06	20	-1678.56	20	66.68	20
103	-1237	116	Min.	56.00	0.00	20	0.00	20	0.00	20	-4578.47	20	-3974.43	20	66.68	20
103	116	117	Max	17.50	0.00	20	0.00	20	0.00	20	6168.59	20	-3197.98	20	266.20	20
103	116	117	Max	204.80									2592.15	20		
103	116	117	Max	428.00	0.00	20	0.00	20	0.00	20	-7319.94	20	-5561.13	20	266.20	20
103	116	117	Min.	17.50	0.00	20	0.00	20	0.00	20	6168.59	20	-3197.98	20	266.20	20
103	116	117	Min.	204.80									2592.15	20		
103	116	117	Min.	428.00	0.00	20	0.00	20	0.00	20	-7319.94	20	-5561.13	20	266.20	20
103	117	118	Max	35.00	0.00	20	0.00	20	0.00	20	5599.20	20	-2835.80	20	-220.71	20
103	117	118	Max	207.67									2062.78	20		
103	117	118	Max	396.00	0.00	20	0.00	20	0.00	20	-5950.79	20	-3470.42	20	-220.71	20
103	117	118	Min.	35.00	0.00	20	0.00	20	0.00	20	5599.20	20	-2835.80	20	-220.71	20
103	117	118	Min.	207.67									2062.78	20		
103	117	118	Min.	396.00	0.00	20	0.00	20	0.00	20	-5950.79	20	-3470.42	20	-220.71	20
104	101	-1133	Max	15.00	0.00	20	0.00	20	0.00	20	-2432.40	20	3998.95	20	244.79	20
104	101	-1133	Max	163.00	0.00	20	0.00	20	0.00	20	-4383.26	20	-1044.64	20	244.79	20
104	101	-1133	Min.	15.00	0.00	20	0.00	20	0.00	20	-2432.40	20	3998.95	20	244.79	20
104	101	-1133	Min.	163.00	0.00	20	0.00	20	0.00	20	-4383.26	20	-1044.64	20	244.79	20
104	101	107	Max	105.00	0.00	20	0.00	20	0.00	20	4772.12	20	-3548.57	20	54.02	20
104	101	107	Max	317.38									1527.56	20		
104	101	107	Max	444.00	0.00	20	0.00	20	0.00	20	-2832.17	20	-260.35	20	54.02	20
104	101	107	Min.	105.00	0.00	20	0.00	20	0.00	20	4772.12	20	-3548.57	20	54.02	20
104	101	107	Min.	317.38									1527.56	20		
104	101	107	Min.	444.00	0.00	20	0.00	20	0.00	20	-2832.17	20	-260.35	20	54.02	20
104	107	-1197	Max	60.00	0.00	20	0.00	20	0.00	20	4722.37	20	-3116.66	20	-41.70	20
104	107	-1197	Max	161.00	0.00	20	0.00	20	0.00	20	2456.79	20	508.82	20	-41.70	20
104	107	-1197	Min.	60.00	0.00	20	0.00	20	0.00	20	4722.37	20	-3116.66	20	-41.70	20
104	107	-1197	Min.	161.00	0.00	20	0.00	20	0.00	20	2456.79	20	508.82	20	-41.70	20
104	-1197	113	Max	0.00	0.00	20	0.00	20	0.00	20	2456.79	20	508.82	20	-41.70	20
104	-1197	113	Max	109.52									1854.21	20		
104	-1197	113	Max	306.00	0.00	20	0.00	20	0.00	20	-4407.26	20	-2475.39	20	-41.70	20
104	-1197	113	Min.	0.00	0.00	20	0.00	20	0.00	20	2456.79	20	508.82	20	-41.70	20
104	-1197	113	Min.	109.52									1854.21	20		
104	-1197	113	Min.	306.00	0.00	20	0.00	20	0.00	20	-4407.26	20	-2475.39	20	-41.70	20
104	113	-1243	Max	15.00	0.00	20	0.00	20	0.00	20	-6960.05	20	6685.96	20	-309.07	20
104	113	-1243	Max	118.00	0.00	20	0.00	20	0.00	20	-8317.75	20	-1182.10	20	-309.07	20
104	113	-1243	Min.	15.00	0.00	20	0.00	20	0.00	20	-6960.05	20	6685.96	20	-309.07	20
104	113	-1243	Min.	118.00	0.00	20	0.00	20	0.00	20	-8317.75	20	-1182.10	20	-309.07	20
105	102	108	Max	15.00	0.00	20	0.00	20	0.00	20	3409.39	20	-2259.82	20	30.28	20
105	102	108	Max	244.91									1664.51	20		
105	102	108	Max	489.00	0.00	20	0.00	20	0.00	20	-3610.55	20	-2736.59	20	30.28	20
105	102	108	Min.	15.00	0.00	20	0.00	20	0.00	20	3409.39	20	-2259.82	20	30.28	20
105	102	108	Min.	244.91									1664.51	20		
105	102	108	Min.	489.00	0.00	20	0.00	20	0.00	20	-3610.55	20	-2736.59	20	30.28	20
105	108	-1198	Max	15.00	0.00	20	0.00	20	0.00	20	4408.37	20	-4109.75	20	-4.51	20
105	108	-1198	Max	161.00	0.00	20	0.00	20	0.00	20	2246.11	20	748.01	20	-4.51	20
105	108	-1198	Min.	15.00	0.00	20	0.00	20	0.00	20	4408.37	20	-4109.75	20	-4.51	20
105	108	-1198	Min.	161.00	0.00	20	0.00	20	0.00	20	2246.11	20	748.01	20	-4.51	20
105	-1198	114	Max	0.00	0.00	20	0.00	20	0.00	20	2246.11	20	748.01	20	-4.51	20
105	-1198	114	Max	151.66									2451.25	20		
105	-1198	114	Max	396.00	0.00	20	0.00	20	0.00	20	-3618.65	20	-1969.63	20	-4.51	20
105	-1198	114	Min.	0.00	0.00	20	0.00	20	0.00	20	2246.11	20	748.01	20	-4.51	20
105	-1198	114	Min.	151.66									2451.25	20		
105	-1198	114	Min.	396.00	0.00	20	0.00	20	0.00	20	-3618.65	20	-1969.63	20	-4.51	20
106	-1140	-1153	Max	30.00	0.00	20	0.00	20	0.00	20	2695.09	20	-2864.80	20	159.69	20
106	-1140	-1153	Max	193.00	0.00	20	0.00	20	0.00	20	1296.55	20	388.38	20	159.69	20
106	-1140	-1153	Min.	30.00	0.00	20	0.00	20	0.00	20	2695.09	20	-2864.80	20	159.69	20
106	-1140	-1153	Min.	193.00	0.00	20	0.00	20	0.00	20	1296.55	20	388.38	20	159.69	20
107	103	109	Max	15.00	0.00	20	0.00	20	0.00	20	8312.36	20	-6386.82	20	0.24	20
107	103	109	Max	264.08									3965.43	20		
107	103	109	Max	484.00	0.00	20	0.00	20	0.00	20	-7339.16	20	-4104.67	20	0.24	20
107	103	109	Min.	15.00	0.00	20	0.00	20	0.00	20	8312.36	20	-6386.82	20	0.24	20
107	103	109	Min.	264.08									3965.43	20		
107	103	109	Min.	484.00	0.00	20	0.00	20	0.00	20	-7339.16	20	-4104.67	20	0.24	20
107	109	-1183	Max	20.00	0.00	20	0.00	20	0.00	20	5665.18	20	-4330.20	20	258.36	20
107	109	-1183	Max	82.00	0.00	20	0.00	20	0.00	20	4494.62	20	-1180.67	20	258.36	20
107	109	-1183	Min.	20.00	0.00	20	0.00	20	0.00	20	5665.18	20	-4330.20	20	258.36	20
107	109	-1183	Min.	82.00	0.00	20	0.00	20	0.00	20	4494.62	20	-1180.67	20	258.36	20



107	-1183	-1199	Max	0.00	0.00	20	0.00	20	0.00	20	3439.85	20	-354.51	20	99.96	20
107	-1183	-1199	Max	82.00	0.00	20	0.00	20	0.00	20	1891.69	20	1831.42	20	99.96	20
107	-1183	-1199	Min.	0.00	0.00	20	0.00	20	0.00	20	3439.85	20	-354.51	20	99.96	20
107	-1183	-1199	Min.	82.00	0.00	20	0.00	20	0.00	20	1891.69	20	1831.42	20	99.96	20
107	-1199	-2021	Max	0.00	0.00	20	0.00	20	0.00	20	1031.85	20	2373.71	20	-165.53	20
107	-1199	-2021	Max	54.09									2655.65	20		
107	-1199	-2021	Max	223.00	0.00	20	0.00	20	0.00	20	-3178.39	20	-19.67	20	-165.53	20
107	-1199	-2021	Min.	0.00	0.00	20	0.00	20	0.00	20	1031.85	20	2373.71	20	-165.53	20
107	-1199	-2021	Min.	54.09									2655.65	20		
107	-1199	-2021	Min.	223.00	0.00	20	0.00	20	0.00	20	-3178.39	20	-19.67	20	-165.53	20
108	104	110	Max	15.00	0.00	20	0.00	20	0.00	20	8109.45	20	-5833.61	20	15.67	20
108	104	110	Max	258.00									4019.40	20		
108	104	110	Max	484.00	0.00	20	0.00	20	0.00	20	-7542.07	20	-4503.11	20	15.67	20
108	104	110	Min.	15.00	0.00	20	0.00	20	0.00	20	8109.45	20	-5833.61	20	15.67	20
108	104	110	Min.	258.00									4019.40	20		
108	104	110	Min.	484.00	0.00	20	0.00	20	0.00	20	-7542.07	20	-4503.11	20	15.67	20
108	110	-1184	Max	20.00	0.00	20	0.00	20	0.00	20	3954.24	20	-3254.44	20	-289.22	20
108	110	-1184	Max	95.33	0.00	20	0.00	20	0.00	20	2531.94	20	-811.31	20	-289.22	20
108	110	-1184	Min.	20.00	0.00	20	0.00	20	0.00	20	3954.24	20	-3254.44	20	-289.22	20
108	110	-1184	Min.	95.33	0.00	20	0.00	20	0.00	20	2531.94	20	-811.31	20	-289.22	20
108	-1184	-1202	Max	0.00	0.00	20	0.00	20	0.00	20	1992.55	20	-227.06	20	43.82	20
108	-1184	-1202	Max	95.33	0.00	20	0.00	20	0.00	20	192.65	20	814.55	20	43.82	20
108	-1184	-1202	Min.	0.00	0.00	20	0.00	20	0.00	20	1992.55	20	-227.06	20	43.82	20
108	-1184	-1202	Min.	95.33	0.00	20	0.00	20	0.00	20	192.65	20	814.55	20	43.82	20
108	-1202	-1213	Max	0.00	0.00	20	0.00	20	0.00	20	728.14	20	987.37	20	22.19	20
108	-1202	-1213	Max	38.30									1127.77	20		
108	-1202	-1213	Max	95.33	0.00	20	0.00	20	0.00	20	-1071.76	20	823.57	20	22.19	20
108	-1202	-1213	Min.	0.00	0.00	20	0.00	20	0.00	20	728.14	20	987.37	20	22.19	20
108	-1202	-1213	Min.	38.30									1127.77	20		
108	-1202	-1213	Min.	95.33	0.00	20	0.00	20	0.00	20	-1071.76	20	823.57	20	22.19	20
108	-1213	-2022	Max	0.00	0.00	20	0.00	20	0.00	20	-733.53	20	450.17	20	109.02	20
108	-1213	-2022	Max	101.00	0.00	20	0.00	20	0.00	20	-2640.41	20	-1253.67	20	109.02	20
108	-1213	-2022	Min.	0.00	0.00	20	0.00	20	0.00	20	-733.53	20	450.17	20	109.02	20
108	-1213	-2022	Min.	101.00	0.00	20	0.00	20	0.00	20	-2640.41	20	-1253.67	20	109.02	20
109	105	111	Max	15.00	0.00	20	0.00	20	0.00	20	3426.53	20	-2390.51	20	1.97	20
109	105	111	Max	246.03									1573.39	20		
109	105	111	Max	489.00	0.00	20	0.00	20	0.00	20	-3593.41	20	-2786.02	20	1.97	20
109	105	111	Min.	15.00	0.00	20	0.00	20	0.00	20	3426.53	20	-2390.51	20	1.97	20
109	105	111	Min.	246.03									1573.39	20		
109	105	111	Min.	489.00	0.00	20	0.00	20	0.00	20	-3593.41	20	-2786.02	20	1.97	20
109	111	-1190	Max	15.00	0.00	20	0.00	20	0.00	20	4412.22	20	-4132.73	20	-11.34	20
109	111	-1190	Max	133.00	0.00	20	0.00	20	0.00	20	2664.65	20	42.62	20	-11.34	20
109	111	-1190	Min.	15.00	0.00	20	0.00	20	0.00	20	4412.22	20	-4132.73	20	-11.34	20
109	111	-1190	Min.	133.00	0.00	20	0.00	20	0.00	20	2664.65	20	42.62	20	-11.34	20
109	-1190	117	Max	0.00	0.00	20	0.00	20	0.00	20	2664.64	20	42.63	20	-11.34	20
109	-1190	117	Max	179.17									2439.72	20		
109	-1190	117	Max	424.00	0.00	20	0.00	20	0.00	20	-3614.80	20	-1971.70	20	-11.34	20
109	-1190	117	Min.	0.00	0.00	20	0.00	20	0.00	20	2664.64	20	42.63	20	-11.34	20
109	-1190	117	Min.	179.17									2439.72	20		
109	-1190	117	Min.	424.00	0.00	20	0.00	20	0.00	20	-3614.80	20	-1971.70	20	-11.34	20
110	106	112	Max	105.00	0.00	20	0.00	20	0.00	20	4641.03	20	-3456.13	20	-189.82	20
110	106	112	Max	311.36									1361.86	20		
110	106	112	Max	444.00	0.00	20	0.00	20	0.00	20	-2936.29	20	-566.61	20	-189.82	20
110	106	112	Min.	105.00	0.00	20	0.00	20	0.00	20	4641.03	20	-3456.13	20	-189.82	20
110	106	112	Min.	311.36									1361.86	20		
110	106	112	Min.	444.00	0.00	20	0.00	20	0.00	20	-2936.29	20	-566.61	20	-189.82	20
110	112	118	Max	60.00	0.00	20	0.00	20	0.00	20	4900.10	20	-3523.48	20	37.37	20
110	112	118	Max	279.23									1847.64	20		
110	112	118	Max	467.00	0.00	20	0.00	20	0.00	20	-4197.15	20	-2092.97	20	37.37	20
110	112	118	Min.	60.00	0.00	20	0.00	20	0.00	20	4900.10	20	-3523.48	20	37.37	20
110	112	118	Min.	279.23									1847.64	20		
110	112	118	Min.	467.00	0.00	20	0.00	20	0.00	20	-4197.15	20	-2092.97	20	37.37	20
110	118	-1268	Max	15.00	0.00	20	0.00	20	0.00	20	-5070.74	20	4985.39	20	215.57	20
110	118	-1268	Max	118.00	0.00	20	0.00	20	0.00	20	-6420.24	20	-932.47	20	215.57	20
110	118	-1268	Min.	15.00	0.00	20	0.00	20	0.00	20	-5070.74	20	4985.39	20	215.57	20
110	118	-1268	Min.	118.00	0.00	20	0.00	20	0.00	20	-6420.24	20	-932.47	20	215.57	20
201	201	202	Max	15.00	0.00	20	0.00	20	0.00	20	5310.46	20	-3904.55	20	-164.98	20
201	201	202	Max	220.25									1545.20	20		
201	201	202	Max	405.00	0.00	20	0.00	20	0.00	20	-4780.26	20	-2870.66	20	-164.98	20
201	201	202	Min.	15.00	0.00	20	0.00	20	0.00	20	5310.46	20	-3904.55	20	-164.98	20
201	201	202	Min.	220.25									1545.20	20		
201	201	202	Min.	405.00	0.00	20	0.00	20	0.00	20	-4780.26	20	-2870.66	20	-164.98	20
201	202	203	Max	35.00	0.00	20	0.00	20	0.00	20	5463.57	20	-3681.15	20	-261.04	20
201	202	203	Max	241.11									1949.26	20		
201	202	203	Max	431.00	0.00	20	0.00	20	0.00	20	-5033.75	20	-2830.10	20	-261.04	20
201	202	203	Min.	35.00	0.00	20	0.00	20	0.00	20	5463.57	20	-3681.15	20	-261.04	20



201	202	203	Min.	241.11								1949.26	20			
201	202	203	Min.	431.00	0.00	20	0.00	20	0.00	20	-5033.75	20	-2830.10	20	-261.04	20
201	203	204	Max	12.00	0.00	20	0.00	20	0.00	20	4420.49	20	-3722.30	20	84.69	20
201	203	204	Max	259.92									1757.43	20		
201	203	204	Max	496.00	0.00	20	0.00	20	0.00	20	-4209.23	20	-3211.06	20	84.69	20
201	203	204	Min.	12.00	0.00	20	0.00	20	0.00	20	4420.49	20	-3722.30	20	84.69	20
201	203	204	Min.	259.92									1757.43	20		
201	203	204	Min.	496.00	0.00	20	0.00	20	0.00	20	-4209.23	20	-3211.06	20	84.69	20
201	204	205	Max	58.00	0.00	20	0.00	20	0.00	20	4361.42	20	-1894.75	20	185.73	20
201	204	205	Max	223.91									1736.97	20		
201	204	205	Max	428.00	0.00	20	0.00	20	0.00	20	-5328.25	20	-3683.40	20	185.73	20
201	204	205	Min.	58.00	0.00	20	0.00	20	0.00	20	4361.42	20	-1894.75	20	185.73	20
201	204	205	Min.	223.91									1736.97	20		
201	204	205	Min.	428.00	0.00	20	0.00	20	0.00	20	-5328.25	20	-3683.40	20	185.73	20
201	205	206	Max	35.00	0.00	20	0.00	20	0.00	20	4405.34	20	-2137.53	20	177.07	20
201	205	206	Max	207.75									1678.70	20		
201	205	206	Max	396.00	0.00	20	0.00	20	0.00	20	-4773.70	20	-2802.42	20	177.07	20
201	205	206	Min.	35.00	0.00	20	0.00	20	0.00	20	4405.34	20	-2137.53	20	177.07	20
201	205	206	Min.	207.75									1678.70	20		
201	205	206	Min.	396.00	0.00	20	0.00	20	0.00	20	-4773.70	20	-2802.42	20	177.07	20
202	207	208	Max	15.00	0.00	20	0.00	20	0.00	20	10730.50	20	-8695.97	20	-10.48	20
202	207	208	Max	229.06									2788.75	20		
202	207	208	Max	405.00	0.00	20	0.00	20	0.00	20	-8819.72	20	-4970.03	20	-10.48	20
202	207	208	Min.	15.00	0.00	20	0.00	20	0.00	20	10730.50	20	-8695.97	20	-10.48	20
202	207	208	Min.	229.06									2788.75	20		
202	207	208	Min.	405.00	0.00	20	0.00	20	0.00	20	-8819.72	20	-4970.03	20	-10.48	20
202	208	209	Max	35.00	0.00	20	0.00	20	0.00	20	10349.10	20	-8439.38	20	164.30	20
202	208	209	Max	267.91									3612.68	20		
202	208	209	Max	432.00	0.00	20	0.00	20	0.00	20	-7291.11	20	-2369.29	20	164.30	20
202	208	209	Min.	35.00	0.00	20	0.00	20	0.00	20	10349.10	20	-8439.38	20	164.30	20
202	208	209	Min.	267.91									3612.68	20		
202	208	209	Min.	432.00	0.00	20	0.00	20	0.00	20	-7291.11	20	-2369.29	20	164.30	20
202	209	-1322	Max	13.00	0.00	20	0.00	20	0.00	20	4348.02	20	-3159.67	20	49.99	20
202	209	-1322	Max	84.67	0.00	20	0.00	20	0.00	20	2941.20	20	-547.70	20	49.99	20
202	209	-1322	Min.	13.00	0.00	20	0.00	20	0.00	20	4348.02	20	-3159.67	20	49.99	20
202	209	-1322	Min.	84.67	0.00	20	0.00	20	0.00	20	2941.20	20	-547.70	20	49.99	20
202	-1322	-1323	Max	0.00	0.00	20	0.00	20	0.00	20	2719.84	20	-99.47	20	277.77	20
202	-1322	-1323	Max	84.67	0.00	20	0.00	20	0.00	20	1057.83	20	1499.74	20	277.77	20
202	-1322	-1323	Min.	0.00	0.00	20	0.00	20	0.00	20	2719.84	20	-99.47	20	277.77	20
202	-1322	-1323	Min.	84.67	0.00	20	0.00	20	0.00	20	1057.83	20	1499.74	20	277.77	20
202	-1323	-1324	Max	0.00	0.00	20	0.00	20	0.00	20	1285.82	20	1615.84	20	161.79	20
202	-1323	-1324	Max	65.50									2036.97	20		
202	-1323	-1324	Max	84.67	0.00	20	0.00	20	0.00	20	-376.18	20	2000.92	20	161.79	20
202	-1323	-1324	Min.	0.00	0.00	20	0.00	20	0.00	20	1285.82	20	1615.84	20	161.79	20
202	-1323	-1324	Min.	65.50									2036.97	20		
202	-1323	-1324	Min.	84.67	0.00	20	0.00	20	0.00	20	-376.18	20	2000.92	20	161.79	20
202	-1324	-1325	Max	0.00	0.00	20	0.00	20	0.00	20	-32.67	20	1935.66	20	-104.60	20
202	-1324	-1325	Max	84.67	0.00	20	0.00	20	0.00	20	-1694.67	20	1204.42	20	-104.60	20
202	-1324	-1325	Min.	0.00	0.00	20	0.00	20	0.00	20	-32.67	20	1935.66	20	-104.60	20
202	-1324	-1325	Min.	84.67	0.00	20	0.00	20	0.00	20	-1694.67	20	1204.42	20	-104.60	20
202	-1325	-1326	Max	0.00	0.00	20	0.00	20	0.00	20	-1282.46	20	873.39	20	-253.50	20
202	-1325	-1326	Max	84.67	0.00	20	0.00	20	0.00	20	-2944.47	20	-916.01	20	-253.50	20
202	-1325	-1326	Min.	0.00	0.00	20	0.00	20	0.00	20	-1282.46	20	873.39	20	-253.50	20
202	-1325	-1326	Min.	84.67	0.00	20	0.00	20	0.00	20	-2944.47	20	-916.01	20	-253.50	20
202	-1326	210	Max	0.00	0.00	20	0.00	20	0.00	20	-3428.92	20	-1541.94	20	-43.20	20
202	-1326	210	Max	71.67	0.00	20	0.00	20	0.00	20	-4835.74	20	-4503.45	20	-43.20	20
202	-1326	210	Min.	0.00	0.00	20	0.00	20	0.00	20	-3428.92	20	-1541.94	20	-43.20	20
202	-1326	210	Min.	71.67	0.00	20	0.00	20	0.00	20	-4835.74	20	-4503.45	20	-43.20	20
202	210	211	Max	57.00	0.00	20	0.00	20	0.00	20	5107.26	20	-1320.35	20	-185.91	20
202	210	211	Max	206.29									2498.64	20		
202	210	211	Max	428.00	0.00	20	0.00	20	0.00	20	-7562.55	20	-5874.91	20	-185.91	20
202	210	211	Min.	57.00	0.00	20	0.00	20	0.00	20	5107.26	20	-1320.35	20	-185.91	20
202	210	211	Min.	206.29									2498.64	20		
202	210	211	Min.	428.00	0.00	20	0.00	20	0.00	20	-7562.55	20	-5874.91	20	-185.91	20
202	211	212	Max	35.00	0.00	20	0.00	20	0.00	20	4927.73	20	-1478.26	20	40.90	20
202	211	212	Max	179.40									2246.49	20		
202	211	212	Max	396.00	0.00	20	0.00	20	0.00	20	-6813.59	20	-4882.23	20	40.90	20
202	211	212	Min.	35.00	0.00	20	0.00	20	0.00	20	4927.73	20	-1478.26	20	40.90	20
202	211	212	Min.	179.40									2246.49	20		
202	211	212	Min.	396.00	0.00	20	0.00	20	0.00	20	-6813.59	20	-4882.23	20	40.90	20
203	213	-1395	Max	15.00	0.00	20	0.00	20	0.00	20	4534.55	20	-4220.41	20	-2474.18	20
203	213	-1395	Max	88.00	0.00	20	0.00	20	0.00	20	2512.09	20	-1648.38	20	-2474.18	20
203	213	-1395	Min.	15.00	0.00	20	0.00	20	0.00	20	4534.55	20	-4220.41	20	-2474.18	20
203	213	-1395	Min.	88.00	0.00	20	0.00	20	0.00	20	2512.09	20	-1648.38	20	-2474.18	20
203	-1395	-1396	Max	0.00	0.00	20	0.00	20	0.00	20	3375.55	20	-924.14	20	-1019.29	20
203	-1395	-1396	Max	88.00	0.00	20	0.00	20	0.00	20	937.51	20	973.60	20	-1019.29	20



203	-1395	-1396	Min.	0.00	0.00	20	0.00	20	0.00	20	3375.55	20	-924.14	20	-1019.29	20
203	-1395	-1396	Min.	88.00	0.00	20	0.00	20	0.00	20	937.51	20	973.60	20	-1019.29	20
203	-1396	-1397	Max	0.00	0.00	20	0.00	20	0.00	20	1393.48	20	1515.56	20	-232.57	20
203	-1396	-1397	Max	50.30									1866.00	20		
203	-1396	-1397	Max	88.00	0.00	20	0.00	20	0.00	20	-1044.56	20	1669.08	20	-232.57	20
203	-1396	-1397	Min.	0.00	0.00	20	0.00	20	0.00	20	1393.48	20	1515.56	20	-232.57	20
203	-1396	-1397	Min.	50.30									1866.00	20		
203	-1396	-1397	Min.	88.00	0.00	20	0.00	20	0.00	20	-1044.56	20	1669.08	20	-232.57	20
203	-1397	-1398	Max	0.00	0.00	20	0.00	20	0.00	20	-382.56	20	1332.64	20	498.90	20
203	-1397	-1398	Max	88.00	0.00	20	0.00	20	0.00	20	-2820.60	20	-76.75	20	498.90	20
203	-1397	-1398	Min.	0.00	0.00	20	0.00	20	0.00	20	-382.56	20	1332.64	20	498.90	20
203	-1397	-1398	Min.	88.00	0.00	20	0.00	20	0.00	20	-2820.60	20	-76.75	20	498.90	20
203	-1398	214	Max	0.00	0.00	20	0.00	20	0.00	20	-3965.15	20	-649.16	20	2164.13	20
203	-1398	214	Max	53.00	0.00	20	0.00	20	0.00	20	-5433.52	20	-3139.81	20	2164.13	20
203	-1398	214	Min.	0.00	0.00	20	0.00	20	0.00	20	-3965.15	20	-649.16	20	2164.13	20
203	-1398	214	Min.	53.00	0.00	20	0.00	20	0.00	20	-5433.52	20	-3139.81	20	2164.13	20
203	214	-1399	Max	35.00	0.00	20	0.00	20	0.00	20	7230.08	20	-5424.03	20	-4086.32	20
203	214	-1399	Max	97.80	0.00	20	0.00	20	0.00	20	5444.96	20	-1444.06	20	-4086.32	20
203	214	-1399	Min.	35.00	0.00	20	0.00	20	0.00	20	7230.08	20	-5424.03	20	-4086.32	20
203	214	-1399	Min.	97.80	0.00	20	0.00	20	0.00	20	5444.96	20	-1444.06	20	-4086.32	20
203	-1399	-1400	Max	0.00	0.00	20	0.00	20	0.00	20	3144.14	20	-110.46	20	-2117.90	20
203	-1399	-1400	Max	97.80	0.00	20	0.00	20	0.00	20	364.14	20	1605.08	20	-2117.90	20
203	-1399	-1400	Min.	0.00	0.00	20	0.00	20	0.00	20	3144.14	20	-110.46	20	-2117.90	20
203	-1399	-1400	Min.	97.80	0.00	20	0.00	20	0.00	20	364.14	20	1605.08	20	-2117.90	20
203	-1400	-1401	Max	0.00	0.00	20	0.00	20	0.00	20	1332.29	20	2639.19	20	-1299.87	20
203	-1400	-1401	Max	46.29									2951.36	20		
203	-1400	-1401	Max	97.80	0.00	20	0.00	20	0.00	20	-1447.72	20	2582.75	20	-1299.87	20
203	-1400	-1401	Min.	0.00	0.00	20	0.00	20	0.00	20	1332.29	20	2639.19	20	-1299.87	20
203	-1400	-1401	Min.	46.29									2951.36	20		
203	-1400	-1401	Min.	97.80	0.00	20	0.00	20	0.00	20	-1447.72	20	2582.75	20	-1299.87	20
203	-1401	-1402	Max	0.00	0.00	20	0.00	20	0.00	20	-507.51	20	2159.47	20	-604.76	20
203	-1401	-1402	Max	97.80	0.00	20	0.00	20	0.00	20	-3287.51	20	303.70	20	-604.76	20
203	-1401	-1402	Min.	0.00	0.00	20	0.00	20	0.00	20	-507.51	20	2159.47	20	-604.76	20
203	-1401	-1402	Min.	97.80	0.00	20	0.00	20	0.00	20	-3287.51	20	303.70	20	-604.76	20
203	-1402	21	Max	0.00	0.00	20	0.00	20	0.00	20	-4140.03	20	-1085.97	20	672.19	20
203	-1402	21	Max	80.30	0.00	20	0.00	20	0.00	20	-6422.59	20	-5326.86	20	672.19	20
203	-1402	21	Min.	0.00	0.00	20	0.00	20	0.00	20	-4140.03	20	-1085.97	20	672.19	20
203	-1402	21	Min.	80.30	0.00	20	0.00	20	0.00	20	-6422.59	20	-5326.86	20	672.19	20
203	21	-1403	Max	12.50	0.00	20	0.00	20	0.00	20	5866.09	20	-6099.01	20	-925.17	20
203	21	-1403	Max	92.75	0.00	20	0.00	20	0.00	20	4818.83	20	-1811.68	20	-925.17	20
203	21	-1403	Min.	12.50	0.00	20	0.00	20	0.00	20	5866.09	20	-6099.01	20	-925.17	20
203	21	-1403	Min.	92.75	0.00	20	0.00	20	0.00	20	4818.83	20	-1811.68	20	-925.17	20
203	-1403	-1404	Max	0.00	0.00	20	0.00	20	0.00	20	3310.07	20	-559.84	20	613.91	20
203	-1403	-1404	Max	92.75	0.00	20	0.00	20	0.00	20	2099.68	20	1948.93	20	613.91	20
203	-1403	-1404	Min.	0.00	0.00	20	0.00	20	0.00	20	3310.07	20	-559.84	20	613.91	20
203	-1403	-1404	Min.	92.75	0.00	20	0.00	20	0.00	20	2099.68	20	1948.93	20	613.91	20
203	-1404	-1405	Max	0.00	0.00	20	0.00	20	0.00	20	1780.83	20	2576.44	20	1703.67	20
203	-1404	-1405	Max	92.75	0.00	20	0.00	20	0.00	20	570.44	20	3666.84	20	1703.67	20
203	-1404	-1405	Min.	0.00	0.00	20	0.00	20	0.00	20	1780.83	20	2576.44	20	1703.67	20
203	-1404	-1405	Min.	92.75	0.00	20	0.00	20	0.00	20	570.44	20	3666.84	20	1703.67	20
203	-1405	-1406	Max	0.00	0.00	20	0.00	20	0.00	20	469.67	20	3498.84	20	2843.60	20
203	-1405	-1406	Max	35.99									3583.36	20		
203	-1405	-1406	Max	92.75	0.00	20	0.00	20	0.00	20	-740.72	20	3373.15	20	2843.60	20
203	-1405	-1406	Min.	0.00	0.00	20	0.00	20	0.00	20	469.67	20	3498.84	20	2843.60	20
203	-1405	-1406	Min.	35.99									3583.36	20		
203	-1405	-1406	Min.	92.75	0.00	20	0.00	20	0.00	20	-740.72	20	3373.15	20	2843.60	20
203	-1406	-1407	Max	0.00	0.00	20	0.00	20	0.00	20	-2156.84	20	2372.87	20	2935.52	20
203	-1406	-1407	Max	68.50	0.00	20	0.00	20	0.00	20	-3050.77	20	589.27	20	2935.52	20
203	-1406	-1407	Min.	0.00	0.00	20	0.00	20	0.00	20	-2156.84	20	2372.87	20	2935.52	20
203	-1406	-1407	Min.	68.50	0.00	20	0.00	20	0.00	20	-3050.77	20	589.27	20	2935.52	20
203	-1407	216	Max	0.00	0.00	20	0.00	20	0.00	20	-8491.42	20	-1115.41	20	1592.08	20
203	-1407	216	Max	56.00	0.00	20	0.00	20	0.00	20	-9222.22	20	-6075.24	20	1592.08	20
203	-1407	216	Min.	0.00	0.00	20	0.00	20	0.00	20	-8491.42	20	-1115.41	20	1592.08	20
203	-1407	216	Min.	56.00	0.00	20	0.00	20	0.00	20	-9222.22	20	-6075.24	20	1592.08	20
203	216	-1408	Max	17.50	0.00	20	0.00	20	0.00	20	6251.95	20	-4985.14	20	-1978.31	20
203	216	-1408	Max	92.60	0.00	20	0.00	20	0.00	20	4144.49	20	-1081.28	20	-1978.31	20
203	216	-1408	Min.	17.50	0.00	20	0.00	20	0.00	20	6251.95	20	-4985.14	20	-1978.31	20
203	216	-1408	Min.	92.60	0.00	20	0.00	20	0.00	20	4144.49	20	-1081.28	20	-1978.31	20
203	-1408	-1409	Max	0.00	0.00	20	0.00	20	0.00	20	3259.09	20	-143.56	20	-406.64	20
203	-1408	-1409	Max	92.60	0.00	20	0.00	20	0.00	20	660.53	20	1671.22	20	-406.64	20
203	-1408	-1409	Min.	0.00	0.00	20	0.00	20	0.00	20	3259.09	20	-143.56	20	-406.64	20
203	-1408	-1409	Min.	92.60	0.00	20	0.00	20	0.00	20	660.53	20	1671.22	20	-406.64	20
203	-1409	-1410	Max	0.00	0.00	20	0.00	20	0.00	20	1279.46	20	2040.55	20	351.96	20
203	-1409	-1410	Max	44.92									2332.17	20		
203	-1409	-1410	Max	92.60	0.00	20	0.00	20	0.00	20	-1319.09	20	2022.20	20	351.96	20
203	-1409	-1410	Min.	0.00	0.00	20	0.00	20	0.00	20	1279.46	20	2040.55	20	351.96	20





203	-1409	-1410	Min.	44.92								2332.17	20			
203	-1409	-1410	Min.	92.60	0.00	20	0.00	20	0.00	20	-1319.09	20	2022.20	20	351.96	20
203	-1410	-1411	Max	0.00	0.00	20	0.00	20	0.00	20	-732.94	20	1401.44	20	1164.61	20
203	-1410	-1411	Max	92.60	0.00	20	0.00	20	0.00	20	-3331.49	20	-480.39	20	1164.61	20
203	-1410	-1411	Min.	0.00	0.00	20	0.00	20	0.00	20	-732.94	20	1401.44	20	1164.61	20
203	-1410	-1411	Min.	92.60	0.00	20	0.00	20	0.00	20	-3331.49	20	-480.39	20	1164.61	20
203	-1411	217	Max	0.00	0.00	20	0.00	20	0.00	20	-5387.65	20	-1318.55	20	2935.35	20
203	-1411	217	Max	57.60	0.00	20	0.00	20	0.00	20	-7004.02	20	-4887.36	20	2935.35	20
203	-1411	217	Min.	0.00	0.00	20	0.00	20	0.00	20	-5387.65	20	-1318.55	20	2935.35	20
203	-1411	217	Min.	57.60	0.00	20	0.00	20	0.00	20	-7004.02	20	-4887.36	20	2935.35	20
203	217	-1412	Max	35.00	0.00	20	0.00	20	0.00	20	5309.08	20	-2418.19	20	-2337.95	20
203	217	-1412	Max	82.20	0.00	20	0.00	20	0.00	20	4025.34	20	-215.26	20	-2337.95	20
203	217	-1412	Min.	35.00	0.00	20	0.00	20	0.00	20	5309.08	20	-2418.19	20	-2337.95	20
203	217	-1412	Min.	82.20	0.00	20	0.00	20	0.00	20	4025.34	20	-215.26	20	-2337.95	20
203	-1412	-1413	Max	0.00	0.00	20	0.00	20	0.00	20	2891.77	20	370.43	20	-757.60	20
203	-1412	-1413	Max	82.20	0.00	20	0.00	20	0.00	20	656.11	20	1828.61	20	-757.60	20
203	-1412	-1413	Min.	0.00	0.00	20	0.00	20	0.00	20	2891.77	20	370.43	20	-757.60	20
203	-1412	-1413	Min.	82.20	0.00	20	0.00	20	0.00	20	656.11	20	1828.61	20	-757.60	20
203	-1413	-1414	Max	0.00	0.00	20	0.00	20	0.00	20	1203.65	20	2158.55	20	47.49	20
203	-1413	-1414	Max	44.26								2424.89	20			
203	-1413	-1414	Max	82.20	0.00	20	0.00	20	0.00	20	-1032.01	20	2229.09	20	47.49	20
203	-1413	-1414	Min.	0.00	0.00	20	0.00	20	0.00	20	1203.65	20	2158.55	20	47.49	20
203	-1413	-1414	Min.	44.26								2424.89	20			
203	-1413	-1414	Min.	82.20	0.00	20	0.00	20	0.00	20	-1032.01	20	2229.09	20	47.49	20
203	-1414	-1415	Max	0.00	0.00	20	0.00	20	0.00	20	-579.17	20	1833.30	20	902.08	20
203	-1414	-1415	Max	82.20	0.00	20	0.00	20	0.00	20	-2814.82	20	438.38	20	902.08	20
203	-1414	-1415	Min.	0.00	0.00	20	0.00	20	0.00	20	-579.17	20	1833.30	20	902.08	20
203	-1414	-1415	Min.	82.20	0.00	20	0.00	20	0.00	20	-2814.82	20	438.38	20	902.08	20
203	-1415	218	Max	0.00	0.00	20	0.00	20	0.00	20	-4024.88	20	-879.23	20	2995.65	20
203	-1415	218	Max	67.20	0.00	20	0.00	20	0.00	20	-5852.57	20	-4198.05	20	2995.65	20
203	-1415	218	Min.	0.00	0.00	20	0.00	20	0.00	20	-4024.88	20	-879.23	20	2995.65	20
203	-1415	218	Min.	67.20	0.00	20	0.00	20	0.00	20	-5852.57	20	-4198.05	20	2995.65	20
204	201	-1303	Max	0.00	0.00	20	0.00	20	0.00	20	4886.20	20	-5888.73	20	-3259.73	20
204	201	-1303	Max	84.00	0.00	20	0.00	20	0.00	20	3388.48	20	-2413.36	20	-3259.73	20
204	201	-1303	Min.	0.00	0.00	20	0.00	20	0.00	20	4886.20	20	-5888.73	20	-3259.73	20
204	201	-1303	Min.	84.00	0.00	20	0.00	20	0.00	20	3388.48	20	-2413.36	20	-3259.73	20
204	-1303	-1306	Max	0.00	0.00	20	0.00	20	0.00	20	2544.92	20	-527.51	20	-1081.21	20
204	-1303	-1306	Max	84.00	0.00	20	0.00	20	0.00	20	1047.20	20	981.18	20	-1081.21	20
204	-1303	-1306	Min.	0.00	0.00	20	0.00	20	0.00	20	2544.92	20	-527.51	20	-1081.21	20
204	-1303	-1306	Min.	84.00	0.00	20	0.00	20	0.00	20	1047.20	20	981.18	20	-1081.21	20
204	-1306	-1309	Max	0.00	0.00	20	0.00	20	0.00	20	1477.32	20	1739.20	20	-85.11	20
204	-1306	-1309	Max	82.32								2351.20	20			
204	-1306	-1309	Max	84.00	0.00	20	0.00	20	0.00	20	-20.40	20	2351.11	20	-85.11	20
204	-1306	-1309	Min.	0.00	0.00	20	0.00	20	0.00	20	1477.32	20	1739.20	20	-85.11	20
204	-1306	-1309	Min.	82.32								2351.20	20			
204	-1306	-1309	Min.	84.00	0.00	20	0.00	20	0.00	20	-20.40	20	2351.11	20	-85.11	20
204	-1309	-1314	Max	0.00	0.00	20	0.00	20	0.00	20	45.03	20	2329.66	20	678.47	20
204	-1309	-1314	Max	1.68								2330.16	20			
204	-1309	-1314	Max	84.00	0.00	20	0.00	20	0.00	20	-1452.69	20	1738.44	20	678.47	20
204	-1309	-1314	Min.	0.00	0.00	20	0.00	20	0.00	20	45.03	20	2329.66	20	678.47	20
204	-1309	-1314	Min.	1.68								2330.16	20			
204	-1309	-1314	Min.	84.00	0.00	20	0.00	20	0.00	20	-1452.69	20	1738.44	20	678.47	20
204	-1314	-1318	Max	0.00	0.00	20	0.00	20	0.00	20	-1270.02	20	1069.01	20	1758.86	20
204	-1314	-1318	Max	84.00	0.00	20	0.00	20	0.00	20	-2767.74	20	-626.85	20	1758.86	20
204	-1314	-1318	Min.	0.00	0.00	20	0.00	20	0.00	20	-1270.02	20	1069.01	20	1758.86	20
204	-1314	-1318	Min.	84.00	0.00	20	0.00	20	0.00	20	-2767.74	20	-626.85	20	1758.86	20
204	-1318	207	Max	0.00	0.00	20	0.00	20	0.00	20	-5988.62	20	-1172.61	20	4173.50	20
204	-1318	207	Max	24.00	0.00	20	0.00	20	0.00	20	-6416.54	20	-2661.23	20	4173.50	20
204	-1318	207	Min.	0.00	0.00	20	0.00	20	0.00	20	-5988.62	20	-1172.61	20	4173.50	20
204	-1318	207	Min.	24.00	0.00	20	0.00	20	0.00	20	-6416.54	20	-2661.23	20	4173.50	20
204	207	-1337	Max	60.00	0.00	20	0.00	20	0.00	20	8334.58	20	-5027.67	20	-3877.80	20
204	207	-1337	Max	95.33	0.00	20	0.00	20	0.00	20	7704.58	20	-2194.08	20	-3877.80	20
204	207	-1337	Min.	60.00	0.00	20	0.00	20	0.00	20	8334.58	20	-5027.67	20	-3877.80	20
204	207	-1337	Min.	95.33	0.00	20	0.00	20	0.00	20	7704.58	20	-2194.08	20	-3877.80	20
204	-1337	-1354	Max	0.00	0.00	20	0.00	20	0.00	20	3328.85	20	-1695.10	20	-1371.61	20
204	-1337	-1354	Max	95.33	0.00	20	0.00	20	0.00	20	1629.06	20	668.17	20	-1371.61	20
204	-1337	-1354	Min.	0.00	0.00	20	0.00	20	0.00	20	3328.85	20	-1695.10	20	-1371.61	20
204	-1337	-1354	Min.	95.33	0.00	20	0.00	20	0.00	20	1629.06	20	668.17	20	-1371.61	20
204	-1354	-1367	Max	0.00	0.00	20	0.00	20	0.00	20	1781.93	20	1610.28	20	-318.25	20
204	-1354	-1367	Max	95.33	0.00	20	0.00	20	0.00	20	82.13	20	2498.82	20	-318.25	20
204	-1354	-1367	Min.	0.00	0.00	20	0.00	20	0.00	20	1781.93	20	1610.28	20	-318.25	20
204	-1354	-1367	Min.	95.33	0.00	20	0.00	20	0.00	20	82.13	20	2498.82	20	-318.25	20
204	-1367	-1378	Max	0.00	0.00	20	0.00	20	0.00	20	329.14	20	2565.71	20	351.87	20
204	-1367	-1378	Max	18.46								2596.08	20			
204	-1367	-1378	Max	95.33	0.00	20	0.00	20	0.00	20	-1370.66	20	2069.25	20	351.87	20
204	-1367	-1378	Min.	0.00	0.00	20	0.00	20	0.00	20	329.14	20	2565.71	20	351.87	20





209	211	217	Max	557.00	0.00	20	0.00	20	0.00	20	-4586.09	20	-4464.54	20	27.42	20
209	211	217	Min.	15.00	0.00	20	0.00	20	0.00	20	4335.23	20	-3784.70	20	27.42	20
209	211	217	Min.	278.03									1924.34	20		
209	211	217	Min.	557.00	0.00	20	0.00	20	0.00	20	-4586.09	20	-4464.54	20	27.42	20
210	206	212	Max	105.00	0.00	20	0.00	20	0.00	20	3980.80	20	-3093.54	20	-12.99	20
210	206	212	Max	327.88									1350.30	20		
210	206	212	Max	444.00	0.00	20	0.00	20	0.00	20	-2063.57	20	156.17	20	-12.99	20
210	206	212	Min.	105.00	0.00	20	0.00	20	0.00	20	3980.80	20	-3093.54	20	-12.99	20
210	206	212	Min.	327.88									1350.30	20		
210	206	212	Min.	444.00	0.00	20	0.00	20	0.00	20	-2063.57	20	156.17	20	-12.99	20
210	212	218	Max	60.00	0.00	20	0.00	20	0.00	20	4048.83	20	-3161.32	20	-54.73	20
210	212	218	Max	287.08									1435.72	20		
210	212	218	Max	467.00	0.00	20	0.00	20	0.00	20	-3207.98	20	-1450.18	20	-54.73	20
210	212	218	Min.	60.00	0.00	20	0.00	20	0.00	20	4048.83	20	-3161.32	20	-54.73	20
210	212	218	Min.	287.08									1435.72	20		
210	212	218	Min.	467.00	0.00	20	0.00	20	0.00	20	-3207.98	20	-1450.18	20	-54.73	20
301	301	302	Max	15.00	0.00	20	0.00	20	0.00	20	5509.72	20	-4170.66	20	-159.42	20
301	301	302	Max	227.95									1695.74	20		
301	301	302	Max	405.00	0.00	20	0.00	20	0.00	20	-4581.00	20	-2359.65	20	-159.42	20
301	301	302	Min.	15.00	0.00	20	0.00	20	0.00	20	5509.72	20	-4170.66	20	-159.42	20
301	301	302	Min.	227.95									1695.74	20		
301	301	302	Min.	405.00	0.00	20	0.00	20	0.00	20	-4581.00	20	-2359.65	20	-159.42	20
301	302	303	Max	35.00	0.00	20	0.00	20	0.00	20	5745.87	20	-4213.04	20	-128.88	20
301	302	303	Max	251.76									2014.24	20		
301	302	303	Max	431.00	0.00	20	0.00	20	0.00	20	-4751.45	20	-2244.09	20	-128.88	20
301	302	303	Min.	35.00	0.00	20	0.00	20	0.00	20	5745.87	20	-4213.04	20	-128.88	20
301	302	303	Min.	251.76									2014.24	20		
301	302	303	Min.	431.00	0.00	20	0.00	20	0.00	20	-4751.45	20	-2244.09	20	-128.88	20
301	303	304	Max	12.00	0.00	20	0.00	20	0.00	20	4534.98	20	-4033.84	20	-24.77	20
301	303	304	Max	266.35									1733.42	20		
301	303	304	Max	496.00	0.00	20	0.00	20	0.00	20	-4094.74	20	-2968.46	20	-24.77	20
301	303	304	Min.	12.00	0.00	20	0.00	20	0.00	20	4534.98	20	-4033.84	20	-24.77	20
301	303	304	Min.	266.35									1733.42	20		
301	303	304	Min.	496.00	0.00	20	0.00	20	0.00	20	-4094.74	20	-2968.46	20	-24.77	20
301	304	305	Max	58.00	0.00	20	0.00	20	0.00	20	4481.45	20	-2078.52	20	191.02	20
301	304	305	Max	228.54									1755.86	20		
301	304	305	Max	428.00	0.00	20	0.00	20	0.00	20	-5208.22	20	-3423.05	20	191.02	20
301	304	305	Min.	58.00	0.00	20	0.00	20	0.00	20	4481.45	20	-2078.52	20	191.02	20
301	304	305	Min.	228.54									1755.86	20		
301	304	305	Min.	428.00	0.00	20	0.00	20	0.00	20	-5208.22	20	-3423.05	20	191.02	20
301	305	306	Max	35.00	0.00	20	0.00	20	0.00	20	4249.69	20	-1912.99	20	182.72	20
301	305	306	Max	201.57									1638.33	20		
301	305	306	Max	396.00	0.00	20	0.00	20	0.00	20	-4929.34	20	-3139.76	20	182.72	20
301	305	306	Min.	35.00	0.00	20	0.00	20	0.00	20	4249.69	20	-1912.99	20	182.72	20
301	305	306	Min.	201.57									1638.33	20		
301	305	306	Min.	396.00	0.00	20	0.00	20	0.00	20	-4929.34	20	-3139.76	20	182.72	20
302	307	308	Max	15.00	0.00	20	0.00	20	0.00	20	10939.60	20	-8848.75	20	-11.86	20
302	307	308	Max	233.23									3088.03	20		
302	307	308	Max	405.00	0.00	20	0.00	20	0.00	20	-8610.57	20	-4307.13	20	-11.86	20
302	307	308	Min.	15.00	0.00	20	0.00	20	0.00	20	10939.60	20	-8848.75	20	-11.86	20
302	307	308	Min.	233.23									3088.03	20		
302	307	308	Min.	405.00	0.00	20	0.00	20	0.00	20	-8610.57	20	-4307.13	20	-11.86	20
302	308	309	Max	35.00	0.00	20	0.00	20	0.00	20	10762.30	20	-9122.83	20	202.31	20
302	308	309	Max	277.21									3910.81	20		
302	308	309	Max	432.00	0.00	20	0.00	20	0.00	20	-6877.92	20	-1412.38	20	202.31	20
302	308	309	Min.	35.00	0.00	20	0.00	20	0.00	20	10762.30	20	-9122.83	20	202.31	20
302	308	309	Min.	277.21									3910.81	20		
302	308	309	Min.	432.00	0.00	20	0.00	20	0.00	20	-6877.92	20	-1412.38	20	202.31	20
302	309	-1534	Max	13.00	0.00	20	0.00	20	0.00	20	4237.67	20	-3159.53	20	573.44	20
302	309	-1534	Max	84.67	0.00	20	0.00	20	0.00	20	2830.86	20	-626.64	20	573.44	20
302	309	-1534	Min.	13.00	0.00	20	0.00	20	0.00	20	4237.67	20	-3159.53	20	573.44	20
302	309	-1534	Min.	84.67	0.00	20	0.00	20	0.00	20	2830.86	20	-626.64	20	573.44	20
302	-1534	-1535	Max	0.00	0.00	20	0.00	20	0.00	20	2563.41	20	-442.87	20	702.12	20
302	-1534	-1535	Max	84.67	0.00	20	0.00	20	0.00	20	901.40	20	1023.90	20	702.12	20
302	-1534	-1535	Min.	0.00	0.00	20	0.00	20	0.00	20	2563.41	20	-442.87	20	702.12	20
302	-1534	-1535	Min.	84.67	0.00	20	0.00	20	0.00	20	901.40	20	1023.90	20	702.12	20
302	-1535	-1536	Max	0.00	0.00	20	0.00	20	0.00	20	1293.56	20	1045.34	20	401.25	20
302	-1535	-1536	Max	65.90									1471.54	20		
302	-1535	-1536	Max	84.67	0.00	20	0.00	20	0.00	20	-368.45	20	1436.97	20	401.25	20
302	-1535	-1536	Min.	0.00	0.00	20	0.00	20	0.00	20	1293.56	20	1045.34	20	401.25	20
302	-1535	-1536	Min.	65.90									1471.54	20		
302	-1535	-1536	Min.	84.67	0.00	20	0.00	20	0.00	20	-368.45	20	1436.97	20	401.25	20
302	-1536	-1537	Max	0.00	0.00	20	0.00	20	0.00	20	172.91	20	1394.83	20	-102.20	20
302	-1536	-1537	Max	8.81									1402.45	20		
302	-1536	-1537	Max	84.67	0.00	20	0.00	20	0.00	20	-1489.10	20	837.64	20	-102.20	20
302	-1536	-1537	Min.	0.00	0.00	20	0.00	20	0.00	20	172.91	20	1394.83	20	-102.20	20





303	-1616	-1617	Min.	0.00	0.00	20	0.00	20	0.00	20	2031.31	20	2392.03	20	1582.49	20
303	-1616	-1617	Min.	92.75	0.00	20	0.00	20	0.00	20	820.92	20	3714.75	20	1582.49	20
303	-1617	-1618	Max	0.00	0.00	20	0.00	20	0.00	20	623.31	20	3677.33	20	2821.06	20
303	-1617	-1618	Max	47.76									3826.18	20		
303	-1617	-1618	Max	92.75	0.00	20	0.00	20	0.00	20	-587.08	20	3694.13	20	2821.06	20
303	-1617	-1618	Min.	0.00	0.00	20	0.00	20	0.00	20	623.31	20	3677.33	20	2821.06	20
303	-1617	-1618	Min.	47.76									3826.18	20		
303	-1617	-1618	Min.	92.75	0.00	20	0.00	20	0.00	20	-587.08	20	3694.13	20	2821.06	20
303	-1618	-1619	Max	0.00	0.00	20	0.00	20	0.00	20	-2286.02	20	2735.80	20	3111.96	20
303	-1618	-1619	Max	68.50	0.00	20	0.00	20	0.00	20	-3179.95	20	863.71	20	3111.96	20
303	-1618	-1619	Min.	0.00	0.00	20	0.00	20	0.00	20	-2286.02	20	2735.80	20	3111.96	20
303	-1618	-1619	Min.	68.50	0.00	20	0.00	20	0.00	20	-3179.95	20	863.71	20	3111.96	20
303	-1619	316	Max	0.00	0.00	20	0.00	20	0.00	20	-9282.35	20	-966.04	20	1735.47	20
303	-1619	316	Max	56.00	0.00	20	0.00	20	0.00	20	-10013.10	20	-6368.79	20	1735.47	20
303	-1619	316	Min.	0.00	0.00	20	0.00	20	0.00	20	-9282.35	20	-966.04	20	1735.47	20
303	-1619	316	Min.	56.00	0.00	20	0.00	20	0.00	20	-10013.10	20	-6368.79	20	1735.47	20
303	316	-1620	Max	17.50	0.00	20	0.00	20	0.00	20	6542.49	20	-5383.38	20	-1967.62	20
303	316	-1620	Max	92.60	0.00	20	0.00	20	0.00	20	4435.02	20	-1261.33	20	-1967.62	20
303	316	-1620	Min.	17.50	0.00	20	0.00	20	0.00	20	6542.49	20	-5383.38	20	-1967.62	20
303	316	-1620	Min.	92.60	0.00	20	0.00	20	0.00	20	4435.02	20	-1261.33	20	-1967.62	20
303	-1620	-1621	Max	0.00	0.00	20	0.00	20	0.00	20	3420.17	20	-331.37	20	-259.12	20
303	-1620	-1621	Max	92.60	0.00	20	0.00	20	0.00	20	821.62	20	1632.58	20	-259.12	20
303	-1620	-1621	Min.	0.00	0.00	20	0.00	20	0.00	20	3420.17	20	-331.37	20	-259.12	20
303	-1620	-1621	Min.	92.60	0.00	20	0.00	20	0.00	20	821.62	20	1632.58	20	-259.12	20
303	-1621	-1622	Max	0.00	0.00	20	0.00	20	0.00	20	1447.85	20	2009.39	20	543.54	20
303	-1621	-1622	Max	51.59									2382.89	20		
303	-1621	-1622	Max	92.60	0.00	20	0.00	20	0.00	20	-1150.70	20	2146.97	20	543.54	20
303	-1621	-1622	Min.	0.00	0.00	20	0.00	20	0.00	20	1447.85	20	2009.39	20	543.54	20
303	-1621	-1622	Min.	51.59									2382.89	20		
303	-1621	-1622	Min.	92.60	0.00	20	0.00	20	0.00	20	-1150.70	20	2146.97	20	543.54	20
303	-1622	-1623	Max	0.00	0.00	20	0.00	20	0.00	20	-553.31	20	1537.17	20	1375.69	20
303	-1622	-1623	Max	92.60	0.00	20	0.00	20	0.00	20	-3151.86	20	-178.31	20	1375.69	20
303	-1622	-1623	Min.	0.00	0.00	20	0.00	20	0.00	20	-553.31	20	1537.17	20	1375.69	20
303	-1622	-1623	Min.	92.60	0.00	20	0.00	20	0.00	20	-3151.86	20	-178.31	20	1375.69	20
303	-1623	317	Max	0.00	0.00	20	0.00	20	0.00	20	-5005.80	20	-1057.18	20	3174.83	20
303	-1623	317	Max	57.60	0.00	20	0.00	20	0.00	20	-6622.18	20	-4406.04	20	3174.83	20
303	-1623	317	Min.	0.00	0.00	20	0.00	20	0.00	20	-5005.80	20	-1057.18	20	3174.83	20
303	-1623	317	Min.	57.60	0.00	20	0.00	20	0.00	20	-6622.18	20	-4406.04	20	3174.83	20
303	317	-1624	Max	35.00	0.00	20	0.00	20	0.00	20	5087.07	20	-2162.43	20	-2375.96	20
303	317	-1624	Max	82.20	0.00	20	0.00	20	0.00	20	3803.34	20	-64.29	20	-2375.96	20
303	317	-1624	Min.	35.00	0.00	20	0.00	20	0.00	20	5087.07	20	-2162.43	20	-2375.96	20
303	317	-1624	Min.	82.20	0.00	20	0.00	20	0.00	20	3803.34	20	-64.29	20	-2375.96	20
303	-1624	-1625	Max	0.00	0.00	20	0.00	20	0.00	20	2786.59	20	512.09	20	-791.55	20
303	-1624	-1625	Max	82.20	0.00	20	0.00	20	0.00	20	550.94	20	1883.82	20	-791.55	20
303	-1624	-1625	Min.	0.00	0.00	20	0.00	20	0.00	20	2786.59	20	512.09	20	-791.55	20
303	-1624	-1625	Min.	82.20	0.00	20	0.00	20	0.00	20	550.94	20	1883.82	20	-791.55	20
303	-1625	-1626	Max	0.00	0.00	20	0.00	20	0.00	20	1087.72	20	2189.34	20	-10.62	20
303	-1625	-1626	Max	39.45									2406.80	20		
303	-1625	-1626	Max	82.20	0.00	20	0.00	20	0.00	20	-1147.93	20	2164.59	20	-10.62	20
303	-1625	-1626	Min.	0.00	0.00	20	0.00	20	0.00	20	1087.72	20	2189.34	20	-10.62	20
303	-1625	-1626	Min.	39.45									2406.80	20		
303	-1625	-1626	Min.	82.20	0.00	20	0.00	20	0.00	20	-1147.93	20	2164.59	20	-10.62	20
303	-1626	-1627	Max	0.00	0.00	20	0.00	20	0.00	20	-689.92	20	1749.74	20	778.19	20
303	-1626	-1627	Max	82.20	0.00	20	0.00	20	0.00	20	-2925.57	20	263.78	20	778.19	20
303	-1626	-1627	Min.	0.00	0.00	20	0.00	20	0.00	20	-689.92	20	1749.74	20	778.19	20
303	-1626	-1627	Min.	82.20	0.00	20	0.00	20	0.00	20	-2925.57	20	263.78	20	778.19	20
303	-1627	318	Max	0.00	0.00	20	0.00	20	0.00	20	-4101.82	20	-1033.04	20	2673.70	20
303	-1627	318	Max	67.20	0.00	20	0.00	20	0.00	20	-5929.51	20	-4403.58	20	2673.70	20
303	-1627	318	Min.	0.00	0.00	20	0.00	20	0.00	20	-4101.82	20	-1033.04	20	2673.70	20
303	-1627	318	Min.	67.20	0.00	20	0.00	20	0.00	20	-5929.51	20	-4403.58	20	2673.70	20
304	301	-1515	Max	0.00	0.00	20	0.00	20	0.00	20	4529.88	20	-4891.68	20	-3231.48	20
304	301	-1515	Max	84.00	0.00	20	0.00	20	0.00	20	3032.16	20	-1715.62	20	-3231.48	20
304	301	-1515	Min.	0.00	0.00	20	0.00	20	0.00	20	4529.88	20	-4891.68	20	-3231.48	20
304	301	-1515	Min.	84.00	0.00	20	0.00	20	0.00	20	3032.16	20	-1715.62	20	-3231.48	20
304	-1515	-1518	Max	0.00	0.00	20	0.00	20	0.00	20	2281.77	20	-4.29	20	-1096.60	20
304	-1515	-1518	Max	84.00	0.00	20	0.00	20	0.00	20	784.05	20	1283.35	20	-1096.60	20
304	-1515	-1518	Min.	0.00	0.00	20	0.00	20	0.00	20	2281.77	20	-4.29	20	-1096.60	20
304	-1515	-1518	Min.	84.00	0.00	20	0.00	20	0.00	20	784.05	20	1283.35	20	-1096.60	20
304	-1518	-1521	Max	0.00	0.00	20	0.00	20	0.00	20	1189.37	20	1925.23	20	-114.91	20
304	-1518	-1521	Max	66.45									2321.92	20		
304	-1518	-1521	Max	84.00	0.00	20	0.00	20	0.00	20	-308.35	20	2295.26	20	-114.91	20
304	-1518	-1521	Min.	0.00	0.00	20	0.00	20	0.00	20	1189.37	20	1925.23	20	-114.91	20
304	-1518	-1521	Min.	66.45									2321.92	20		
304	-1518	-1521	Min.	84.00	0.00	20	0.00	20	0.00	20	-308.35	20	2295.26	20	-114.91	20
304	-1521	-1526	Max	0.00	0.00	20	0.00	20	0.00	20	-256.50	20	2183.65	20	659.50	20
304	-1521	-1526	Max	84.00	0.00	20	0.00	20	0.00	20	-1754.22	20	1339.15	20	659.50	20



304	-1521	-1526	Min.	0.00	0.00	20	0.00	20	0.00	20	-256.50	20	2183.65	20	659.50	20
304	-1521	-1526	Min.	84.00	0.00	20	0.00	20	0.00	20	-1754.22	20	1339.15	20	659.50	20
304	-1526	-1530	Max	0.00	0.00	20	0.00	20	0.00	20	-1583.75	20	580.59	20	1794.81	20
304	-1526	-1530	Max	84.00	0.00	20	0.00	20	0.00	20	-3081.47	20	-1378.81	20	1794.81	20
304	-1526	-1530	Min.	0.00	0.00	20	0.00	20	0.00	20	-1583.75	20	580.59	20	1794.81	20
304	-1526	-1530	Min.	84.00	0.00	20	0.00	20	0.00	20	-3081.47	20	-1378.81	20	1794.81	20
304	-1530	307	Max	0.00	0.00	20	0.00	20	0.00	20	-6897.58	20	-1886.93	20	4352.10	20
304	-1530	307	Max	24.00	0.00	20	0.00	20	0.00	20	-7325.50	20	-3593.70	20	4352.10	20
304	-1530	307	Min.	0.00	0.00	20	0.00	20	0.00	20	-6897.58	20	-1886.93	20	4352.10	20
304	-1530	307	Min.	24.00	0.00	20	0.00	20	0.00	20	-7325.50	20	-3593.70	20	4352.10	20
304	307	-1549	Max	60.00	0.00	20	0.00	20	0.00	20	7555.41	20	-4067.17	20	-4019.78	20
304	307	-1549	Max	95.33	0.00	20	0.00	20	0.00	20	6925.41	20	-1508.90	20	-4019.78	20
304	307	-1549	Min.	60.00	0.00	20	0.00	20	0.00	20	7555.41	20	-4067.17	20	-4019.78	20
304	307	-1549	Min.	95.33	0.00	20	0.00	20	0.00	20	6925.41	20	-1508.90	20	-4019.78	20
304	-1549	-1566	Max	0.00	0.00	20	0.00	20	0.00	20	3082.48	20	-914.99	20	-1464.94	20
304	-1549	-1566	Max	95.33	0.00	20	0.00	20	0.00	20	1382.69	20	1213.41	20	-1464.94	20
304	-1549	-1566	Min.	0.00	0.00	20	0.00	20	0.00	20	3082.48	20	-914.99	20	-1464.94	20
304	-1549	-1566	Min.	95.33	0.00	20	0.00	20	0.00	20	1382.69	20	1213.41	20	-1464.94	20
304	-1566	-1579	Max	0.00	0.00	20	0.00	20	0.00	20	1535.30	20	2059.16	20	-371.29	20
304	-1566	-1579	Max	86.11								2720.17	20			
304	-1566	-1579	Max	95.33	0.00	20	0.00	20	0.00	20	-164.49	20	2712.58	20	-371.29	20
304	-1566	-1579	Min.	0.00	0.00	20	0.00	20	0.00	20	1535.30	20	2059.16	20	-371.29	20
304	-1566	-1579	Min.	86.11								2720.17	20			
304	-1566	-1579	Min.	95.33	0.00	20	0.00	20	0.00	20	-164.49	20	2712.58	20	-371.29	20
304	-1579	-1590	Max	0.00	0.00	20	0.00	20	0.00	20	69.42	20	2668.31	20	336.48	20
304	-1579	-1590	Max	3.38								2669.63	20			
304	-1579	-1590	Max	95.33	0.00	20	0.00	20	0.00	20	-1630.37	20	1924.26	20	336.48	20
304	-1579	-1590	Min.	0.00	0.00	20	0.00	20	0.00	20	69.42	20	2668.31	20	336.48	20
304	-1579	-1590	Min.	3.38								2669.63	20			
304	-1579	-1590	Min.	95.33	0.00	20	0.00	20	0.00	20	-1630.37	20	1924.26	20	336.48	20
304	-1590	-1601	Max	0.00	0.00	20	0.00	20	0.00	20	-1329.99	20	1013.65	20	1089.34	20
304	-1590	-1601	Max	95.33	0.00	20	0.00	20	0.00	20	-3029.79	20	-1064.51	20	1089.34	20
304	-1590	-1601	Min.	0.00	0.00	20	0.00	20	0.00	20	-1329.99	20	1013.65	20	1089.34	20
304	-1590	-1601	Min.	95.33	0.00	20	0.00	20	0.00	20	-3029.79	20	-1064.51	20	1089.34	20
304	-1601	313	Max	0.00	0.00	20	0.00	20	0.00	20	-2306.07	20	-2573.15	20	2533.99	20
304	-1601	313	Max	95.33	0.00	20	0.00	20	0.00	20	-4005.86	20	-5581.83	20	2533.99	20
304	-1601	313	Min.	0.00	0.00	20	0.00	20	0.00	20	-2306.07	20	-2573.15	20	2533.99	20
304	-1601	313	Min.	95.33	0.00	20	0.00	20	0.00	20	-4005.86	20	-5581.83	20	2533.99	20
305	302	308	Max	15.00	0.00	20	0.00	20	0.00	20	3887.72	20	-2910.29	20	36.19	20
305	302	308	Max	250.62								1680.92	20			
305	302	308	Max	489.00	0.00	20	0.00	20	0.00	20	-3914.32	20	-2973.34	20	36.19	20
305	302	308	Min.	15.00	0.00	20	0.00	20	0.00	20	3887.72	20	-2910.29	20	36.19	20
305	302	308	Min.	250.62								1680.92	20			
305	302	308	Min.	489.00	0.00	20	0.00	20	0.00	20	-3914.32	20	-2973.34	20	36.19	20
305	308	314	Max	15.00	0.00	20	0.00	20	0.00	20	4190.54	20	-3364.28	20	-4.01	20
305	308	314	Max	268.77								1969.98	20			
305	308	314	Max	557.00	0.00	20	0.00	20	0.00	20	-4730.79	20	-4828.36	20	-4.01	20
305	308	314	Min.	15.00	0.00	20	0.00	20	0.00	20	4190.54	20	-3364.28	20	-4.01	20
305	308	314	Min.	268.77								1969.98	20			
305	308	314	Min.	557.00	0.00	20	0.00	20	0.00	20	-4730.79	20	-4828.36	20	-4.01	20
307	303	309	Max	15.00	0.00	20	0.00	20	0.00	20	7867.40	20	-6109.38	20	-13.00	20
307	303	309	Max	257.28								3421.26	20			
307	303	309	Max	489.00	0.00	20	0.00	20	0.00	20	-7524.38	20	-5296.42	20	-13.00	20
307	303	309	Min.	15.00	0.00	20	0.00	20	0.00	20	7867.40	20	-6109.38	20	-13.00	20
307	303	309	Min.	257.28								3421.26	20			
307	303	309	Min.	489.00	0.00	20	0.00	20	0.00	20	-7524.38	20	-5296.42	20	-13.00	20
307	309	-1546	Max	15.00	0.00	20	0.00	20	0.00	20	4194.17	20	-2808.37	20	-383.80	20
307	309	-1546	Max	82.00	0.00	20	0.00	20	0.00	20	2929.21	20	-422.04	20	-383.80	20
307	309	-1546	Min.	15.00	0.00	20	0.00	20	0.00	20	4194.17	20	-2808.37	20	-383.80	20
307	309	-1546	Min.	82.00	0.00	20	0.00	20	0.00	20	2929.21	20	-422.04	20	-383.80	20
307	-1546	-1560	Max	0.00	0.00	20	0.00	20	0.00	20	3004.43	20	242.59	20	18.74	20
307	-1546	-1560	Max	82.00	0.00	20	0.00	20	0.00	20	1456.27	20	2071.47	20	18.74	20
307	-1546	-1560	Min.	0.00	0.00	20	0.00	20	0.00	20	3004.43	20	242.59	20	18.74	20
307	-1546	-1560	Min.	82.00	0.00	20	0.00	20	0.00	20	1456.27	20	2071.47	20	18.74	20
307	-1560	-2024	Max	0.00	0.00	20	0.00	20	0.00	20	1101.42	20	2464.03	20	142.21	20
307	-1560	-2024	Max	58.41								2785.30	20			
307	-1560	-2024	Max	223.00	0.00	20	0.00	20	0.00	20	-3108.82	20	225.77	20	142.21	20
307	-1560	-2024	Min.	0.00	0.00	20	0.00	20	0.00	20	1101.42	20	2464.03	20	142.21	20
307	-1560	-2024	Min.	58.41								2785.30	20			
307	-1560	-2024	Min.	223.00	0.00	20	0.00	20	0.00	20	-3108.82	20	225.77	20	142.21	20
308	304	310	Max	15.00	0.00	20	0.00	20	0.00	20	8434.23	20	-6386.86	20	-0.67	20
308	304	310	Max	255.83								3769.04	20			
308	304	310	Max	489.00	0.00	20	0.00	20	0.00	20	-8166.25	20	-5751.76	20	-0.67	20
308	304	310	Min.	15.00	0.00	20	0.00	20	0.00	20	8434.23	20	-6386.86	20	-0.67	20
308	304	310	Min.	255.83								3769.04	20			
308	304	310	Min.	489.00	0.00	20	0.00	20	0.00	20	-8166.25	20	-5751.76	20	-0.67	20





308	310	-1550	Max	15.00	0.00	20	0.00	20	0.00	20	2217.40	20	-1451.00	20	251.06	20
308	310	-1550	Max	95.33	0.00	20	0.00	20	0.00	20	700.71	20	-278.90	20	251.06	20
308	310	-1550	Min.	15.00	0.00	20	0.00	20	0.00	20	2217.40	20	-1451.00	20	251.06	20
308	310	-1550	Min.	95.33	0.00	20	0.00	20	0.00	20	700.71	20	-278.90	20	251.06	20
308	-1550	-1567	Max	0.00	0.00	20	0.00	20	0.00	20	1022.02	20	-141.74	20	188.91	20
308	-1550	-1567	Max	54.13									134.88	20		
308	-1550	-1567	Max	95.33	0.00	20	0.00	20	0.00	20	-777.88	20	-25.37	20	188.91	20
308	-1550	-1567	Min.	0.00	0.00	20	0.00	20	0.00	20	1022.02	20	-141.74	20	188.91	20
308	-1550	-1567	Min.	54.13									134.88	20		
308	-1550	-1567	Min.	95.33	0.00	20	0.00	20	0.00	20	-777.88	20	-25.37	20	188.91	20
308	-1567	-1580	Max	0.00	0.00	20	0.00	20	0.00	20	78.86	20	-152.29	20	-146.33	20
308	-1567	-1580	Max	3.52									-150.68	20		
308	-1567	-1580	Max	95.33	0.00	20	0.00	20	0.00	20	-1721.04	20	-935.06	20	-146.33	20
308	-1567	-1580	Min.	0.00	0.00	20	0.00	20	0.00	20	78.86	20	-152.29	20	-146.33	20
308	-1567	-1580	Min.	3.52									-150.68	20		
308	-1567	-1580	Min.	95.33	0.00	20	0.00	20	0.00	20	-1721.04	20	-935.06	20	-146.33	20
308	-1580	-2027	Max	0.00	0.00	20	0.00	20	0.00	20	-1414.06	20	-1469.26	20	-217.88	20
308	-1580	-2027	Max	101.00	0.00	20	0.00	20	0.00	20	-3320.94	20	-3860.43	20	-217.88	20
308	-1580	-2027	Min.	0.00	0.00	20	0.00	20	0.00	20	-1414.06	20	-1469.26	20	-217.88	20
308	-1580	-2027	Min.	101.00	0.00	20	0.00	20	0.00	20	-3320.94	20	-3860.43	20	-217.88	20
309	305	311	Max	15.00	0.00	20	0.00	20	0.00	20	3886.22	20	-2908.54	20	-24.93	20
309	305	311	Max	250.52									1679.14	20		
309	305	311	Max	489.00	0.00	20	0.00	20	0.00	20	-3915.82	20	-2978.67	20	-24.93	20
309	305	311	Min.	15.00	0.00	20	0.00	20	0.00	20	3886.22	20	-2908.54	20	-24.93	20
309	305	311	Min.	250.52									1679.14	20		
309	305	311	Min.	489.00	0.00	20	0.00	20	0.00	20	-3915.82	20	-2978.67	20	-24.93	20
309	311	317	Max	15.00	0.00	20	0.00	20	0.00	20	4297.61	20	-3617.79	20	26.63	20
309	311	317	Max	275.81									1992.61	20		
309	311	317	Max	557.00	0.00	20	0.00	20	0.00	20	-4623.71	20	-4501.52	20	26.63	20
309	311	317	Min.	15.00	0.00	20	0.00	20	0.00	20	4297.61	20	-3617.79	20	26.63	20
309	311	317	Min.	275.81									1992.61	20		
309	311	317	Min.	557.00	0.00	20	0.00	20	0.00	20	-4623.71	20	-4501.52	20	26.63	20
310	306	312	Max	105.00	0.00	20	0.00	20	0.00	20	3245.89	20	-1903.08	20	-51.53	20
310	306	312	Max	287.05									1051.43	20		
310	306	312	Max	444.00	0.00	20	0.00	20	0.00	20	-2798.48	20	-1144.73	20	-51.53	20
310	306	312	Min.	105.00	0.00	20	0.00	20	0.00	20	3245.89	20	-1903.08	20	-51.53	20
310	306	312	Min.	287.05									1051.43	20		
310	306	312	Min.	444.00	0.00	20	0.00	20	0.00	20	-2798.48	20	-1144.73	20	-51.53	20
310	312	318	Max	60.00	0.00	20	0.00	20	0.00	20	3481.80	20	-1961.64	20	-26.88	20
310	312	318	Max	254.71									1437.93	20		
310	312	318	Max	467.00	0.00	20	0.00	20	0.00	20	-3775.01	20	-2558.31	20	-26.88	20
310	312	318	Min.	60.00	0.00	20	0.00	20	0.00	20	3481.80	20	-1961.64	20	-26.88	20
310	312	318	Min.	254.71									1437.93	20		
310	312	318	Min.	467.00	0.00	20	0.00	20	0.00	20	-3775.01	20	-2558.31	20	-26.88	20
401	401	402	Max	12.50	0.00	20	0.00	20	0.00	20	5209.80	20	-4056.11	20	-131.56	20
401	401	402	Max	231.29									1643.17	20		
401	401	402	Max	405.00	0.00	20	0.00	20	0.00	20	-4136.33	20	-1949.42	20	-131.56	20
401	401	402	Min.	12.50	0.00	20	0.00	20	0.00	20	5209.80	20	-4056.11	20	-131.56	20
401	401	402	Min.	231.29									1643.17	20		
401	401	402	Min.	405.00	0.00	20	0.00	20	0.00	20	-4136.33	20	-1949.42	20	-131.56	20
401	402	403	Max	35.00	0.00	20	0.00	20	0.00	20	5791.35	20	-4329.08	20	-165.23	20
401	402	403	Max	253.47									1997.19	20		
401	402	403	Max	431.00	0.00	20	0.00	20	0.00	20	-4705.96	20	-2179.99	20	-165.23	20
401	402	403	Min.	35.00	0.00	20	0.00	20	0.00	20	5791.35	20	-4329.08	20	-165.23	20
401	402	403	Min.	253.47									1997.19	20		
401	402	403	Min.	431.00	0.00	20	0.00	20	0.00	20	-4705.96	20	-2179.99	20	-165.23	20
401	403	404	Max	12.00	0.00	20	0.00	20	0.00	20	4513.86	20	-3968.48	20	-13.76	20
401	403	404	Max	265.16									1745.19	20		
401	403	404	Max	496.00	0.00	20	0.00	20	0.00	20	-4115.86	20	-3005.31	20	-13.76	20
401	403	404	Min.	12.00	0.00	20	0.00	20	0.00	20	4513.86	20	-3968.48	20	-13.76	20
401	403	404	Min.	265.16									1745.19	20		
401	403	404	Min.	496.00	0.00	20	0.00	20	0.00	20	-4115.86	20	-3005.31	20	-13.76	20
401	404	405	Max	58.00	0.00	20	0.00	20	0.00	20	4423.27	20	-1982.07	20	202.39	20
401	404	405	Max	226.53									1753.41	20		
401	404	405	Max	428.00	0.00	20	0.00	20	0.00	20	-5266.40	20	-3541.87	20	202.39	20
401	404	405	Min.	58.00	0.00	20	0.00	20	0.00	20	4423.27	20	-1982.07	20	202.39	20
401	404	405	Min.	226.53									1753.41	20		
401	404	405	Min.	428.00	0.00	20	0.00	20	0.00	20	-5266.40	20	-3541.87	20	202.39	20
401	405	406	Max	35.00	0.00	20	0.00	20	0.00	20	4077.00	20	-1578.30	20	162.97	20
401	405	406	Max	194.71									1690.24	20		
401	405	406	Max	396.00	0.00	20	0.00	20	0.00	20	-5102.04	20	-3428.50	20	162.97	20
401	405	406	Min.	35.00	0.00	20	0.00	20	0.00	20	4077.00	20	-1578.30	20	162.97	20
401	405	406	Min.	194.71									1690.24	20		
401	405	406	Min.	396.00	0.00	20	0.00	20	0.00	20	-5102.04	20	-3428.50	20	162.97	20
402	407	408	Max	12.50	0.00	20	0.00	20	0.00	20	7245.06	20	-7261.13	20	21.19	20
402	407	408	Max	261.09									1765.07	20		



402	407	408	Max	405.00	0.00	20	0.00	20	0.00	20	-4167.59	20	-1221.60	20	21.19	20
402	407	408	Min.	12.50	0.00	20	0.00	20	0.00	20	7245.06	20	-7261.13	20	21.19	20
402	407	408	Min.	261.09									1765.07	20		
402	407	408	Min.	405.00	0.00	20	0.00	20	0.00	20	-4167.59	20	-1221.60	20	21.19	20
402	408	409	Max	35.00	0.00	20	0.00	20	0.00	20	8587.27	20	-7464.34	20	194.32	20
402	408	409	Max	273.58									3109.43	20		
402	408	409	Max	432.00	0.00	20	0.00	20	0.00	20	-5241.72	20	-823.41	20	194.32	20
402	408	409	Min.	35.00	0.00	20	0.00	20	0.00	20	8587.27	20	-7464.34	20	194.32	20
402	408	409	Min.	273.58									3109.43	20		
402	408	409	Min.	432.00	0.00	20	0.00	20	0.00	20	-5241.72	20	-823.41	20	194.32	20
402	409	-1746	Max	13.00	0.00	20	0.00	20	0.00	20	3855.72	20	-2395.29	20	837.32	20
402	409	-1746	Max	84.67	0.00	20	0.00	20	0.00	20	2448.91	20	-136.13	20	837.32	20
402	409	-1746	Min.	13.00	0.00	20	0.00	20	0.00	20	3855.72	20	-2395.29	20	837.32	20
402	409	-1746	Min.	84.67	0.00	20	0.00	20	0.00	20	2448.91	20	-136.13	20	837.32	20
402	-1746	-1747	Max	0.00	0.00	20	0.00	20	0.00	20	2286.89	20	-72.14	20	880.75	20
402	-1746	-1747	Max	84.67	0.00	20	0.00	20	0.00	20	624.88	20	1160.51	20	880.75	20
402	-1746	-1747	Min.	0.00	0.00	20	0.00	20	0.00	20	2286.89	20	-72.14	20	880.75	20
402	-1746	-1747	Min.	84.67	0.00	20	0.00	20	0.00	20	624.88	20	1160.51	20	880.75	20
402	-1747	-1748	Max	0.00	0.00	20	0.00	20	0.00	20	1128.20	20	1100.34	20	477.82	20
402	-1747	-1748	Max	57.18									1424.53	20		
402	-1747	-1748	Max	84.67	0.00	20	0.00	20	0.00	20	-533.81	20	1351.96	20	477.82	20
402	-1747	-1748	Min.	0.00	0.00	20	0.00	20	0.00	20	1128.20	20	1100.34	20	477.82	20
402	-1747	-1748	Min.	57.18									1424.53	20		
402	-1747	-1748	Min.	84.67	0.00	20	0.00	20	0.00	20	-533.81	20	1351.96	20	477.82	20
402	-1748	-1749	Max	0.00	0.00	20	0.00	20	0.00	20	135.24	20	1294.31	20	-170.23	20
402	-1748	-1749	Max	6.23									1298.92	20		
402	-1748	-1749	Max	84.67	0.00	20	0.00	20	0.00	20	-1526.76	20	705.23	20	-170.23	20
402	-1748	-1749	Min.	0.00	0.00	20	0.00	20	0.00	20	135.24	20	1294.31	20	-170.23	20
402	-1748	-1749	Min.	6.23									1298.92	20		
402	-1748	-1749	Min.	84.67	0.00	20	0.00	20	0.00	20	-1526.76	20	705.23	20	-170.23	20
402	-1749	-1750	Max	0.00	0.00	20	0.00	20	0.00	20	-743.09	20	540.61	20	-602.95	20
402	-1749	-1750	Max	84.67	0.00	20	0.00	20	0.00	20	-2405.10	20	-792.12	20	-602.95	20
402	-1749	-1750	Min.	0.00	0.00	20	0.00	20	0.00	20	-743.09	20	540.61	20	-602.95	20
402	-1749	-1750	Min.	84.67	0.00	20	0.00	20	0.00	20	-2405.10	20	-792.12	20	-602.95	20
402	-1750	410	Max	0.00	0.00	20	0.00	20	0.00	20	-2748.74	20	-1167.78	20	-599.26	20
402	-1750	410	Max	71.67	0.00	20	0.00	20	0.00	20	-4155.56	20	-3641.82	20	-599.26	20
402	-1750	410	Min.	0.00	0.00	20	0.00	20	0.00	20	-2748.74	20	-1167.78	20	-599.26	20
402	-1750	410	Min.	71.67	0.00	20	0.00	20	0.00	20	-4155.56	20	-3641.82	20	-599.26	20
402	410	411	Max	57.00	0.00	20	0.00	20	0.00	20	5300.27	20	-1574.70	20	-363.08	20
402	410	411	Max	212.00									2538.41	20		
402	410	411	Max	428.00	0.00	20	0.00	20	0.00	20	-7369.53	20	-5413.17	20	-363.08	20
402	410	411	Min.	57.00	0.00	20	0.00	20	0.00	20	5300.27	20	-1574.70	20	-363.08	20
402	410	411	Min.	212.00									2538.41	20		
402	410	411	Min.	428.00	0.00	20	0.00	20	0.00	20	-7369.53	20	-5413.17	20	-363.08	20
402	411	412	Max	35.00	0.00	20	0.00	20	0.00	20	4378.42	20	-355.76	20	0.20	20
402	411	412	Max	169.62									2591.34	20		
402	411	412	Max	396.00	0.00	20	0.00	20	0.00	20	-7362.90	20	-5742.75	20	0.20	20
402	411	412	Min.	35.00	0.00	20	0.00	20	0.00	20	4378.42	20	-355.76	20	0.20	20
402	411	412	Min.	169.62									2591.34	20		
402	411	412	Min.	396.00	0.00	20	0.00	20	0.00	20	-7362.90	20	-5742.75	20	0.20	20
403	413	-1819	Max	12.50	0.00	20	0.00	20	0.00	20	4562.36	20	-4429.16	20	-2055.63	20
403	413	-1819	Max	88.00	0.00	20	0.00	20	0.00	20	2647.30	20	-1707.51	20	-2055.63	20
403	413	-1819	Min.	12.50	0.00	20	0.00	20	0.00	20	4562.36	20	-4429.16	20	-2055.63	20
403	413	-1819	Min.	88.00	0.00	20	0.00	20	0.00	20	2647.30	20	-1707.51	20	-2055.63	20
403	-1819	-1820	Max	0.00	0.00	20	0.00	20	0.00	20	3276.21	20	-900.68	20	-911.00	20
403	-1819	-1820	Max	88.00	0.00	20	0.00	20	0.00	20	1044.09	20	1000.25	20	-911.00	20
403	-1819	-1820	Min.	0.00	0.00	20	0.00	20	0.00	20	3276.21	20	-900.68	20	-911.00	20
403	-1819	-1820	Min.	88.00	0.00	20	0.00	20	0.00	20	1044.09	20	1000.25	20	-911.00	20
403	-1820	-1821	Max	0.00	0.00	20	0.00	20	0.00	20	1428.87	20	1568.62	20	-249.66	20
403	-1820	-1821	Max	55.90									1971.06	20		
403	-1820	-1821	Max	88.00	0.00	20	0.00	20	0.00	20	-803.25	20	1843.90	20	-249.66	20
403	-1820	-1821	Min.	0.00	0.00	20	0.00	20	0.00	20	1428.87	20	1568.62	20	-249.66	20
403	-1820	-1821	Min.	55.90									1971.06	20		
403	-1820	-1821	Min.	88.00	0.00	20	0.00	20	0.00	20	-803.25	20	1843.90	20	-249.66	20
403	-1821	-1822	Max	0.00	0.00	20	0.00	20	0.00	20	-269.04	20	1592.17	20	415.81	20
403	-1821	-1822	Max	88.00	0.00	20	0.00	20	0.00	20	-2501.16	20	373.29	20	415.81	20
403	-1821	-1822	Min.	0.00	0.00	20	0.00	20	0.00	20	-269.04	20	1592.17	20	415.81	20
403	-1821	-1822	Min.	88.00	0.00	20	0.00	20	0.00	20	-2501.16	20	373.29	20	415.81	20
403	-1822	414	Max	0.00	0.00	20	0.00	20	0.00	20	-3338.54	20	-200.72	20	1962.99	20
403	-1822	414	Max	53.00	0.00	20	0.00	20	0.00	20	-4682.89	20	-2326.40	20	1962.99	20
403	-1822	414	Min.	0.00	0.00	20	0.00	20	0.00	20	-3338.54	20	-200.72	20	1962.99	20
403	-1822	414	Min.	53.00	0.00	20	0.00	20	0.00	20	-4682.89	20	-2326.40	20	1962.99	20
403	414	-1823	Max	35.00	0.00	20	0.00	20	0.00	20	7359.10	20	-5472.33	20	-3779.82	20
403	414	-1823	Max	97.80	0.00	20	0.00	20	0.00	20	5573.99	20	-1411.34	20	-3779.82	20
403	414	-1823	Min.	35.00	0.00	20	0.00	20	0.00	20	7359.10	20	-5472.33	20	-3779.82	20
403	414	-1823	Min.	97.80	0.00	20	0.00	20	0.00	20	5573.99	20	-1411.34	20	-3779.82	20



403	-1823	-1824	Max	0.00	0.00	20	0.00	20	0.00	20	3201.75	20	-92.27	20	-1883.32	20
403	-1823	-1824	Max	97.80	0.00	20	0.00	20	0.00	20	421.75	20	1679.62	20	-1883.32	20
403	-1823	-1824	Min.	0.00	0.00	20	0.00	20	0.00	20	3201.75	20	-92.27	20	-1883.32	20
403	-1823	-1824	Min.	97.80	0.00	20	0.00	20	0.00	20	421.75	20	1679.62	20	-1883.32	20
403	-1824	-1825	Max	0.00	0.00	20	0.00	20	0.00	20	1372.74	20	2688.20	20	-1101.22	20
403	-1824	-1825	Max	47.68									3019.61	20		
403	-1824	-1825	Max	97.80	0.00	20	0.00	20	0.00	20	-1407.26	20	2671.32	20	-1101.22	20
403	-1824	-1825	Min.	0.00	0.00	20	0.00	20	0.00	20	1372.74	20	2688.20	20	-1101.22	20
403	-1824	-1825	Min.	47.68									3019.61	20		
403	-1824	-1825	Min.	97.80	0.00	20	0.00	20	0.00	20	-1407.26	20	2671.32	20	-1101.22	20
403	-1825	-1826	Max	0.00	0.00	20	0.00	20	0.00	20	-475.81	20	2219.96	20	-466.96	20
403	-1825	-1826	Max	97.80	0.00	20	0.00	20	0.00	20	-3255.81	20	395.20	20	-466.96	20
403	-1825	-1826	Min.	0.00	0.00	20	0.00	20	0.00	20	-475.81	20	2219.96	20	-466.96	20
403	-1825	-1826	Min.	97.80	0.00	20	0.00	20	0.00	20	-3255.81	20	395.20	20	-466.96	20
403	-1826	415	Max	0.00	0.00	20	0.00	20	0.00	20	-4044.26	20	-1021.05	20	639.82	20
403	-1826	415	Max	80.30	0.00	20	0.00	20	0.00	20	-6326.81	20	-5185.03	20	639.82	20
403	-1826	415	Min.	0.00	0.00	20	0.00	20	0.00	20	-4044.26	20	-1021.05	20	639.82	20
403	-1826	415	Min.	80.30	0.00	20	0.00	20	0.00	20	-6326.81	20	-5185.03	20	639.82	20
403	415	-1827	Max	12.50	0.00	20	0.00	20	0.00	20	5385.30	20	-6080.14	20	-641.79	20
403	415	-1827	Max	92.75	0.00	20	0.00	20	0.00	20	4338.03	20	-2178.65	20	-641.79	20
403	415	-1827	Min.	12.50	0.00	20	0.00	20	0.00	20	5385.30	20	-6080.14	20	-641.79	20
403	415	-1827	Min.	92.75	0.00	20	0.00	20	0.00	20	4338.03	20	-2178.65	20	-641.79	20
403	-1827	-1828	Max	0.00	0.00	20	0.00	20	0.00	20	3206.34	20	-1051.98	20	556.36	20
403	-1827	-1828	Max	92.75	0.00	20	0.00	20	0.00	20	1995.95	20	1360.59	20	556.36	20
403	-1827	-1828	Min.	0.00	0.00	20	0.00	20	0.00	20	3206.34	20	-1051.98	20	556.36	20
403	-1827	-1828	Min.	92.75	0.00	20	0.00	20	0.00	20	1995.95	20	1360.59	20	556.36	20
403	-1828	-1829	Max	0.00	0.00	20	0.00	20	0.00	20	1819.60	20	2021.56	20	1431.27	20
403	-1828	-1829	Max	92.75	0.00	20	0.00	20	0.00	20	609.21	20	3147.92	20	1431.27	20
403	-1828	-1829	Min.	0.00	0.00	20	0.00	20	0.00	20	1819.60	20	2021.56	20	1431.27	20
403	-1828	-1829	Min.	92.75	0.00	20	0.00	20	0.00	20	609.21	20	3147.92	20	1431.27	20
403	-1829	-1830	Max	0.00	0.00	20	0.00	20	0.00	20	526.44	20	3074.98	20	2445.15	20
403	-1829	-1830	Max	39.76									3181.14	20		
403	-1829	-1830	Max	92.75	0.00	20	0.00	20	0.00	20	-683.95	20	3001.94	20	2445.15	20
403	-1829	-1830	Min.	0.00	0.00	20	0.00	20	0.00	20	526.44	20	3074.98	20	2445.15	20
403	-1829	-1830	Min.	39.76									3181.14	20		
403	-1829	-1830	Min.	92.75	0.00	20	0.00	20	0.00	20	-683.95	20	3001.94	20	2445.15	20
403	-1830	-1831	Max	0.00	0.00	20	0.00	20	0.00	20	-1964.99	20	2118.94	20	2584.60	20
403	-1830	-1831	Max	68.50	0.00	20	0.00	20	0.00	20	-2858.91	20	466.76	20	2584.60	20
403	-1830	-1831	Min.	0.00	0.00	20	0.00	20	0.00	20	-1964.99	20	2118.94	20	2584.60	20
403	-1830	-1831	Min.	68.50	0.00	20	0.00	20	0.00	20	-2858.91	20	466.76	20	2584.60	20
403	-1831	416	Max	0.00	0.00	20	0.00	20	0.00	20	-8002.48	20	-1098.47	20	1456.11	20
403	-1831	416	Max	56.00	0.00	20	0.00	20	0.00	20	-8733.28	20	-5784.49	20	1456.11	20
403	-1831	416	Min.	0.00	0.00	20	0.00	20	0.00	20	-8002.48	20	-1098.47	20	1456.11	20
403	-1831	416	Min.	56.00	0.00	20	0.00	20	0.00	20	-8733.28	20	-5784.49	20	1456.11	20
403	416	-1832	Max	17.50	0.00	20	0.00	20	0.00	20	6436.96	20	-5199.13	20	-1995.57	20
403	416	-1832	Max	92.60	0.00	20	0.00	20	0.00	20	4329.49	20	-1156.33	20	-1995.57	20
403	416	-1832	Min.	17.50	0.00	20	0.00	20	0.00	20	6436.96	20	-5199.13	20	-1995.57	20
403	416	-1832	Min.	92.60	0.00	20	0.00	20	0.00	20	4329.49	20	-1156.33	20	-1995.57	20
403	-1832	-1833	Max	0.00	0.00	20	0.00	20	0.00	20	3357.62	20	-168.34	20	-444.63	20
403	-1832	-1833	Max	92.60	0.00	20	0.00	20	0.00	20	759.07	20	1737.69	20	-444.63	20
403	-1832	-1833	Min.	0.00	0.00	20	0.00	20	0.00	20	3357.62	20	-168.34	20	-444.63	20
403	-1832	-1833	Min.	92.60	0.00	20	0.00	20	0.00	20	759.07	20	1737.69	20	-444.63	20
403	-1833	-1834	Max	0.00	0.00	20	0.00	20	0.00	20	1369.32	20	2163.19	20	300.74	20
403	-1833	-1834	Max	48.80									2497.27	20		
403	-1833	-1834	Max	92.60	0.00	20	0.00	20	0.00	20	-1229.24	20	2228.05	20	300.74	20
403	-1833	-1834	Min.	0.00	0.00	20	0.00	20	0.00	20	1369.32	20	2163.19	20	300.74	20
403	-1833	-1834	Min.	48.80									2497.27	20		
403	-1833	-1834	Min.	92.60	0.00	20	0.00	20	0.00	20	-1229.24	20	2228.05	20	300.74	20
403	-1834	-1835	Max	0.00	0.00	20	0.00	20	0.00	20	-652.25	20	1660.61	20	1090.41	20
403	-1834	-1835	Max	92.60	0.00	20	0.00	20	0.00	20	-3250.80	20	-146.50	20	1090.41	20
403	-1834	-1835	Min.	0.00	0.00	20	0.00	20	0.00	20	-652.25	20	1660.61	20	1090.41	20
403	-1834	-1835	Min.	92.60	0.00	20	0.00	20	0.00	20	-3250.80	20	-146.50	20	1090.41	20
403	-1835	417	Max	0.00	0.00	20	0.00	20	0.00	20	-5151.62	20	-994.32	20	2790.98	20
403	-1835	417	Max	57.60	0.00	20	0.00	20	0.00	20	-6768.00	20	-4427.17	20	2790.98	20
403	-1835	417	Min.	0.00	0.00	20	0.00	20	0.00	20	-5151.62	20	-994.32	20	2790.98	20
403	-1835	417	Min.	57.60	0.00	20	0.00	20	0.00	20	-6768.00	20	-4427.17	20	2790.98	20
403	417	-1836	Max	35.00	0.00	20	0.00	20	0.00	20	4935.83	20	-1888.52	20	-2108.91	20
403	417	-1836	Max	82.20	0.00	20	0.00	20	0.00	20	3652.09	20	138.23	20	-2108.91	20
403	417	-1836	Min.	35.00	0.00	20	0.00	20	0.00	20	4935.83	20	-1888.52	20	-2108.91	20
403	417	-1836	Min.	82.20	0.00	20	0.00	20	0.00	20	3652.09	20	138.23	20	-2108.91	20
403	-1836	-1837	Max	0.00	0.00	20	0.00	20	0.00	20	2731.66	20	698.42	20	-632.29	20
403	-1836	-1837	Max	82.20	0.00	20	0.00	20	0.00	20	496.00	20	2024.99	20	-632.29	20
403	-1836	-1837	Min.	0.00	0.00	20	0.00	20	0.00	20	2731.66	20	698.42	20	-632.29	20
403	-1836	-1837	Min.	82.20	0.00	20	0.00	20	0.00	20	496.00	20	2024.99	20	-632.29	20
403	-1837	-1838	Max	0.00	0.00	20	0.00	20	0.00	20	1012.25	20	2279.43	20	107.56	20
403	-1837	-1838	Max	35.87									2467.56	20		



403	-1837	-1838	Max	82.20	0.00	20	0.00	20	0.00	20	-1223.40	20	2192.65	20	107.56	20
403	-1837	-1838	Min.	0.00	0.00	20	0.00	20	0.00	20	1012.25	20	2279.43	20	107.56	20
403	-1837	-1838	Min.	35.87									2467.56			
403	-1837	-1838	Min.	82.20	0.00	20	0.00	20	0.00	20	-1223.40	20	2192.65	20	107.56	20
403	-1838	-1839	Max	0.00	0.00	20	0.00	20	0.00	20	-805.87	20	1717.18	20	868.71	20
403	-1838	-1839	Max	82.20	0.00	20	0.00	20	0.00	20	-3041.52	20	135.91	20	868.71	20
403	-1838	-1839	Min.	0.00	0.00	20	0.00	20	0.00	20	-805.87	20	1717.18	20	868.71	20
403	-1838	-1839	Min.	82.20	0.00	20	0.00	20	0.00	20	-3041.52	20	135.91	20	868.71	20
403	-1839	418	Max	0.00	0.00	20	0.00	20	0.00	20	-4199.36	20	-1206.51	20	2635.86	20
403	-1839	418	Max	67.20	0.00	20	0.00	20	0.00	20	-6027.05	20	-4642.58	20	2635.86	20
403	-1839	418	Min.	0.00	0.00	20	0.00	20	0.00	20	-4199.36	20	-1206.51	20	2635.86	20
403	-1839	418	Min.	67.20	0.00	20	0.00	20	0.00	20	-6027.05	20	-4642.58	20	2635.86	20
404	401	-1727	Max	0.00	0.00	20	0.00	20	0.00	20	4439.60	20	-4967.88	20	-2844.64	20
404	401	-1727	Max	84.00	0.00	20	0.00	20	0.00	20	3012.44	20	-1838.02	20	-2844.64	20
404	401	-1727	Min.	0.00	0.00	20	0.00	20	0.00	20	4439.60	20	-4967.88	20	-2844.64	20
404	401	-1727	Min.	84.00	0.00	20	0.00	20	0.00	20	3012.44	20	-1838.02	20	-2844.64	20
404	-1727	-1730	Max	0.00	0.00	20	0.00	20	0.00	20	2349.86	20	-109.47	20	-1057.54	20
404	-1727	-1730	Max	84.00	0.00	20	0.00	20	0.00	20	922.70	20	1265.01	20	-1057.54	20
404	-1727	-1730	Min.	0.00	0.00	20	0.00	20	0.00	20	2349.86	20	-109.47	20	-1057.54	20
404	-1727	-1730	Min.	84.00	0.00	20	0.00	20	0.00	20	922.70	20	1265.01	20	-1057.54	20
404	-1730	-1733	Max	0.00	0.00	20	0.00	20	0.00	20	1278.43	20	1967.11	20	-219.98	20
404	-1730	-1733	Max	74.73									2448.07	20		
404	-1730	-1733	Max	84.00	0.00	20	0.00	20	0.00	20	-148.73	20	2441.59	20	-219.98	20
404	-1730	-1733	Min.	0.00	0.00	20	0.00	20	0.00	20	1278.43	20	1967.11	20	-219.98	20
404	-1730	-1733	Min.	74.73									2448.07	20		
404	-1730	-1733	Min.	84.00	0.00	20	0.00	20	0.00	20	-148.73	20	2441.59	20	-219.98	20
404	-1733	-1738	Max	0.00	0.00	20	0.00	20	0.00	20	-134.03	20	2410.16	20	407.45	20
404	-1733	-1738	Max	84.00	0.00	20	0.00	20	0.00	20	-1561.18	20	1698.17	20	407.45	20
404	-1733	-1738	Min.	0.00	0.00	20	0.00	20	0.00	20	-134.03	20	2410.16	20	407.45	20
404	-1733	-1738	Min.	84.00	0.00	20	0.00	20	0.00	20	-1561.18	20	1698.17	20	407.45	20
404	-1738	-1742	Max	0.00	0.00	20	0.00	20	0.00	20	-1416.34	20	1050.35	20	1226.66	20
404	-1738	-1742	Max	84.00	0.00	20	0.00	20	0.00	20	-2843.50	20	-738.78	20	1226.66	20
404	-1738	-1742	Min.	0.00	0.00	20	0.00	20	0.00	20	-1416.34	20	1050.35	20	1226.66	20
404	-1738	-1742	Min.	84.00	0.00	20	0.00	20	0.00	20	-2843.50	20	-738.78	20	1226.66	20
404	-1742	407	Max	0.00	0.00	20	0.00	20	0.00	20	-4608.58	20	-1431.69	20	2948.10	20
404	-1742	407	Max	54.00	0.00	20	0.00	20	0.00	20	-5526.04	20	-4168.03	20	2948.10	20
404	-1742	407	Min.	0.00	0.00	20	0.00	20	0.00	20	-4608.58	20	-1431.69	20	2948.10	20
404	-1742	407	Min.	54.00	0.00	20	0.00	20	0.00	20	-5526.04	20	-4168.03	20	2948.10	20
404	407	-1761	Max	30.00	0.00	20	0.00	20	0.00	20	5535.98	20	-4298.72	20	-2813.51	20
404	407	-1761	Max	95.33	0.00	20	0.00	20	0.00	20	4425.97	20	-1044.49	20	-2813.51	20
404	407	-1761	Min.	30.00	0.00	20	0.00	20	0.00	20	5535.98	20	-4298.72	20	-2813.51	20
404	407	-1761	Min.	95.33	0.00	20	0.00	20	0.00	20	4425.97	20	-1044.49	20	-2813.51	20
404	-1761	-1778	Max	0.00	0.00	20	0.00	20	0.00	20	2783.68	20	-120.42	20	-1064.26	20
404	-1761	-1778	Max	95.33	0.00	20	0.00	20	0.00	20	1163.97	20	1761.30	20	-1064.26	20
404	-1761	-1778	Min.	0.00	0.00	20	0.00	20	0.00	20	2783.68	20	-120.42	20	-1064.26	20
404	-1761	-1778	Min.	95.33	0.00	20	0.00	20	0.00	20	1163.97	20	1761.30	20	-1064.26	20
404	-1778	-1791	Max	0.00	0.00	20	0.00	20	0.00	20	1277.65	20	2464.47	20	-260.31	20
404	-1778	-1791	Max	75.20									2944.87	20		
404	-1778	-1791	Max	95.33	0.00	20	0.00	20	0.00	20	-342.06	20	2910.44	20	-260.31	20
404	-1778	-1791	Min.	0.00	0.00	20	0.00	20	0.00	20	1277.65	20	2464.47	20	-260.31	20
404	-1778	-1791	Min.	75.20									2944.87	20		
404	-1778	-1791	Min.	95.33	0.00	20	0.00	20	0.00	20	-342.06	20	2910.44	20	-260.31	20
404	-1791	-1802	Max	0.00	0.00	20	0.00	20	0.00	20	-126.89	20	2784.35	20	334.56	20
404	-1791	-1802	Max	95.33	0.00	20	0.00	20	0.00	20	-1746.60	20	1891.32	20	334.56	20
404	-1791	-1802	Min.	0.00	0.00	20	0.00	20	0.00	20	-126.89	20	2784.35	20	334.56	20
404	-1791	-1802	Min.	95.33	0.00	20	0.00	20	0.00	20	-1746.60	20	1891.32	20	334.56	20
404	-1802	-1813	Max	0.00	0.00	20	0.00	20	0.00	20	-1538.71	20	918.39	20	1038.30	20
404	-1802	-1813	Max	95.33	0.00	20	0.00	20	0.00	20	-3158.43	20	-1320.58	20	1038.30	20
404	-1802	-1813	Min.	0.00	0.00	20	0.00	20	0.00	20	-1538.71	20	918.39	20	1038.30	20
404	-1802	-1813	Min.	95.33	0.00	20	0.00	20	0.00	20	-3158.43	20	-1320.58	20	1038.30	20
404	-1813	413	Max	0.00	0.00	20	0.00	20	0.00	20	-2695.34	20	-2977.92	20	2399.43	20
404	-1813	413	Max	95.33	0.00	20	0.00	20	0.00	20	-4315.06	20	-6319.55	20	2399.43	20
404	-1813	413	Min.	0.00	0.00	20	0.00	20	0.00	20	-2695.34	20	-2977.92	20	2399.43	20
404	-1813	413	Min.	95.33	0.00	20	0.00	20	0.00	20	-4315.06	20	-6319.55	20	2399.43	20
405	402	408	Max	15.00	0.00	20	0.00	20	0.00	20	3724.61	20	-2839.95	20	51.35	20
405	402	408	Max	253.45									1600.74	20		
405	402	408	Max	489.00	0.00	20	0.00	20	0.00	20	-3679.27	20	-2732.49	20	51.35	20
405	402	408	Min.	15.00	0.00	20	0.00	20	0.00	20	3724.61	20	-2839.95	20	51.35	20
405	402	408	Min.	253.45									1600.74	20		
405	402	408	Min.	489.00	0.00	20	0.00	20	0.00	20	-3679.27	20	-2732.49	20	51.35	20
405	408	414	Max	15.00	0.00	20	0.00	20	0.00	20	3877.37	20	-3012.69	20	-18.92	20
405	408	414	Max	262.64									1799.70	20		
405	408	414	Max	557.00	0.00	20	0.00	20	0.00	20	-4588.67	20	-4940.31	20	-18.92	20
405	408	414	Min.	15.00	0.00	20	0.00	20	0.00	20	3877.37	20	-3012.69	20	-18.92	20
405	408	414	Min.	262.64									1799.70	20		
405	408	414	Min.	557.00	0.00	20	0.00	20	0.00	20	-4588.67	20	-4940.31	20	-18.92	20



407	403	409	Max	15.00	0.00	20	0.00	20	0.00	20	7856.10	20	-6060.94	20	12.22	20
407	403	409	Max	256.93									3442.33	20		
407	403	409	Max	489.00	0.00	20	0.00	20	0.00	20	-7535.68	20	-5301.55	20	12.22	20
407	403	409	Min.	15.00	0.00	20	0.00	20	0.00	20	7856.10	20	-6060.94	20	12.22	20
407	403	409	Min.	256.93									3442.33	20		
407	403	409	Min.	489.00	0.00	20	0.00	20	0.00	20	-7535.68	20	-5301.55	20	12.22	20
407	409	-1758	Max	15.00	0.00	20	0.00	20	0.00	20	3836.23	20	-2275.80	20	-582.29	20
407	409	-1758	Max	82.00	0.00	20	0.00	20	0.00	20	2571.27	20	-129.29	20	-582.29	20
407	409	-1758	Min.	15.00	0.00	20	0.00	20	0.00	20	3836.23	20	-2275.80	20	-582.29	20
407	409	-1758	Min.	82.00	0.00	20	0.00	20	0.00	20	2571.27	20	-129.29	20	-582.29	20
407	-1758	-1772	Max	0.00	0.00	20	0.00	20	0.00	20	2834.49	20	427.86	20	-44.58	20
407	-1758	-1772	Max	82.00	0.00	20	0.00	20	0.00	20	1286.33	20	2117.40	20	-44.58	20
407	-1758	-1772	Min.	0.00	0.00	20	0.00	20	0.00	20	2834.49	20	427.86	20	-44.58	20
407	-1758	-1772	Min.	82.00	0.00	20	0.00	20	0.00	20	1286.33	20	2117.40	20	-44.58	20
407	-1772	-2025	Max	0.00	0.00	20	0.00	20	0.00	20	1016.63	20	2456.87	20	174.60	20
407	-1772	-2025	Max	53.17									2730.54	20		
407	-1772	-2025	Max	223.00	0.00	20	0.00	20	0.00	20	-3193.61	20	29.54	20	174.60	20
407	-1772	-2025	Min.	0.00	0.00	20	0.00	20	0.00	20	1016.63	20	2456.87	20	174.60	20
407	-1772	-2025	Min.	53.17									2730.54	20		
407	-1772	-2025	Min.	223.00	0.00	20	0.00	20	0.00	20	-3193.61	20	29.54	20	174.60	20
408	404	410	Max	15.00	0.00	20	0.00	20	0.00	20	8437.16	20	-6379.29	20	-6.65	20
408	404	410	Max	255.91									3783.67	20		
408	404	410	Max	489.00	0.00	20	0.00	20	0.00	20	-8163.32	20	-5730.30	20	-6.65	20
408	404	410	Min.	15.00	0.00	20	0.00	20	0.00	20	8437.16	20	-6379.29	20	-6.65	20
408	404	410	Min.	255.91									3783.67	20		
408	404	410	Min.	489.00	0.00	20	0.00	20	0.00	20	-8163.32	20	-5730.30	20	-6.65	20
408	410	-1762	Max	15.00	0.00	20	0.00	20	0.00	20	1929.32	20	-1031.51	20	448.50	20
408	410	-1762	Max	95.33	0.00	20	0.00	20	0.00	20	412.63	20	-90.83	20	448.50	20
408	410	-1762	Min.	15.00	0.00	20	0.00	20	0.00	20	1929.32	20	-1031.51	20	448.50	20
408	410	-1762	Min.	95.33	0.00	20	0.00	20	0.00	20	412.63	20	-90.83	20	448.50	20
408	-1762	-1779	Max	0.00	0.00	20	0.00	20	0.00	20	905.48	20	-61.46	20	282.71	20
408	-1762	-1779	Max	47.96									155.67	20		
408	-1762	-1779	Max	95.33	0.00	20	0.00	20	0.00	20	-894.41	20	-56.19	20	282.71	20
408	-1762	-1779	Min.	0.00	0.00	20	0.00	20	0.00	20	905.48	20	-61.46	20	282.71	20
408	-1762	-1779	Min.	47.96									155.67	20		
408	-1762	-1779	Min.	95.33	0.00	20	0.00	20	0.00	20	-894.41	20	-56.19	20	282.71	20
408	-1779	-1792	Max	0.00	0.00	20	0.00	20	0.00	20	128.69	20	-204.88	20	-184.13	20
408	-1779	-1792	Max	6.30									-200.52	20		
408	-1779	-1792	Max	95.33	0.00	20	0.00	20	0.00	20	-1671.20	20	-940.14	20	-184.13	20
408	-1779	-1792	Min.	0.00	0.00	20	0.00	20	0.00	20	128.69	20	-204.88	20	-184.13	20
408	-1779	-1792	Min.	6.30									-200.52	20		
408	-1779	-1792	Min.	95.33	0.00	20	0.00	20	0.00	20	-1671.20	20	-940.14	20	-184.13	20
408	-1792	-2028	Max	0.00	0.00	20	0.00	20	0.00	20	-1174.13	20	-1374.63	20	-379.95	20
408	-1792	-2028	Max	101.00	0.00	20	0.00	20	0.00	20	-3081.01	20	-3523.47	20	-379.95	20
408	-1792	-2028	Min.	0.00	0.00	20	0.00	20	0.00	20	-1174.13	20	-1374.63	20	-379.95	20
408	-1792	-2028	Min.	101.00	0.00	20	0.00	20	0.00	20	-3081.01	20	-3523.47	20	-379.95	20
409	405	411	Max	15.00	0.00	20	0.00	20	0.00	20	3907.59	20	-2954.41	20	-31.81	20
409	405	411	Max	252.40									1683.89	20		
409	405	411	Max	489.00	0.00	20	0.00	20	0.00	20	-3894.45	20	-2923.26	20	-31.81	20
409	405	411	Min.	15.00	0.00	20	0.00	20	0.00	20	3907.59	20	-2954.41	20	-31.81	20
409	405	411	Min.	252.40									1683.89	20		
409	405	411	Min.	489.00	0.00	20	0.00	20	0.00	20	-3894.45	20	-2923.26	20	-31.81	20
409	411	417	Max	15.00	0.00	20	0.00	20	0.00	20	4205.72	20	-3447.80	20	29.83	20
409	411	417	Max	269.71									1925.20	20		
409	411	417	Max	557.00	0.00	20	0.00	20	0.00	20	-4715.60	20	-4829.56	20	29.83	20
409	411	417	Min.	15.00	0.00	20	0.00	20	0.00	20	4205.72	20	-3447.80	20	29.83	20
409	411	417	Min.	269.71									1925.20	20		
409	411	417	Min.	557.00	0.00	20	0.00	20	0.00	20	-4715.60	20	-4829.56	20	29.83	20
410	406	412	Max	105.00	0.00	20	0.00	20	0.00	20	3079.90	20	-1622.13	20	-53.12	20
410	406	412	Max	277.74									1037.94	20		
410	406	412	Max	444.00	0.00	20	0.00	20	0.00	20	-2964.47	20	-1426.46	20	-53.12	20
410	406	412	Min.	105.00	0.00	20	0.00	20	0.00	20	3079.90	20	-1622.13	20	-53.12	20
410	406	412	Min.	277.74									1037.94	20		
410	406	412	Min.	444.00	0.00	20	0.00	20	0.00	20	-2964.47	20	-1426.46	20	-53.12	20
410	412	418	Max	60.00	0.00	20	0.00	20	0.00	20	3319.67	20	-1635.62	20	-28.89	20
410	412	418	Max	245.75									1454.73	20		
410	412	418	Max	467.00	0.00	20	0.00	20	0.00	20	-3937.14	20	-2892.16	20	-28.89	20
410	412	418	Min.	60.00	0.00	20	0.00	20	0.00	20	3319.67	20	-1635.62	20	-28.89	20
410	412	418	Min.	245.75									1454.73	20		
410	412	418	Min.	467.00	0.00	20	0.00	20	0.00	20	-3937.14	20	-2892.16	20	-28.89	20
501	502	503	Max	35.00	0.00	20	0.00	20	0.00	20	3303.05	20	-2330.62	20	-212.48	20
501	502	503	Max	253.42									1276.65	20		
501	502	503	Max	431.00	0.00	20	0.00	20	0.00	20	-2685.45	20	-1107.76	20	-212.48	20
501	502	503	Min.	35.00	0.00	20	0.00	20	0.00	20	3303.05	20	-2330.62	20	-212.48	20
501	502	503	Min.	253.42									1276.65	20		
501	502	503	Min.	431.00	0.00	20	0.00	20	0.00	20	-2685.45	20	-1107.76	20	-212.48	20



501	503	504	Max	12.00	0.00	20	0.00	20	0.00	20	2460.10	20	-2257.07	20	24.68	20
501	503	504	Max	270.41									921.55	20		
501	503	504	Max	496.00	0.00	20	0.00	20	0.00	20	-2147.58	20	-1500.76	20	24.68	20
501	503	504	Min.	12.00	0.00	20	0.00	20	0.00	20	2460.10	20	-2257.07	20	24.68	20
501	503	504	Min.	270.41									921.55	20		
501	503	504	Min.	496.00	0.00	20	0.00	20	0.00	20	-2147.58	20	-1500.76	20	24.68	20
501	504	505	Max	58.00	0.00	20	0.00	20	0.00	20	2386.20	20	-794.07	20	118.86	20
501	504	505	Max	217.47									1114.61	20		
501	504	505	Max	428.00	0.00	20	0.00	20	0.00	20	-3132.67	20	-2175.03	20	118.86	20
501	504	505	Min.	58.00	0.00	20	0.00	20	0.00	20	2386.20	20	-794.07	20	118.86	20
501	504	505	Min.	217.47									1114.61	20		
501	504	505	Min.	428.00	0.00	20	0.00	20	0.00	20	-3132.67	20	-2175.03	20	118.86	20
501	505	506	Max	35.00	0.00	20	0.00	20	0.00	20	2159.32	20	-554.36	20	237.42	20
501	505	506	Max	184.09									1061.88	20		
501	505	506	Max	396.00	0.00	20	0.00	20	0.00	20	-3047.81	20	-2158.09	20	237.42	20
501	505	506	Min.	35.00	0.00	20	0.00	20	0.00	20	2159.32	20	-554.36	20	237.42	20
501	505	506	Min.	184.09									1061.88	20		
501	505	506	Min.	396.00	0.00	20	0.00	20	0.00	20	-3047.81	20	-2158.09	20	237.42	20
502	508	509	Max	35.00	0.00	20	0.00	20	0.00	20	5687.66	20	-4638.95	20	351.79	20
502	508	509	Max	278.67									2293.33	20		
502	508	509	Max	432.00	0.00	20	0.00	20	0.00	20	-3575.36	20	-446.01	20	351.79	20
502	508	509	Min.	35.00	0.00	20	0.00	20	0.00	20	5687.66	20	-4638.95	20	351.79	20
502	508	509	Min.	278.67									2293.33	20		
502	508	509	Min.	432.00	0.00	20	0.00	20	0.00	20	-3575.36	20	-446.01	20	351.79	20
502	509	-1937	Max	13.00	0.00	20	0.00	20	0.00	20	1114.99	20	-739.67	20	543.44	20
502	509	-1937	Max	84.67	0.00	20	0.00	20	0.00	20	590.39	20	-128.58	20	543.44	20
502	509	-1937	Min.	13.00	0.00	20	0.00	20	0.00	20	1114.99	20	-739.67	20	543.44	20
502	509	-1937	Min.	84.67	0.00	20	0.00	20	0.00	20	590.39	20	-128.58	20	543.44	20
502	-1937	-1938	Max	0.00	0.00	20	0.00	20	0.00	20	635.44	20	-167.23	20	370.70	20
502	-1937	-1938	Max	84.67	0.00	20	0.00	20	0.00	20	15.68	20	108.42	20	370.70	20
502	-1937	-1938	Min.	0.00	0.00	20	0.00	20	0.00	20	635.44	20	-167.23	20	370.70	20
502	-1937	-1938	Min.	84.67	0.00	20	0.00	20	0.00	20	15.68	20	108.42	20	370.70	20
502	-1938	-1939	Max	0.00	0.00	20	0.00	20	0.00	20	343.34	20	61.57	20	124.79	20
502	-1938	-1939	Max	46.90									142.09	20		
502	-1938	-1939	Max	84.67	0.00	20	0.00	20	0.00	20	-276.42	20	89.90	20	124.79	20
502	-1938	-1939	Min.	0.00	0.00	20	0.00	20	0.00	20	343.34	20	61.57	20	124.79	20
502	-1938	-1939	Min.	46.90									142.09	20		
502	-1938	-1939	Min.	84.67	0.00	20	0.00	20	0.00	20	-276.42	20	89.90	20	124.79	20
502	-1939	-1940	Max	0.00	0.00	20	0.00	20	0.00	20	56.38	20	108.99	20	-259.16	20
502	-1939	-1940	Max	7.19									111.15	20		
502	-1939	-1940	Max	84.67	0.00	20	0.00	20	0.00	20	-563.38	20	-105.64	20	-259.16	20
502	-1939	-1940	Min.	0.00	0.00	20	0.00	20	0.00	20	56.38	20	108.99	20	-259.16	20
502	-1939	-1940	Min.	7.19									111.15	20		
502	-1939	-1940	Min.	84.67	0.00	20	0.00	20	0.00	20	-563.38	20	-105.64	20	-259.16	20
502	-1940	-1941	Max	0.00	0.00	20	0.00	20	0.00	20	-131.60	20	-98.85	20	-506.50	20
502	-1940	-1941	Max	84.67	0.00	20	0.00	20	0.00	20	-751.37	20	-472.64	20	-506.50	20
502	-1940	-1941	Min.	0.00	0.00	20	0.00	20	0.00	20	-131.60	20	-98.85	20	-506.50	20
502	-1940	-1941	Min.	84.67	0.00	20	0.00	20	0.00	20	-751.37	20	-472.64	20	-506.50	20
502	-1941	510	Max	0.00	0.00	20	0.00	20	0.00	20	-1048.54	20	-534.33	20	-514.86	20
502	-1941	510	Max	71.67	0.00	20	0.00	20	0.00	20	-1573.14	20	-1473.76	20	-514.86	20
502	-1941	510	Min.	0.00	0.00	20	0.00	20	0.00	20	-1048.54	20	-534.33	20	-514.86	20
502	-1941	510	Min.	71.67	0.00	20	0.00	20	0.00	20	-1573.14	20	-1473.76	20	-514.86	20
502	510	511	Max	57.00	0.00	20	0.00	20	0.00	20	3488.52	20	-804.36	20	-338.67	20
502	510	511	Max	209.43									1853.80	20		
502	510	511	Max	428.00	0.00	20	0.00	20	0.00	20	-5004.19	20	-3615.93	20	-338.67	20
502	510	511	Min.	57.00	0.00	20	0.00	20	0.00	20	3488.52	20	-804.36	20	-338.67	20
502	510	511	Min.	209.43									1853.80	20		
502	510	511	Min.	428.00	0.00	20	0.00	20	0.00	20	-5004.19	20	-3615.93	20	-338.67	20
502	511	512	Max	35.00	0.00	20	0.00	20	0.00	20	3087.00	20	-515.47	20	56.48	20
502	511	512	Max	176.34									1666.04	20		
502	511	512	Max	396.00	0.00	20	0.00	20	0.00	20	-4797.86	20	-3603.57	20	56.48	20
502	511	512	Min.	35.00	0.00	20	0.00	20	0.00	20	3087.00	20	-515.47	20	56.48	20
502	511	512	Min.	176.34									1666.04	20		
502	511	512	Min.	396.00	0.00	20	0.00	20	0.00	20	-4797.86	20	-3603.57	20	56.48	20
503	514	515	Max	35.00	0.00	20	0.00	20	0.00	20	3525.84	20	-2267.49	20	-592.78	20
503	514	515	Max	250.12									1531.85	20		
503	514	515	Max	471.50	0.00	20	0.00	20	0.00	20	-3615.32	20	-2462.79	20	-592.78	20
503	514	515	Min.	35.00	0.00	20	0.00	20	0.00	20	3525.84	20	-2267.49	20	-592.78	20
503	514	515	Min.	250.12									1531.85	20		
503	514	515	Min.	471.50	0.00	20	0.00	20	0.00	20	-3615.32	20	-2462.79	20	-592.78	20
503	515	-2000	Max	12.50	0.00	20	0.00	20	0.00	20	2605.96	20	-2286.42	20	1228.81	20
503	515	-2000	Max	92.75	0.00	20	0.00	20	0.00	20	2128.47	20	-386.73	20	1228.81	20
503	515	-2000	Min.	12.50	0.00	20	0.00	20	0.00	20	2605.96	20	-2286.42	20	1228.81	20
503	515	-2000	Min.	92.75	0.00	20	0.00	20	0.00	20	2128.47	20	-386.73	20	1228.81	20
503	-2000	-2001	Max	0.00	0.00	20	0.00	20	0.00	20	741.03	20	-10.91	20	145.94	20
503	-2000	-2001	Max	92.75	0.00	20	0.00	20	0.00	20	189.17	20	420.47	20	145.94	20





503	-2000	-2001	Min.	0.00	0.00	20	0.00	20	0.00	20	741.03	20	-10.91	20	145.94	20
503	-2000	-2001	Min.	92.75	0.00	20	0.00	20	0.00	20	189.17	20	420.47	20	145.94	20
503	-2001	-2002	Max	0.00	0.00	20	0.00	20	0.00	20	226.66	20	542.33	20	12.25	20
503	-2001	-2002	Max	38.13									585.50	20		
503	-2001	-2002	Max	92.75	0.00	20	0.00	20	0.00	20	-325.20	20	496.63	20	12.25	20
503	-2001	-2002	Min.	0.00	0.00	20	0.00	20	0.00	20	226.66	20	542.33	20	12.25	20
503	-2001	-2002	Min.	38.13									585.50	20		
503	-2001	-2002	Min.	92.75	0.00	20	0.00	20	0.00	20	-325.20	20	496.63	20	12.25	20
503	-2002	-2003	Max	0.00	0.00	20	0.00	20	0.00	20	-67.59	20	408.71	20	106.12	20
503	-2002	-2003	Max	92.75	0.00	20	0.00	20	0.00	20	-619.45	20	90.10	20	106.12	20
503	-2002	-2003	Min.	0.00	0.00	20	0.00	20	0.00	20	-67.59	20	408.71	20	106.12	20
503	-2002	-2003	Min.	92.75	0.00	20	0.00	20	0.00	20	-619.45	20	90.10	20	106.12	20
503	-2003	-2004	Max	0.00	0.00	20	0.00	20	0.00	20	-543.51	20	-60.01	20	132.59	20
503	-2003	-2004	Max	68.50	0.00	20	0.00	20	0.00	20	-951.08	20	-571.91	20	132.59	20
503	-2003	-2004	Min.	0.00	0.00	20	0.00	20	0.00	20	-543.51	20	-60.01	20	132.59	20
503	-2003	-2004	Min.	68.50	0.00	20	0.00	20	0.00	20	-951.08	20	-571.91	20	132.59	20
503	-2004	516	Max	0.00	0.00	20	0.00	20	0.00	20	-1462.32	20	-755.61	20	37.63	20
503	-2004	516	Max	56.00	0.00	20	0.00	20	0.00	20	-1795.52	20	-1667.81	20	37.63	20
503	-2004	516	Min.	0.00	0.00	20	0.00	20	0.00	20	-1462.32	20	-755.61	20	37.63	20
503	-2004	516	Min.	56.00	0.00	20	0.00	20	0.00	20	-1795.52	20	-1667.81	20	37.63	20
503	516	517	Max	17.50	0.00	20	0.00	20	0.00	20	3276.60	20	-1820.63	20	414.50	20
503	516	517	Max	220.31									1508.28	20		
503	516	517	Max	428.00	0.00	20	0.00	20	0.00	20	-3342.93	20	-1956.77	20	414.50	20
503	516	517	Min.	17.50	0.00	20	0.00	20	0.00	20	3276.60	20	-1820.63	20	414.50	20
503	516	517	Min.	220.31									1508.28	20		
503	516	517	Min.	428.00	0.00	20	0.00	20	0.00	20	-3342.93	20	-1956.77	20	414.50	20
503	517	518	Max	35.00	0.00	20	0.00	20	0.00	20	1902.42	20	159.70	20	-407.19	20
503	517	518	Max	157.21									1322.12	20		
503	517	518	Max	396.00	0.00	20	0.00	20	0.00	20	-3717.46	20	-3116.43	20	-407.19	20
503	517	518	Min.	35.00	0.00	20	0.00	20	0.00	20	1902.42	20	159.70	20	-407.19	20
503	517	518	Min.	157.21									1322.12	20		
503	517	518	Min.	396.00	0.00	20	0.00	20	0.00	20	-3717.46	20	-3116.43	20	-407.19	20
505	502	508	Max	15.00	0.00	20	0.00	20	0.00	20	2303.49	20	-1642.88	20	34.54	20
505	502	508	Max	256.96									1143.93	20		
505	502	508	Max	489.00	0.00	20	0.00	20	0.00	20	-2208.99	20	-1418.89	20	34.54	20
505	502	508	Min.	15.00	0.00	20	0.00	20	0.00	20	2303.49	20	-1642.88	20	34.54	20
505	502	508	Min.	256.96									1143.93	20		
505	502	508	Min.	489.00	0.00	20	0.00	20	0.00	20	-2208.99	20	-1418.89	20	34.54	20
505	508	514	Max	15.00	0.00	20	0.00	20	0.00	20	2679.95	20	-2022.87	20	-34.78	20
505	508	514	Max	296.51									1749.27	20		
505	508	514	Max	557.00	0.00	20	0.00	20	0.00	20	-2479.89	20	-1480.69	20	-34.78	20
505	508	514	Min.	15.00	0.00	20	0.00	20	0.00	20	2679.95	20	-2022.87	20	-34.78	20
505	508	514	Min.	296.51									1749.27	20		
505	508	514	Min.	557.00	0.00	20	0.00	20	0.00	20	-2479.89	20	-1480.69	20	-34.78	20
507	503	509	Max	15.00	0.00	20	0.00	20	0.00	20	4634.51	20	-3604.27	20	-57.75	20
507	503	509	Max	267.90									2256.01	20		
507	503	509	Max	489.00	0.00	20	0.00	20	0.00	20	-4051.85	20	-2223.37	20	-57.75	20
507	503	509	Min.	15.00	0.00	20	0.00	20	0.00	20	4634.51	20	-3604.27	20	-57.75	20
507	503	509	Min.	267.90									2256.01	20		
507	503	509	Min.	489.00	0.00	20	0.00	20	0.00	20	-4051.85	20	-2223.37	20	-57.75	20
507	509	-1948	Max	15.00	0.00	20	0.00	20	0.00	20	345.04	20	5.87	20	-520.78	20
507	509	-1948	Max	62.14									87.19	20		
507	509	-1948	Max	82.00	0.00	20	0.00	20	0.00	20	-145.40	20	72.75	20	-520.78	20
507	509	-1948	Min.	15.00	0.00	20	0.00	20	0.00	20	345.04	20	5.87	20	-520.78	20
507	509	-1948	Min.	62.14									87.19	20		
507	509	-1948	Min.	82.00	0.00	20	0.00	20	0.00	20	-145.40	20	72.75	20	-520.78	20
507	-1948	-1959	Max	0.00	0.00	20	0.00	20	0.00	20	148.99	20	-146.02	20	-346.38	20
507	-1948	-1959	Max	19.20									-130.91	20		
507	-1948	-1959	Max	82.00	0.00	20	0.00	20	0.00	20	-451.25	20	-269.95	20	-346.38	20
507	-1948	-1959	Min.	0.00	0.00	20	0.00	20	0.00	20	148.99	20	-146.02	20	-346.38	20
507	-1948	-1959	Min.	19.20									-130.91	20		
507	-1948	-1959	Min.	82.00	0.00	20	0.00	20	0.00	20	-451.25	20	-269.95	20	-346.38	20
507	-1959	-1969	Max	0.00	0.00	20	0.00	20	0.00	20	201.30	20	-353.84	20	105.69	20
507	-1959	-1969	Max	27.50									-326.16	20		
507	-1959	-1969	Max	81.60	0.00	20	0.00	20	0.00	20	-396.02	20	-433.28	20	105.69	20
507	-1959	-1969	Min.	0.00	0.00	20	0.00	20	0.00	20	201.30	20	-353.84	20	105.69	20
507	-1959	-1969	Min.	27.50									-326.16	20		
507	-1959	-1969	Min.	81.60	0.00	20	0.00	20	0.00	20	-396.02	20	-433.28	20	105.69	20
507	-1969	-2026	Max	0.00	0.00	20	0.00	20	0.00	20	423.77	20	-270.79	20	515.76	20
507	-1969	-2026	Max	57.60									-148.13	20		
507	-1969	-2026	Max	141.40	0.00	20	0.00	20	0.00	20	-611.28	20	-403.36	20	515.76	20
507	-1969	-2026	Min.	0.00	0.00	20	0.00	20	0.00	20	423.77	20	-270.79	20	515.76	20
507	-1969	-2026	Min.	57.60									-148.13	20		
507	-1969	-2026	Min.	141.40	0.00	20	0.00	20	0.00	20	-611.28	20	-403.36	20	515.76	20
508	504	510	Max	15.00	0.00	20	0.00	20	0.00	20	4496.63	20	-3333.20	20	37.06	20
508	504	510	Max	260.37									2183.56	20		

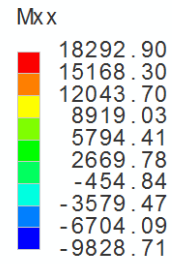
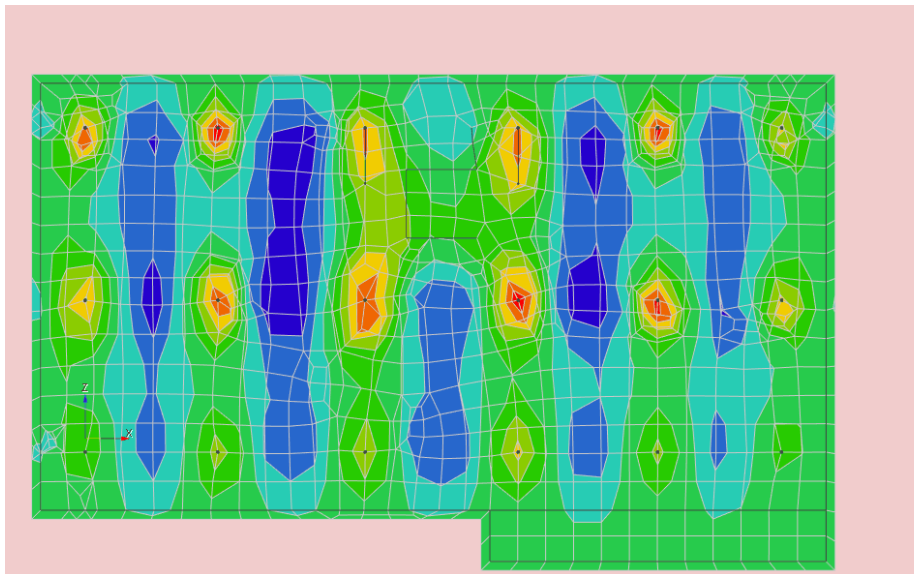


508	504	510	Max	489.00	0.00	20	0.00	20	0.00	20	-4189.74	20	-2605.87	20	37.06	20
508	504	510	Min.	15.00	0.00	20	0.00	20	0.00	20	4496.63	20	-3333.20	20	37.06	20
508	504	510	Min.	260.37									2183.56	20		
508	504	510	Min.	489.00	0.00	20	0.00	20	0.00	20	-4189.74	20	-2605.87	20	37.06	20
508	510	-1949	Max	15.00	0.00	20	0.00	20	0.00	20	513.42	20	-348.39	20	438.39	20
508	510	-1949	Max	84.88									-168.34	20		
508	510	-1949	Max	95.33	0.00	20	0.00	20	0.00	20	-74.62	20	-172.14	20	438.39	20
508	510	-1949	Min.	15.00	0.00	20	0.00	20	0.00	20	513.42	20	-348.39	20	438.39	20
508	510	-1949	Min.	84.88									-168.34	20		
508	510	-1949	Min.	95.33	0.00	20	0.00	20	0.00	20	-74.62	20	-172.14	20	438.39	20
508	-1949	-1962	Max	0.00	0.00	20	0.00	20	0.00	20	226.62	20	-325.88	20	229.27	20
508	-1949	-1962	Max	30.96									-290.80	20		
508	-1949	-1962	Max	95.33	0.00	20	0.00	20	0.00	20	-471.22	20	-442.47	20	229.27	20
508	-1949	-1962	Min.	0.00	0.00	20	0.00	20	0.00	20	226.62	20	-325.88	20	229.27	20
508	-1949	-1962	Min.	30.96									-290.80	20		
508	-1949	-1962	Min.	95.33	0.00	20	0.00	20	0.00	20	-471.22	20	-442.47	20	229.27	20
508	-1962	-1973	Max	0.00	0.00	20	0.00	20	0.00	20	153.54	20	-504.52	20	-162.30	20
508	-1962	-1973	Max	19.07									-488.55	20		
508	-1962	-1973	Max	95.33	0.00	20	0.00	20	0.00	20	-544.30	20	-690.78	20	-162.30	20
508	-1962	-1973	Min.	0.00	0.00	20	0.00	20	0.00	20	153.54	20	-504.52	20	-162.30	20
508	-1962	-1973	Min.	19.07									-488.55	20		
508	-1962	-1973	Min.	95.33	0.00	20	0.00	20	0.00	20	-544.30	20	-690.78	20	-162.30	20
508	-1973	-2029	Max	0.00	0.00	20	0.00	20	0.00	20	-291.49	20	-735.53	20	-360.88	20
508	-1973	-2029	Max	101.00	0.00	20	0.00	20	0.00	20	-1030.81	20	-1403.29	20	-360.88	20
508	-1973	-2029	Min.	0.00	0.00	20	0.00	20	0.00	20	-291.49	20	-735.53	20	-360.88	20
508	-1973	-2029	Min.	101.00	0.00	20	0.00	20	0.00	20	-1030.81	20	-1403.29	20	-360.88	20
509	505	511	Max	15.00	0.00	20	0.00	20	0.00	20	2876.42	20	-1975.91	20	-28.43	20
509	505	511	Max	244.10									1323.03	20		
509	505	511	Max	489.00	0.00	20	0.00	20	0.00	20	-3067.54	20	-2428.89	20	-28.43	20
509	505	511	Min.	15.00	0.00	20	0.00	20	0.00	20	2876.42	20	-1975.91	20	-28.43	20
509	505	511	Min.	244.10									1323.03	20		
509	505	511	Min.	489.00	0.00	20	0.00	20	0.00	20	-3067.54	20	-2428.89	20	-28.43	20
509	511	517	Max	15.00	0.00	20	0.00	20	0.00	20	3535.28	20	-3143.79	20	14.67	20
509	511	517	Max	296.92									1839.55	20		
509	511	517	Max	557.00	0.00	20	0.00	20	0.00	20	-3261.40	20	-2401.57	20	14.67	20
509	511	517	Min.	15.00	0.00	20	0.00	20	0.00	20	3535.28	20	-3143.79	20	14.67	20
509	511	517	Min.	296.92									1839.55	20		
509	511	517	Min.	557.00	0.00	20	0.00	20	0.00	20	-3261.40	20	-2401.57	20	14.67	20
510	506	512	Max	105.00	0.00	20	0.00	20	0.00	20	1692.07	20	-940.90	20	-65.38	20
510	506	512	Max	282.74									562.82	20		
510	506	512	Max	444.00	0.00	20	0.00	20	0.00	20	-1535.21	20	-675.04	20	-65.38	20
510	506	512	Min.	105.00	0.00	20	0.00	20	0.00	20	1692.07	20	-940.90	20	-65.38	20
510	506	512	Min.	282.74									562.82	20		
510	506	512	Min.	444.00	0.00	20	0.00	20	0.00	20	-1535.21	20	-675.04	20	-65.38	20
510	512	518	Max	60.00	0.00	20	0.00	20	0.00	20	1643.13	20	-563.47	20	42.26	20
510	512	518	Max	231.77									854.51	20		
510	512	518	Max	467.00	0.00	20	0.00	20	0.00	20	-2231.51	20	-1760.81	20	42.26	20
510	512	518	Min.	60.00	0.00	20	0.00	20	0.00	20	1643.13	20	-563.47	20	42.26	20
510	512	518	Min.	231.77									854.51	20		
510	512	518	Min.	467.00	0.00	20	0.00	20	0.00	20	-2231.51	20	-1760.81	20	42.26	20



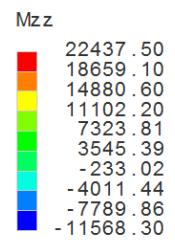
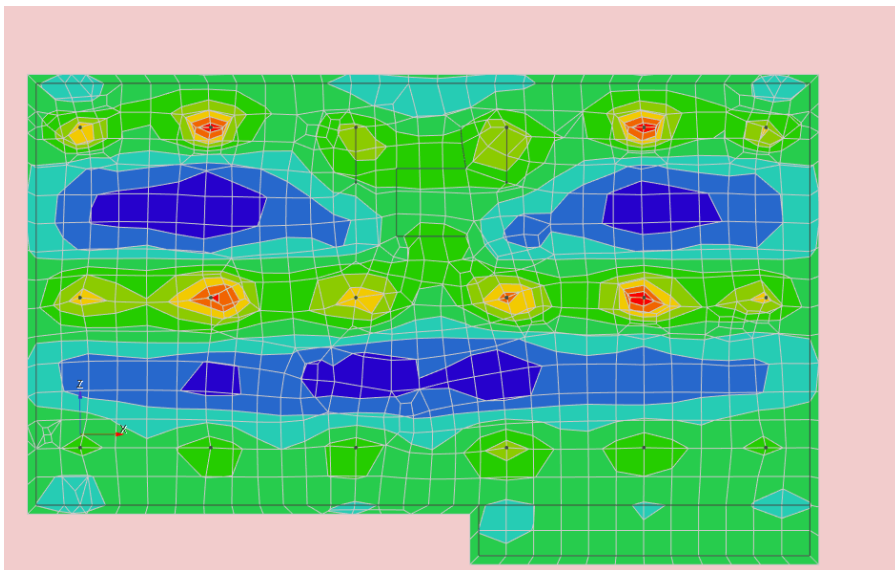
# Sollecitazioni elementi platea e solette

PLATEA - slu17 Mxx



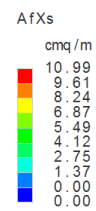
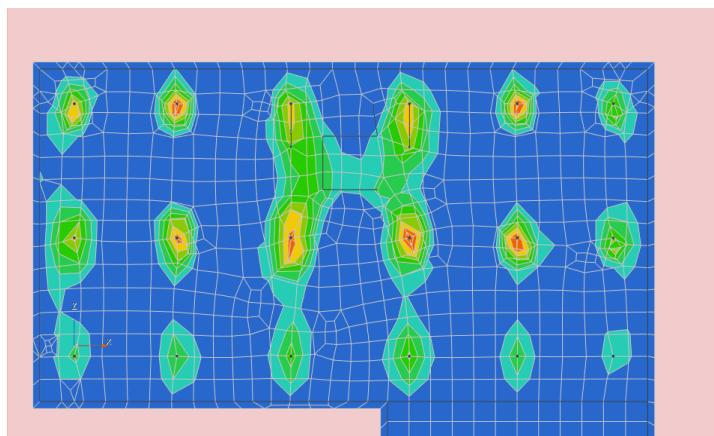
CC 17

PLATEA - slu17 Mzz



CC 17

PLATEA - Area ferro teorica X superiore



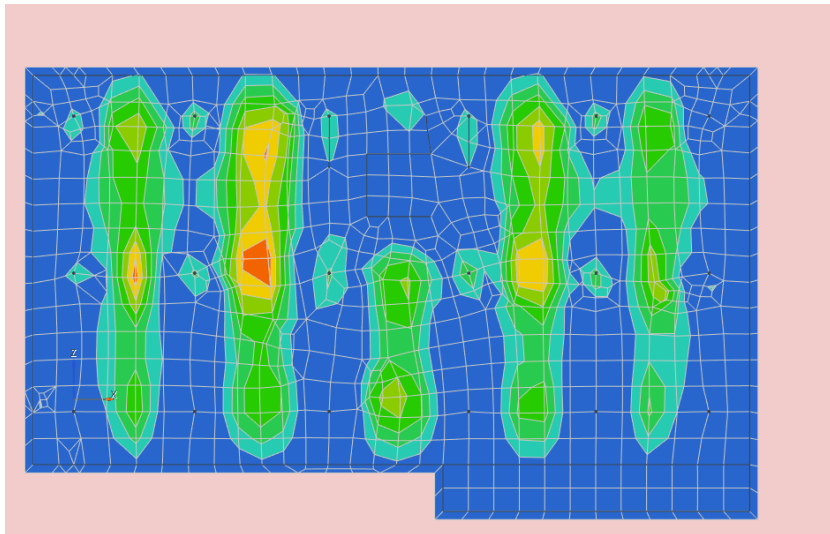
Af<sub>s</sub>=0.00

Af<sub>i</sub>=0.00

CC tutte

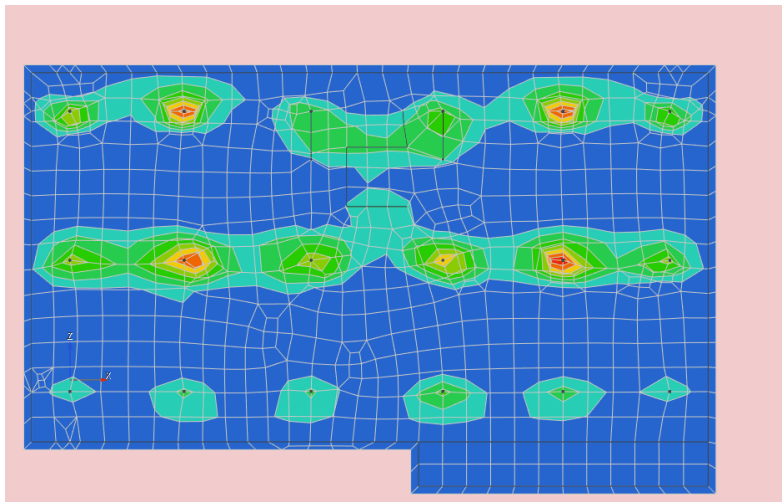


### PLATEA - Area ferro teorica X inferiore



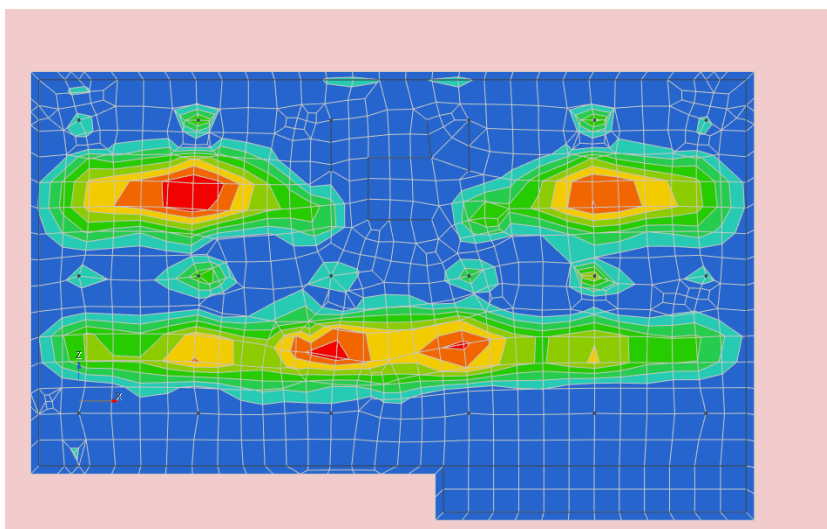
AfXi  
cmq/m  
6.90  
6.04  
5.18  
4.32  
3.45  
2.59  
1.73  
0.86  
0.00  
0.00  
Af<sub>s</sub>=0.00  
Af<sub>i</sub>=0.00  
CC tutte

### PLATEA - Area ferro teorica Z superiore



AfZs  
cmq/m  
13.66  
11.96  
10.25  
8.54  
6.83  
5.12  
3.42  
1.71  
0.00  
0.00  
Af<sub>s</sub>=0.00  
Af<sub>i</sub>=0.00  
CC tutte

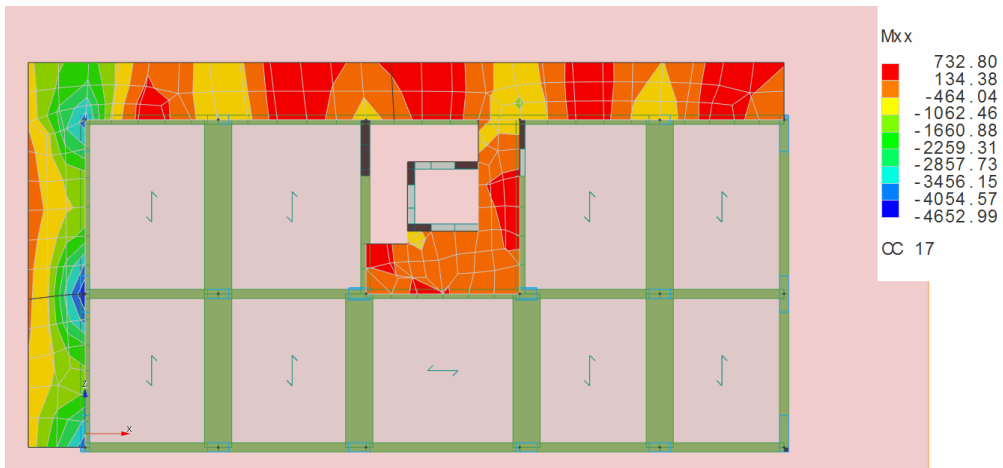
### PLATEA - Area ferro teorica Z inferiore



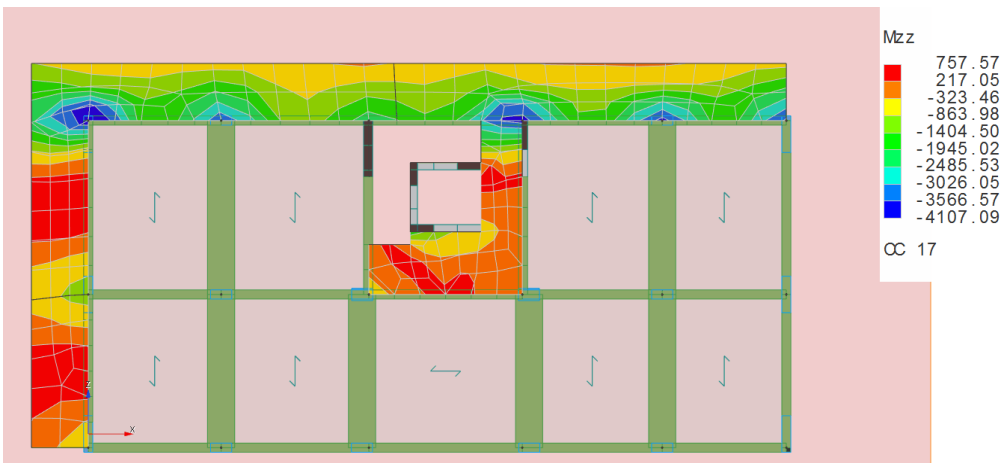
AfZi  
cmq/m  
6.84  
5.99  
5.13  
4.28  
3.42  
2.57  
1.71  
0.86  
0.00  
0.00  
Af<sub>s</sub>=0.00  
Af<sub>i</sub>=0.00  
CC tutte



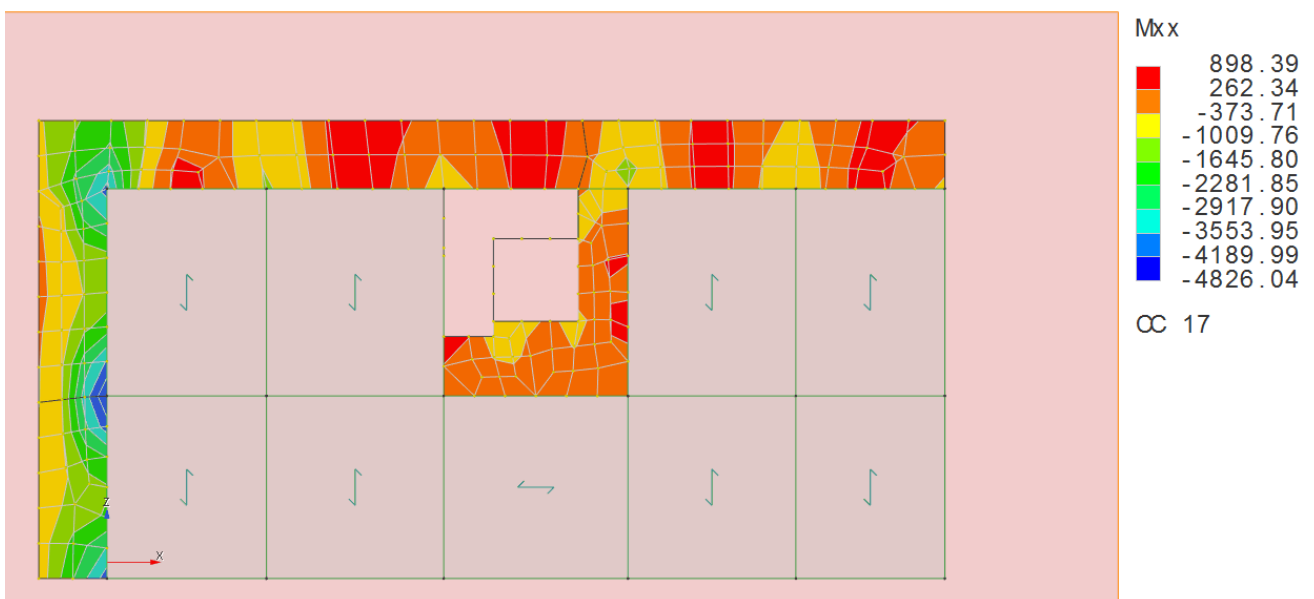
PIANO PRIMO solette - slu17 Mxx



PIANO PRIMO solette - slu17 Mzz

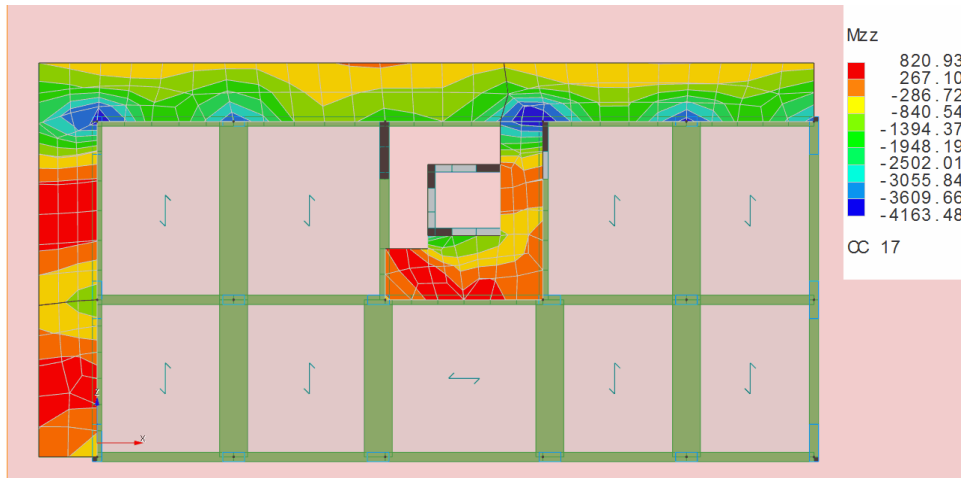


PIANO SECONDO solette - slu17 Mxx

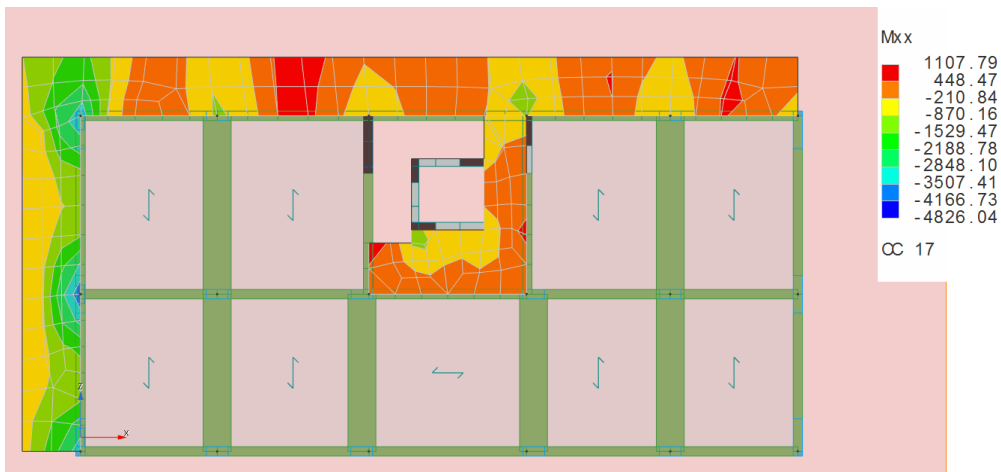




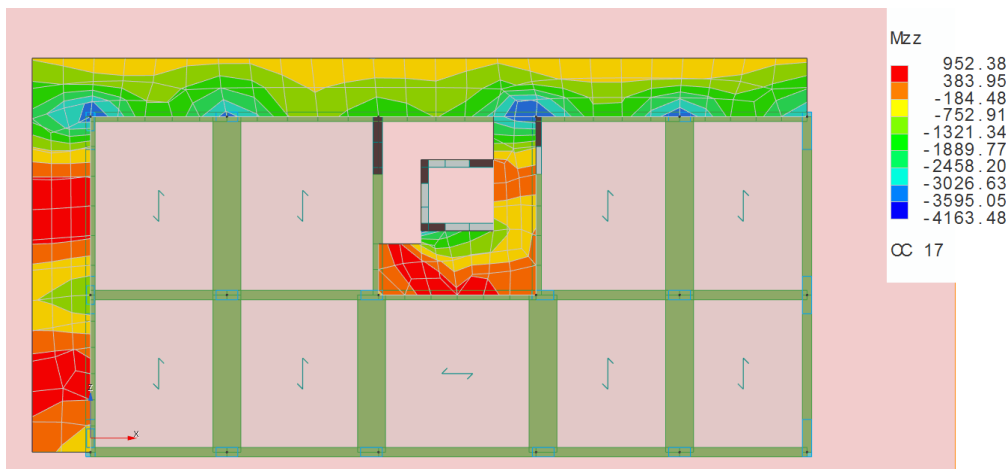
PIANO SECONDO solette - slu17 Mzz



PIANO TERZO solette - slu17 Mxx



PIANO TERZO solette - slu17 Mzz







## Criteri di progetto utilizzati

### Pilastrini in c.a.

Generali	
<b>Parametri di progetto</b>	
Pilastrino prefabbricato	No
Progettazione dell'armatura con sollecitazioni più gravose	Si
Disaccoppia sovrarresistenza	No
Limita fattore di sovrarresistenza al massimo valore di struttura	No
Tipo verifica di stabilità	
-Per $N^*Q$ -M e per N-c*M (standard)	Si
-Per $N^*Q$ -c*M (doppia)	No
-Per $N^*Q$ (sforzo normale e momento nullo)	No
-Per c*M (momento e sforzo normale nullo)	No
Max angolo di piegatura ferri <grad>	20.00
Progettazione armatura di ripresa	Si
Minimizzazione armatura di ripresa	No
Minimizzazione area di ferro totale nella sezione	No
Non progettare riprese ma estendi solo i ferri	Si
Verifiche in relazione	Minimizzate
<b>Ancoraggi</b>	
Lunghezza ancoraggi	
-Lunghezza minima come multiplo del diametro	60.00
Ancoraggi tutti uguali	No
Piegatura ancoraggi per discontinuità	Si
Piegatura ancoraggi ferri di ripresa	Si
<b>Armatura a taglio</b>	
Staffatura a spirale pilastrini circolari	Si
Cambiare le staffe nei nodi appartenenti all'impalcato 0 se sul nodo incidono elementi	Si
Considera solo la zona critica alla base della pilastrata (strutture pendolari)	No
Progetta a taglio con traliccio ad inclinazione variabile	Si
-Classe A	
-In zona critica limita ctg $\theta$ a	1.00
-In zona non critica limita ctg $\theta$ a	2.50
-Classe B	
-In zona critica limita ctg $\theta$ a	2.50
-In zona non critica limita ctg $\theta$ a	2.50
Verifiche a taglio per elementi esistenti come per elementi nuovi	Si
Estendi nel nodo staffe sottostanti anche se non richiesto dalla normativa	No
<b>Parametri di disegno</b>	
Scala disegno sezioni pilastrini	25.00
Scala disegno viste pilastrini	50.00
Creazione tabelle pilastrini	Si
-Tipo di tabella	Armature disposte dal basso verso l'alto
-Max lunghezza tavole <cm>	70.00
-Max altezza tavole <cm>	50.00
Creazione viste pilastrini	
-Disegno ferri dentro pilastrino in vista	Si
-Disegno staffe dentro pilastrino in vista	Si
-Modalità di individuazione ferri	
-Modalità di indicazione ferri	Mediante una tabella
-Minimizzazione riferimenti	Si
-Modalità di individuazione ferri	Per posizione
-Modalità di indicazione ferri	Mediante una tabella
-Minimizzazione riferimenti	Si

Specifici	1	5
<b>Materiali</b>		
-Considera come elemento esistente	No	No
-Calcestruzzo		
-Livello di conoscenza	LC2	LC2



-Fattore di confidenza	1.20	1.20
-Tipo di calcestruzzo	C28/35	C28/35
-Rck calcestruzzo	350.00	350.00
-Modulo elastico <daN/cm <sup>2</sup> >	325881.00	325881.00
-Resistenza caratteristica cilindrica (Fck)	290.50	290.50
-Resistenza caratteristica a trazione (Fctk)	19.84	19.84
-Resistenza media (Fcm) <daN/cm <sup>2</sup> >	370.50	370.50
-Resistenza media a trazione (Fctm) <daN/cm <sup>2</sup> >	28.35	28.35
-σ amm. calcestruzzo <daN/cm <sup>2</sup> >	110.00	110.00
-τc0 <daN/cm <sup>2</sup> >	6.70	6.70
-τc1 <daN/cm <sup>2</sup> >	19.70	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si	Si
-γc per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Acciaio		
-Livello di conoscenza	LC2	LC2
-Fattore di confidenza	1.20	1.20
-Tipo di acciaio	B450C	B450C
-Modulo elastico <daN/cm <sup>2</sup> >	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm <sup>2</sup> >	4500.00	4500.00
-Tensione media di snervamento (Fym) <daN/cm <sup>2</sup> >	4500.00	4500.00
-Sigma amm. acciaio <daN/cm <sup>2</sup> >	2600.00	2600.00
-Sigma amm. reti e tralicci <daN/cm <sup>2</sup> >	2600.00	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00	4.00
-γs per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Coeff. di omogeneizzazione	15.00	15.00
<b>Parametri per analisi pushover</b>		
Numero fibre	200.00	200.00
Fattore di confinamento nucleo interno	1.00	1.00
Fattore di incrudimento acciaio <%>	0.10	0.10
<b>Parametri per verifiche di duttilità</b>		
Considera formulazione per pareti	No	No
Considera rotazione massima di esercizio per determinare SLO e SLD	No	No
Modalità di calcolo luce di taglio Lv		
-Lv=L/2	x	x
-Lv=M/V		
-Lv=Punto di nullo del momento flettente		
Capacità di rotazione alla corda al collasso		
-Formula C8A.6.1 con fattore di riduzione pari a		
-Formula C8A.6.5	x	x
Sforzo normale di verifica per analisi pushover		
-Gravitazionale		
-Dal calcolo	x	x
<b>Parametri di calcolo</b>		
Strategia di progetto	RETTANG	RETTANG
Copriferro reale al bordo staffa <cm>	3.00	2.50
Diametro staffa teorica <mm>	8.00	9.00
Continuità dei ferri nei nodi appartenenti all'impalcato 0	Si	Si
Coeff. β in direzione Z locale	1.00	1.00
Coeff. β in direzione Y locale	1.00	1.00
Armatura secondo Circ. 65 del 10/04/97	No	No
-Raffittimento staffe in testa e al piede del pilastro	No	No
-Passo <cm>		
Parametri di progetto secondo il D.M. 18		
Elemento dissipativo	Si	Si
Trascura gerarchia	No	No
Limita verifica a pressoflessione ad elemento non dissipativo	Si	Si
Limita verifica a taglio ad elemento non dissipativo	Si	Si
Elemento secondario	No	No
Incremento percentuale per piano debole	No	No
Non effettuare verifiche dei nodi fra trave e pilastro	No	No
Verifiche a pressoflessione deviata	No	Si
Per calcoli secondo il D.M. 18 usa espressione 4.1.19	No	No
<b>Verifiche a taglio</b>		
Verifiche a taglio per sezioni circolari		
-Usa formulazione sezioni generiche		
-Considera rettangolo inscritto con B/H pari a	1.00	1.00
Verifiche a taglio per sezioni generiche		



-Considera Vrdu minimo		
-Considera Vrdu calcolato in corrispondenza di bw minimo		
-Considera Vrdu in corrispondenza di bw medio	x	x
-Considera Vrdu in corrispondenza di bw massimo		
-Considera sempre Af Staffe non proiettata in direzione del taglio	Si	Si
<b>Armatura a pressoflessione</b>		
Elenco diametri ferri longitudinali 1 <mm>	16	16
Elenco diametri ferri longitudinali 2 <mm>	20	20
Elenco diametri ferri longitudinali 3 <mm>	22	22
Elenco diametri ferri longitudinali 4 <mm>		
Elenco diametri ferri longitudinali 5 <mm>		
Elenco diametri ferri longitudinali 6 <mm>		
Elenco diametri ferri longitudinali 7 <mm>		
Max distanza fra i ferri su un lato <cm>	25.00	25.00
Min. interfero ammissibile <cm>	7.00	7.00
Distanza fra i ferri di spigolo <cm>	3.00	3.00
Min. numero ferri per pilastri circolari	8.00	8.00
Reggistaffe aggiuntivi sezioni non rettangolari	Si	Si
Fattore di riduzione $\tau_0$ per ancoraggio ferri	1.00	1.00
<b>Armatura a taglio</b>		
Elenco diametri staffe 1 <mm>	8	8
Elenco diametri staffe 2 <mm>	10	10
Elenco diametri staffe 3 <mm>	12	
Elenco diametri staffe 4 <mm>		
Elenco diametri staffe 5 <mm>		
Elenco diametri staffe 6 <mm>		
Elenco diametri staffe 7 <mm>		
Mantieni diametro costante nell'interpiano	Si	Si
Passi staffe	4.00	4.00
-Minimo <cm>	Si	Si
-Massimo <cm>	25.00	30.00
-Incremento <cm>	2.00	2.00
Tipo di minimizzazione staffatura		
-Minimizza il numero delle staffe		
-Minimizza il peso delle staffe	x	x
Max distanza fra ferri non collegati <cm>	20.00	20.00
Max numero ferri non collegati	2.00	2.00
Max distanza fra ferri nei nodi non collegati <cm>	10.00	7.00
Max numero ferri nei nodi non collegati	1.00	1.00
Collegamenti ferri		
Con spilli		
Con staffe rettangolari		
Con staffe poligonali	x	x
Ferri orizzontali pareti realizzati con staffe	No	No
<b>Quote di alleggerimento armature pilastri prefabbricati</b>		
Quota di alleggerimento n. 1 <m>	0.00	0.00
Quota di alleggerimento n. 2 <m>	0.00	0.00
Quota di alleggerimento n. 3 <m>	0.00	0.00
Quota di alleggerimento n. 4 <m>	0.00	0.00
Quota di alleggerimento n. 5 <m>	0.00	0.00
Quota di alleggerimento n. 6 <m>	0.00	0.00
Quota di alleggerimento n. 7 <m>	0.00	0.00
<b>Dati per progettazione interattiva sezioni</b>		
Distanza fra ferri su più strati <cm>	1.00	1.00
Integrare lo scorrimento lungo il tratto	Si	Si
-Lunghezza del tratto <m>	1.00	1.00
<b>Dati per progettazione agli stati limite</b>		
Gruppo di esigenza		
-Ambiente poco aggressivo	x	x
-Ambiente moderatamente aggressivo		
-Ambiente molto aggressivo		
Usa dominio N-M per flessioni rette	No	No
-Ricerca della sicurezza con sforzo normale costante		
-Ricerca della sicurezza con eccentricità costante		
Controllo rapporto X/D	No	No
Barre da considerare tese per verifiche a taglio		
-Solo le barre con deformazione percentuale rispetto alla barra più tesa non inferiore al <%>	30.00	30.00
-Tutte le barre in trazione		
<b>Dati per verifiche di resistenza al fuoco</b>		



-Tempo di verifica (REI) <minuti>	120.00	120.00
Dimensione MESH <cm>	2.00	2.00
-Passo di calcolo <secondi>	10.00	10.00
-Temperatura ambiente <C°>	20.00	20.00
-Coeff. di convezione a temperatura ambiente <W/mq K>	9.00	9.00
Calcestruzzo		
-Tipo di aggregati	SILICEI	SILICEI
Massa volumica a secco <daN/mc>	2300.00	2300.00
-Umidità iniziale <%>	3.00	3.00
-Fattore di interpolazione conducibilità	0.50	0.50
<b>Dati per verifiche FRP</b>		
Rinforzo longitudinale		
Tipo di fibra/resina		
-Vetro/Epossidica		
-Arammidica/Epossidica		
-Carbonio/Epossidica	x	x
Resistenza caratteristica ( $f_{fk}$ ) <daN/cm <sup>2</sup> >	49000.00	49000.00
Modulo elastico ( $E_c$ ) <daN/cm <sup>2</sup> >	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione ( $\epsilon_{fk}$ ) <%>	2.00	2.00
Spessore equivalente ( $t_f$ ) <mm>	0.17	0.17
Sistemi di rinforzo		
-Preformati		
-Impregnati in situ	x	x
Rinforzo trasversale		
Tipo di fibra/resina		
-Vetro/Epossidica		
-Arammidica/Epossidica		
-Carbonio/Epossidica	x	x
Resistenza caratteristica ( $f_{fk}$ ) <daN/cm <sup>2</sup> >	49000.00	49000.00
Modulo elastico ( $E_c$ ) <daN/cm <sup>2</sup> >	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione ( $\epsilon_{fk}$ ) <%>	2.00	2.00
Spessore equivalente ( $t_f$ ) <mm>	0.17	0.17
Sistemi di rinforzo		
-Preformati		
-Impregnati in situ	x	x
Trascura resistenza a taglio dei rinforzi	No	No
Modalità di carico		
-Lungo termine	x	x
-Ciclico		
Coeff. parziale di sicurezza per SLU di distacco ( $\gamma_{ed}$ )	1.50	1.50
Fattore di conversione ambientale ( $\eta_a$ )	0.95	0.95
Raggio di arrotondamento spigoli ( $r_c$ ) <cm>	2.00	2.00
Coeff. condizione di carico ( $K_d$ )	1.25	1.25
<b>Dati per verifiche incamiciature in acciaio non CAM</b>		
Resistenza di progetto strisce di collegamento ( $F_{yd}$ ) <daN/cm <sup>2</sup> >	2350.00	2350.00

**Travi in c.a.**

Generali	
<b>Parametri di progetto</b>	
Passo di progettazione <m>	0.30
Tipo di sollecitazioni zone rigide	Costanti
Min. angolo per spinte a vuoto <grad>	10.00
Invertire i ferri anche in presenza di pilastro sottostante	Si
Max differenza larghezza travi continue <cm>	5.00
Progetta a taglio con traliccio ad inclinazione variabile	Si
-Classe A	
-In zona critica limita ctg $\theta$ a	1.00
-In zona non critica limita ctg $\theta$ a	2.50
-Classe B	
-In zona critica limita ctg $\theta$ a	2.50
-In zona non critica limita ctg $\theta$ a	2.50
Verifiche a taglio per elementi esistenti come per elementi nuovi	Si
<b>Lunghezze e arrotondamenti</b>	
Max lunghezza barre <m>	12.00
Arrotondamento lunghezza ferri <cm>	10.00
Lunghezza ferri nei muri d'estremità <m>	1.20
Min. interferro ammissibile <cm>	2.00
Elenco diametri minimizzazione interferri <mm>	14 16 18 20 24



Riduzione ancoraggi	
-Nella zona compressa per flessione	No
-Nei punti inferiori della travata	Si
Considerare nel calcolo degli ancoraggi i risvolti specificati nei criteri generali di disegno	No
Risvoltare i ferri per garantire l'ancoraggio agli estremi della trave	No
<b>Reggistaffe</b>	
Interruzione reggistaffe in campata	No
Modalità di sovrapposizione reggistaffe	Per garantire la copertura del momento negativo
Modalità di unificazione reggistaffe	Solo se la geometria della travata e la lunghezza totale delle barre lo consentono
<b>Minimi di regolamento</b>	
Min. percentuale di regolamento	
-Per le travi di fondazione	No
-Per le travi di elevazione	Si
Min. di armatura a taglio	
-Per le travi di fondazione	No
-Per le travi di elevazione	No
Tipo di armatura per taglio (T.A.)	Mista
Controllo passo e 12Fi	Si
Min. di regolamento a torsione nell'ala	No
Min. di regolamento nell'ala	No
<b>Stampe</b>	
Verifiche a flessione in relazione	Minimizzate
Verifiche a taglio in relazione	Max scorrimento per taglio e torsione
<b>Parametri di disegno</b>	
Scala disegno travi	50.00
Scala disegno sezioni	25.00
Campitura sezioni	Fitta
Disegno sezione travi in falso	Si
Disegna sezioni	Si
Campitura travi in falso	Fitta
Campitura muri	Rada
Tipo di quotatura luci nette trave	Con riferimento ai pilastri superiori
Lunghezza monconi di pilastro	Minimizzata
Linee di riferimento quote	Si
Quotatura zone di staffatura	No
Quotatura zone di staffatura	No
Indicazione numero bracci staffe	Solo se il numero è maggiore di due
<b>Disegno ferri longitudinali</b>	
Disegno ferri dentro la trave	Si
Disegno esploso ferri di parete	No
Distanza fra ferri esplosi <cm>	0.10
Disegno reggistaffe aggiuntivi per travi a T e L	Reggistaffe aggiuntivi tipo 3
<b>Disegno staffe</b>	
Posizione staffe esterne	In automatico
Disegno staffe dentro la sezione	Si

Specifici	1	11
<b>Materiali</b>		
-Considera come elemento esistente	No	No
-Calcestruzzo		
-Livello di conoscenza	LC2	LC2
-Fattore di confidenza	1.20	1.20
-Tipo di calcestruzzo	C28/35	C28/35
-Rck calcestruzzo	350.00	350.00
-Modulo elastico <daN/cm <sup>2</sup> >	325881.00	325881.00
-Resistenza caratteristica cilindrica (Fck)	290.50	290.50
-Resistenza caratteristica a trazione (Fctk)	19.84	19.84
-Resistenza media (Fcm) <daN/cm <sup>2</sup> >	370.50	370.50
-Resistenza media a trazione (Fctm) <daN/cm <sup>2</sup> >	28.35	28.35
-σ amm. calcestruzzo <daN/cm <sup>2</sup> >	110.00	110.00
-τc0 <daN/cm <sup>2</sup> >	6.70	6.70
-τc1 <daN/cm <sup>2</sup> >	19.70	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si	Si
-γc per stati limite ultimi		
-Automatico	x	x



-Pari a		
-Acciaio		
-Livello di conoscenza	LC2	LC2
-Fattore di confidenza	1.20	1.20
-Tipo di acciaio	B450C	B450C
-Modulo elastico <daN/cm <sup>2</sup> >	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm <sup>2</sup> >	4500.00	4500.00
-Tensione media di snervamento (Fym) <daN/cm <sup>2</sup> >	4500.00	4500.00
-Sigma amm. acciaio <daN/cm <sup>2</sup> >	2600.00	2600.00
-Sigma amm. reti e tralicci <daN/cm <sup>2</sup> >	2600.00	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00	4.00
-γ <sub>s</sub> per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Coeff. di omogeneizzazione	15.00	15.00
<b>Parametri per analisi pushover</b>		
Numero fibre	200.00	200.00
Fattore di confinamento nucleo interno	1.00	1.00
Fattore di incrudimento acciaio <%>	0.10	0.10
<b>Parametri per verifiche di duttilità</b>		
Considera rotazione massima di esercizio per determinare SLO e SLD	No	No
Modalità di calcolo luce di taglio Lv		
-Lv=L/2	x	x
-Lv=M/V		
-Lv=Punto di nullo del momento flettente		
Capacità di rotazione alla corda al collasso		
-Formula C8A.6.1 con fattore di riduzione pari a		
-Formula C8A.6.5	x	x
Sforzo normale di verifica per analisi pushover		
-Gravitazionale		
-Dal calcolo	x	x
<b>Parametri di calcolo</b>		
Progetto a pressoflessione	Si	Si
-Per tutte le travi	x	
-Solo per travi inclinate		x
-Min. angolo per pressoflessione <grad>		10.00
-Compressione massima senza progetto a pressoflessione <%>	10.00	10.00
Progetto a torsione	No	No
-Trazione senza progetto a torsione<%>		
Armatura secondo Circ. 65 del 10/04/97	No	No
Parametri di progetto secondo il D.M. 18		
Elemento dissipativo	Si	Si
Trascura gerarchia	No	No
Elemento secondario	No	No
Sollecitazioni dissipative amplificate per elementi di fondazione	Si	Si
Escludi dal calcolo sovraresistenza per pilastri incidenti	No	No
Sollecitazioni complanari ad eventuali elementi bidimensionali	No	No
Copriferro teorico superiore <cm>	4.10	4.10
Copriferro teorico inferiore <cm>	4.10	4.10
Min. momento fittizio agli appoggi	No	No
-Denominatore		
Min. momento fittizio in campata	No	No
-Denominatore		
Incremento percentuale momento in campata <%>	10.00	10.00
Usa taglio max per traslazione momento (S.L.)	Si	Si
Limitare momento traslato al valore max di appoggio (S.L.)	No	No
Limitare momento traslato al valore max di campata (S.L.)	No	No
Taglio da momento resistente in fondazione (S.L.)	No	No
Tipo di progetto in doppia armatura (T.A.)		
-Tensioni pari ai valori amm.		
-Tensioni pari ai valori amm. con AfComp/AfTesa minore o pari a	1.00	1.00
-Con AfComp/AfTesa pari a		
<b>Parametri di progettazione armatura</b>		
Max differenza fra diametri per unificazioni	2.00	2.00
Max distanza fra barre per unificazioni <m>	1.00	1.00
Denominatore per individuazione zona di campata	32.00	32.00
Fattore di copertura appoggi (0÷1)	0.00	0.00
Fattore di riduzione per ancoraggio ferri	1.00	1.00
Minimizzazione momenti resistenti di appoggio (stati limite D.M. 18)	Si	Si
-Tolleranza di copertura da sovrapposizione <%>	10.00	10.00
Tipo di distribuzione armatura eccedente in fase di verifica		
-Ripartita proporzionalmente per flessione, torsione e taglio	x	x





-Tutta agente per flessione		
-Tutta agente per taglio		
<b>Armatura a flessione</b>		
Elenco diametri ferri longitudinali 1 <mm>	14	16
Elenco diametri ferri longitudinali 2 <mm>	16	18
Elenco diametri ferri longitudinali 3 <mm>	18	20
Elenco diametri ferri longitudinali 4 <mm>	20	
Elenco diametri ferri longitudinali 5 <mm>	24	
Elenco diametri ferri longitudinali 6 <mm>		
Elenco diametri ferri longitudinali 7 <mm>		
Max differenza fra diametri nella trave	8.00	4.00
Max differenza fra diametri ferri accoppiati	4.00	4.00
Reggistaffe superiori		
-Numero		
-Automatico		
-Pari a	2.00	4.00
-Max mutua distanza <cm>		
-Diametro		
-Automatico	x	x
-Pari a <mm>		
-Minimo <mm>		
Reggistaffe inferiori		
-Numero		
-Automatico		
-Pari a	2.00	4.00
-Max mutua distanza <cm>		
-Diametro		
-Automatico	x	x
-Pari a <mm>		
-Minimo <mm>		
<b>Armatura a taglio</b>		
Scorrimento (T.A.)		
-Percentuale assorbita dalle staffe <%>	100.00	100.00
-Percentuale assorbita dai ferri piegati <%>	0.00	0.00
-Percentuale assorbita dai ferri di parete <%>	0	0
-Considerare il valore relativo alle staffe come minimo percentuale da adottare	No	No
Variabilità staffe		
-Staffe uguali a passo costante		
-Staffe diverse in tre parti della trave in funzione delle zone critiche	x	x
-Staffe diverse in tre parti della trave in funzione di un multiplo dell'altezza pari a		
Variabilità staffe ala		
-Passi uguali a passi anima	x	x
-Passi multipli di passi anima		
-Passi indipendenti da passi anima		
Min. lunghezza tratto centrale come multiplo dell'altezza della trave	1.10	1.10
Elenco diametri staffe 1 <mm>	8	8
Elenco diametri staffe 2 <mm>	10	
Elenco diametri staffe 3 <mm>		10
Elenco diametri staffe 4 <mm>		
Elenco diametri staffe 5 <mm>		
Elenco diametri staffe 6 <mm>		
Elenco diametri staffe 7 <mm>		
Elenco numero bracci staffe 1	2	2
Elenco numero bracci staffe 2	4	4
Elenco numero bracci staffe 3		
Elenco numero bracci staffe 4		
Elenco numero bracci staffe 5		
Passi staffe		
-Minimo <cm>	4.00	4.00
-Massimo <cm>	32.00	32.00
-Incremento <cm>	4.00	4.00
Elementi costanti		
-Diametro	Si	Si
-Passo	No	No
-Bracci	Si	Si
Tipo di minimizzazione staffatura		
-Minimizza il numero delle staffe	x	x
-Minimizza il peso delle staffe		
Raffittimento staffe all'estremità della trave	No	No
-Passo non superiore a		
Lunghezza max del tratto di calcolo scorrimento		
-Pari al tratto in cui $\tau > \tau_{c0}$	x	x
-Pari a <cm>		



-Come multiplo dell'altezza pari a		
<b>Armatura a taglio e torsione</b>		
Elenco diametri ferri piegati 1 <mm>	12	12
Elenco diametri ferri piegati 2 <mm>	14	14
Elenco diametri ferri piegati 3 <mm>	16	16
Elenco diametri ferri piegati 4 <mm>	18	18
Elenco diametri ferri piegati 5 <mm>	20	20
Elenco diametri ferri piegati 6 <mm>		
Elenco diametri ferri piegati 7 <mm>		
Angolo di piegatura <grad>	45.00	45.00
Posizione primo punto di piegatura		
-Pari al multiplo dell'altezza		
-Distanza <cm>	5.00	5.00
Interasse punti di piegatura		
-Pari al multiplo dell'altezza		
-Distanza <cm>	25.00	25.00
Tipo di ferri piegati		
-Solo sagomati		
-Solo cavallotti		
-Sia sagomati che cavallotti	x	x
Ferri di parete	Si	Si
-Max distanza fra le barre <cm>	30.00	30.00
Elenco diametri ferri di parete 1 <mm>	12	12
Elenco diametri ferri di parete 2 <mm>	14	14
Elenco diametri ferri di parete 3 <mm>	16	16
Elenco diametri ferri di parete 4 <mm>	18	18
Elenco diametri ferri di parete 5 <mm>	20	20
Elenco diametri ferri di parete 6 <mm>		
Elenco diametri ferri di parete 7 <mm>		
Elenco diametri staffe orizzontali 1 <mm>	8	8
Elenco diametri staffe orizzontali 2 <mm>	10	10
Elenco diametri staffe orizzontali 3 <mm>		
Elenco diametri staffe orizzontali 4 <mm>		
Elenco diametri staffe orizzontali 5 <mm>		
Elenco diametri staffe orizzontali 6 <mm>		
Elenco diametri staffe orizzontali 7 <mm>		
<b>Parametri di disegno</b>		
Risolto ferri superiori	Si	Si
-Pari a <cm>		
-Pari all'altezza della trave	x	x
-Pari alla minima altezza delle travi incidenti		
Risolto ferri inferiori	Si	Si
-Pari a <cm>	25.00	
-Pari all'altezza della trave		x
-Pari alla minima altezza delle travi incidenti		
Risolto ferri laterali	Si	Si
-Pari a <cm>	25.00	25.00
-Pari alla larghezza della trave		
Magrone	Si	Si
-Allargamento laterale <cm>	0.00	0.00
-Altezza <cm>	20.00	20.00
<b>Dati per progettazione interattiva sezioni</b>		
Copriferro reale al bordo staffa <cm>	3.00	3.50
Diametro staffa teorica <mm>	8.00	8.00
Distanza fra ferri su più strati <cm>	1.00	1.00
Integrare lo scorrimento lungo il tratto	Si	Si
-Lunghezza del tratto <m>	1.00	1.00
<b>Dati per progettazione agli stati limite</b>		
Gruppo di esigenza		
-Ambiente poco aggressivo	x	x
-Ambiente moderatamente aggressivo		
-Ambiente molto aggressivo		
Usa dominio N-M per flessioni rette	Si	Si
-Ricerca della sicurezza con sforzo normale costante		
-Ricerca della sicurezza con eccentricità costante	x	x
Controllo rapporto X/D	Si	Si
Barre da considerare tese per verifiche a taglio		
-Solo le barre con deformazione percentuale rispetto alla barra più tesa non inferiore al <%>	30.00	30.00
-Tutte le barre in trazione		
<b>Dati per verifiche di resistenza al fuoco</b>		



-Tempo di verifica (REI) <minuti>	120.00	120.00
Dimensione MESH <cm>	2.00	2.00
-Passo di calcolo <secondi>	10.00	10.00
-Temperatura ambiente <C°>	20.00	20.00
-Coeff. di convezione a temperatura ambiente <W/mq K>	9.00	9.00
Calcestruzzo		
-Tipo di aggregati	SILICEI	SILICEI
Massa volumica a secco <daN/mc>	2300.00	2300.00
-Umidità iniziale <%>	3.00	3.00
-Fattore di interpolazione conducibilità	0.50	0.50
<b>Dati per verifiche FRP</b>		
Rinforzo longitudinale		
Tipo di fibra/resina		
-Vetro/Epossidica		
-Arammidica/Epossidica		
-Carbonio/Epossidica	x	x
Resistenza caratteristica ( $f_{fk}$ ) <daN/cmq>	49000.00	49000.00
Modulo elastico ( $E_c$ ) <daN/cmq>	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione ( $\epsilon_{fk}$ ) <%>	2.00	2.00
Spessore equivalente ( $t_f$ ) <mm>	0.17	0.17
Sistemi di rinforzo		
-Preformati		
-Impregnati in situ	x	x
Rinforzo trasversale		
Tipo di fibra/resina		
-Vetro/Epossidica		
-Arammidica/Epossidica		
-Carbonio/Epossidica	x	x
Resistenza caratteristica ( $f_{fk}$ ) <daN/cmq>	49000.00	49000.00
Modulo elastico ( $E_c$ ) <daN/cmq>	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione ( $\epsilon_{fk}$ ) <%>	2.00	2.00
Spessore equivalente ( $t_f$ ) <mm>	0.17	0.17
Sistemi di rinforzo		
-Preformati		
-Impregnati in situ	x	x
Modalità di carico		
-Lungo termine	x	x
-Ciclico		
Coeff. parziale SLU di distacco ( $\gamma_{fd}$ )	1.50	1.50
Fattore di conversione ambientale ( $\eta_a$ )	0.95	0.95
Raggio di arrotondamento spigoli ( $r_c$ ) <cm>	2.00	2.00
Coeff. condizione di carico ( $K_q$ )	1.25	1.25

## Pareti

<b>Generali</b>	
Verifiche a taglio per elementi esistenti come per elementi nuovi	Si
<b>Parametri di disegno</b>	
Scala disegno pareti	50.00
Campitura disegno parete	Rada
Disegno armatura diffusa	No
Disegno prospetto e pianta	Sempre
<b>Stampe</b>	
Tipo di relazione	Sintetica

<b>Specifici</b>		<b>1</b>
<b>Materiali</b>		
-Considera come elemento esistente		No
-Calcestruzzo		
-Livello di conoscenza		LC2
-Fattore di confidenza		1.20
-Tipo di calcestruzzo		C28/35
-Rck calcestruzzo		350.00
-Modulo elastico <daN/cmq>		325881.00
-Resistenza caratteristica cilindrica ( $F_{ck}$ )		290.50
-Resistenza caratteristica a trazione ( $F_{ctk}$ )		19.84
-Resistenza media ( $F_{cm}$ ) <daN/cmq>		370.50
-Resistenza media a trazione ( $F_{ctm}$ ) <daN/cmq>		28.35



- $\sigma$ amm. calcestruzzo <daN/cm <sup>2</sup> >	110.00
- $\tau_{c0}$ <daN/cm <sup>2</sup> >	6.70
- $\tau_{c1}$ <daN/cm <sup>2</sup> >	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si
- $\gamma_c$ per stati limite ultimi	
-Automatico	x
-Pari a	
-Acciaio	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di acciaio	B450C
-Modulo elastico <daN/cm <sup>2</sup> >	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm <sup>2</sup> >	4500.00
-Tensione media di snervamento (Fym) <daN/cm <sup>2</sup> >	4500.00
-Sigma amm. acciaio <daN/cm <sup>2</sup> >	2600.00
-Sigma amm. reti e tralicci <daN/cm <sup>2</sup> >	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00
- $\gamma_s$ per stati limite ultimi	
-Automatico	x
-Pari a	
-Coeff. di omogeneizzazione	15.00
<b>Parametri di calcolo</b>	
Elemento dissipativo	No
Copriferro <cm>	3.50
Fattore moltiplicativo per calcolo $\tau_l$	1.00
Fattore moltiplicativo per calcolo $\tau_t$	1.00
Fattore di riduzione per ancoraggio ferri	1.00
Lunghezza ancoraggi armature	
-Calcolata in funzione della $\sigma_f$	
-Imposta come multiplo del diametro	40.00
Lunghezza minima pari a <m>	0.90
-Inserire solo armatura al centro della parete	No
Modalità di progettazione e verifica armatura verticale	
-In funzione delle zone di incidenza elementi	
-In funzione delle sollecitazioni globali	x
-Inserisci armatura di rinforzo nelle zone di incidenza elementi	Si
-Dimensione minima zone di incidenza elementi	Si
-Pari a multiplo dello spessore	1.00
-Passo di verifica	1.50
-Trascura zone con pilastro inglobato	Si
-Effettuare verifiche nel piano della parete	No
-Elimina armatura diffusa nelle zone di rinforzo	Si
Elimina armatura diffusa nell'architrave	Si
-Effettuare verifiche su sezioni verticali	No
-Passo di verifica	1.00
Controllare resistenza a taglio trasversale come sezione priva di armatura a taglio	No
Min. Af armatura diffusa <cm <sup>2</sup> /m>	3.00
Considera come parete debolmente armata ai sensi D.M. 18	No
-Modalità di valutazione parametri nel caso di sisma diverso per X e Y	
-Usa valore massimo	x
-Componi in direzione parete	
-Incremento del 50% delle forze assiali	
Sempre	x
-Solo per analisi sismiche statiche	
-Mai	
Coeff. $\beta$ per controllo snellezza <m>	1.00
<b>Armatura diffusa</b>	
Considera armatura con rete elettrosaldata	No
Armatura verticale o rete	
Elenco diametri utilizzabili 1 <mm>	12
Elenco diametri utilizzabili 2 <mm>	
Elenco diametri utilizzabili 3 <mm>	
Elenco diametri utilizzabili 4 <mm>	
Elenco diametri utilizzabili 5 <mm>	
Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Passi utilizzabili	
-Minimo <cm>	15.00
-Massimo <cm>	25.00
-Incremento <cm>	5.00
-Modalità di completamento armatura	
-Adattata	x
-Terminata	



-Nessuna	
Armatura orizzontale	
Elenco diametri utilizzabili 1 <mm>	8
Elenco diametri utilizzabili 2 <mm>	10
Elenco diametri utilizzabili 3 <mm>	
Elenco diametri utilizzabili 4 <mm>	
Elenco diametri utilizzabili 5 <mm>	
Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Passi utilizzabili	
-Minimo <cm>	10.00
-Massimo <cm>	20.00
-Incremento <cm>	5.00
Tipo di armatura orizzontale	
-Dritta	
-Con risvolti di estremità	x
-Modalità di chiusura orizzontale	
-Nessuna chiusura	
-Chiusura con ferri ad U	x
-Chiusura con staffe	
-Lunghezza armatura di chiusura	
-Multiplo dello spessore pari a	
-Lunghezza fissa pari a <cm>	0.80
-Tipo di ottimizzazione armatura	
-Minimizza il peso complessivo dei ferri	x
-Minimizza il numero dei ferri	
<b>Armatura di rinforzo</b>	
Elenco diametri utilizzabili 1 <mm>	16
Elenco diametri utilizzabili 2 <mm>	
Elenco diametri utilizzabili 3 <mm>	
Elenco diametri utilizzabili 4 <mm>	
Elenco diametri utilizzabili 5 <mm>	
Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Numero minimo ferri	2.00
Interferro minimo <cm>	10.00
-Aggiungi staffe chiuse	Si
-Stesso diametro armatura diffusa orizzontale	x
-Diametro imposto	
-Stesso passo armatura diffusa orizzontale	x
-Passo imposto	
<b>Armatura secondaria</b>	
Diametro ferri di collegamento <mm>	6.00
Numero ferri di collegamento (a mq)	6.00
Lunghezza ancoraggio ferri di collegamento <cm>	10.00
<b>Dati per progettazione agli stati limite</b>	
Gruppo di esigenza	
-Ambiente poco aggressivo	x
-Ambiente moderatamente aggressivo	
-Ambiente molto aggressivo	
Usa dominio N-M per flessioni rette	No
-Ricerca della sicurezza con sforzo normale costante	
-Ricerca della sicurezza con eccentricità costante	
Controllo rapporto X/D	No
Barre da considerare tese per verifiche a taglio	
-Solo le barre con deformazione percentuale rispetto alla barra più tesa non inferiore al <%>	30.00
-Tutte le barre in trazione	

## Solette/Platee

Generali	
<b>Parametri di progetto</b>	
Controllo resistenza a taglio allo S.L.U. DM 96	No
Progetto e verifica con metodo d'integrazione	No
-Massima dimensione della linea d'integrazione	1.00
Calcolo armature con metodo di Wood	No
Accoppia pilastri per calcolo punzonamento	Si
-Massima distanza come un moltiplicatore dello spessore	1.50
Verifiche a taglio per elementi esistenti come per elementi nuovi	Si



Parametri di disegno	
Disposizione disegno	2A
Particolari nel disegno principale	
-Eliminare le quotature	No
-Eliminare le campiture	No
-Eliminare la numerazione dei pilastri	No
-Eliminare la numerazione delle travi e dei muri	No
Particolari nei disegni secondari	
-Eliminare le quotature	Si
-Eliminare le campiture	Si
-Eliminare la numerazione dei pilastri	Si
-Eliminare la numerazione delle travi e dei muri	Si
Disegno armatura diffusa	No
Posizione particolari punzonamento	In automatico
Copriferro per calcolo lunghezza ferri <cm>	3.50
Risvoltare al bordo i ferri	
-Inferiori	Si
-Superiori	Si
Lunghezza risvolti ferri al bordo	Pari all'altezza meno due volte il copriferro
Disegno particolare ferri al bordo	Si
Scala disegno particolare ferri al bordo	20.00
Calcolo lunghezza ferri semplificato	No
Stampe	
Tipo di relazione	Sintetica

Specifici	1	2
Materiali		
-Considera come elemento esistente	No	No
-Calcestruzzo		
-Livello di conoscenza	LC2	LC2
-Fattore di confidenza	1.20	1.20
-Tipo di calcestruzzo	C28/35	C28/35
-Rck calcestruzzo	350.00	350.00
-Modulo elastico <daN/cmq>	325881.00	325881.00
-Resistenza caratteristica cilindrica (Fck)	290.50	290.50
-Resistenza caratteristica a trazione (Fctk)	19.84	19.84
-Resistenza media (Fcm) <daN/cmq>	370.50	370.50
-Resistenza media a trazione (Fctm) <daN/cmq>	28.35	28.35
-σ amm. calcestruzzo <daN/cmq>	110.00	110.00
-τc0 <daN/cmq>	6.70	6.70
-τc1 <daN/cmq>	19.70	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si	Si
-γc per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Acciaio		
-Livello di conoscenza	LC2	LC2
-Fattore di confidenza	1.20	1.20
-Tipo di acciaio	B450C	B450C
-Modulo elastico <daN/cmq>	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cmq>	4500.00	4500.00
-Tensione media di snervamento (Fym) <daN/cmq>	4500.00	4500.00
-Sigma amm. acciaio <daN/cmq>	2600.00	2600.00
-Sigma amm. reti e tralicci <daN/cmq>	2600.00	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00	4.00
-γs per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Coeff. di omogeneizzazione	15.00	15.00
Parametri di calcolo		
Parametri di progetto secondo il D.M. 18		
-Elemento dissipativo	No	No
-Sollecitazioni dissipative amplificate per elementi di fondazione	Si	Si
Angolo d'armatura <grad>	0.00	0.00
Copriferro teorico superiore <cm>	4.00	3.00
Copriferro teorico inferiore <cm>	4.00	3.00
Tipo di progetto in doppia armatura		
-Tensione pari ai valori amm.		
-Tensione pari ai valori amm. con AfComp/AfTesa minore o pari a	1.00	1.00
-Tensione pari ai valori amm. con AfComp/AfTesa pari a		
Min. percentuale di regolamento		





-Platee di fondazione su suolo elastico	No	No
-Solette di elevazione	Si	Si
Controlla min. armatura di ripartizione	No	No
<b>Armatura a flessione</b>		
Elenco diametri utilizzabili 1 <mm>	12	12
Elenco diametri utilizzabili 2 <mm>	14	14
Elenco diametri utilizzabili 3 <mm>	16	16
Elenco diametri utilizzabili 4 <mm>		
Elenco diametri utilizzabili 5 <mm>		
Elenco diametri utilizzabili 6 <mm>		
Elenco diametri utilizzabili 7 <mm>		
Passi utilizzabili		
-Minimo <cm>	10.00	10.00
-Massimo <cm>	25.00	25.00
-Incremento <cm>	5.00	5.00
Uniformizzazione interassi armatura	No	No
-Sempre		
-Nella stessa direzione		
-Nella stessa posizione		
Uniformizzazione diametri armatura	No	No
-Sempre		
-Nella stessa direzione		
-Nella stessa posizione		
Tipo di ottimizzazione armatura a flessione		
-Minimizza il numero dei ferri		
-Minimizza il peso complessivo dei ferri	x	x
<b>Verifiche a taglio</b>		
-Escludi punti di verifica sotto piramidi di punzonamento	No	No
-Escludi punti di verifica sotto muri/bidimensionali	No	No
<b>Ancoraggi</b>		
Fattore di riduzione per ancoraggio ferri	1.00	1.00
Lunghezza ancoraggi armature		
-Calcolata in funzione della Sigmaf	x	x
-Imposta come multiplo del diametro		
Lunghezza ancoraggi ferri punzonamento		
-Calcolata in funzione della Sigmaf	x	x
-Imposta come multiplo del diametro		
<b>Armatura a punzonamento</b>		
Fattore di riduzione altezza soletta/platea	0.90	0.90
Modifica altezza soletta/platea	Si	No
Allargamento piastra pilastri in acciaio <cm>	5.00	5.00
Distanza dal bordo libero		
-Distanza come un moltiplicatore dello spessore	1.00	1.00
-Distanza imposta a <cm>		
Moltiplicatore altezza utile per valutare perimetro efficace (D.M. 18)	2.00	2.00
Tolleranza di posizionamento barre		
-Distanza come un moltiplicatore dello spessore	0.10	0.10
-Distanza imposta a <cm>		
Elenco diametri utilizzabili 1 <mm>	12	12
Elenco diametri utilizzabili 2 <mm>	14	14
Elenco diametri utilizzabili 3 <mm>	16	16
Elenco diametri utilizzabili 4 <mm>	18	18
Elenco diametri utilizzabili 5 <mm>	20	20
Elenco diametri utilizzabili 6 <mm>		
Elenco diametri utilizzabili 7 <mm>		
Passi utilizzabili		
-Minimo <cm>	10.00	10.00
-Massimo <cm>	20.00	20.00
-Incremento <cm>	2.00	2.00
Tipo di ottimizzazione armatura a punzonamento		
-Minimizza il numero dei ferri	x	x
-Minimizza il peso complessivo dei ferri		
<b>Dati per progettazione agli stati limite</b>		
Gruppo di esigenza		
-Ambiente poco aggressivo	x	x
-Ambiente moderatamente aggressivo		
-Ambiente molto aggressivo		
Usa dominio N-M per flessioni rette	No	No
-Ricerca della sicurezza con sforzo normale costante		
-Ricerca della sicurezza con eccentricità costante		
Controllo rapporto X/D	No	No



Barre da considerare tese per verifiche a taglio		
-Solo le barre con deformazione percentuale rispetto		
Incremento <*>	30.00	30.00
-Tutte le barre in trazione		

## Nuclei

Generali	
<b>Parametri di disegno</b>	
Scala disegno nuclei	25.00
Campitura disegno nucleo	Fitta
Quotatura	Si
<b>Armatura a taglio</b>	
Progetta a taglio con traliccio ad inclinazione variabile	Si
-Classe A	
-In zona critica limita ctg $\theta$ a	1.00
-In zona non critica limita ctg $\theta$ a	2.50
-Classe B	
-In zona critica limita ctg $\theta$ a	2.50
-In zona non critica limita ctg $\theta$ a	2.50
Verifiche a taglio per elementi esistenti come per elementi nuovi	No
<b>Stampe</b>	
Tipo di relazione	Sintetica

Specifici		1
<b>Materiali</b>		
-Considera come elemento esistente		No
-Calcestruzzo		
-Livello di conoscenza		LC2
-Fattore di confidenza		1.20
-Tipo di calcestruzzo		C28/35
-Rck calcestruzzo		350.00
-Modulo elastico <daN/cm <sup>2</sup> >		325881.00
-Resistenza caratteristica cilindrica (Fck)		290.50
-Resistenza caratteristica a trazione (Fctk)		19.84
-Resistenza media (Fcm) <daN/cm <sup>2</sup> >		370.50
-Resistenza media a trazione (Fctm) <daN/cm <sup>2</sup> >		28.35
- $\sigma$ amm. calcestruzzo <daN/cm <sup>2</sup> >		110.00
- $\tau_{c0}$ <daN/cm <sup>2</sup> >		6.70
- $\tau_{c1}$ <daN/cm <sup>2</sup> >		19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18		Si
- $\gamma_c$ per stati limite ultimi		
-Automatico		x
-Pari a		
-Acciaio		
-Livello di conoscenza		LC2
-Fattore di confidenza		1.20
-Tipo di acciaio		B450C
-Modulo elastico <daN/cm <sup>2</sup> >		2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm <sup>2</sup> >		4500.00
-Tensione media di snervamento (Fym) <daN/cm <sup>2</sup> >		4500.00
-Sigma amm. acciaio <daN/cm <sup>2</sup> >		2600.00
-Sigma amm. reti e tralicci <daN/cm <sup>2</sup> >		2600.00
-Allungamento per verifiche di duttilità (Agt) <*>		4.00
- $\gamma_s$ per stati limite ultimi		
-Automatico		x
-Pari a		
-Coeff. di omogeneizzazione		15.00
<b>Parametri di calcolo</b>		
Copriferro <cm>		3.00
Fattore moltiplicativo per calcolo $\tau_l$		1.00
Fattore moltiplicativo per calcolo $\tau_t$		1.00
Fattore di riduzione per ancoraggio ferri		0.70
Lunghezza ancoraggi armature		
-Calcolata in funzione della $\sigma_f$		
-Imposta come multiplo del diametro		40.00



Lunghezza minima pari a <m>	0.80
Rispetta prescrizioni relative alle pareti anche nei nuclei	Si
Considera pressoflessione retta per pareti isolate	Si
Armatura secondo Circ. 65 del 10/04/97	No
Conteggiare le riprese in elevazione	Si
Conteggiare le riprese in fondazione	Si
<b>Parametri di calcolo per il D.M. 18</b>	
Elemento dissipativo	Si
Inviluppo e traslazione dei momenti flettenti	
Sempre	
Solo per analisi sismiche statiche	
Mai	x
Usa diagramma linearizzato	No
Incremento del 50% delle forze assiali	
Sempre	
Solo per analisi sismiche statiche	
Mai	x
Incremento dello sforzo di taglio	
Nessun incremento	x
Incremento secondo espressioni 7.4.14 o 7.4.15	
Modalità di calcolo espressione	
-Considera valore imposto pari a	1.50
-Calcola considerando MRd/MEd pari a	
Inviluppo e traslazione sforzi di taglio	
Sempre	
Solo per analisi sismiche statiche	x
Mai	x
Modalità di ripartizione taglio di calcolo per pareti con fori	
In funzione delle sollecitazioni agenti nelle zone resistenti (con segno)	
In funzione delle sollecitazioni agenti nelle zone resistenti (in valore assoluto)	
In funzione delle aree delle zone resistenti	x
Modalità di valutazione parametri nel caso di sisma diverso per X e Y	
Usa valore massimo	
Componi in direzione parete	x
<b>Armatura di default</b>	
Diametro armatura verticale <mm>	14.00
Passo armatura verticale <cm>	20.00
Diametro armatura orizzontale <mm>	10.00
Passo armatura orizzontale <cm>	20.00
Modalità di completamento armatura verticale	
-Adattata	x
-Terminata	
-Nessuna	
Tipo di armatura orizzontale	
-Dritta	
-Con risvolti di estremità	
-A staffa chiusa	x
Armare le pareti corte con staffe	Si
-Se più corte di un multiplo dello spessore pari a	5.00
-Se più corte di <cm>	
<b>Armatura secondaria</b>	
Diametro ferri di collegamento <mm>	6.00
Numero ferri di collegamento (a mq)	9.00
Lunghezza ancoraggio ferri di collegamento <cm>	8.00
<b>Armatura di estremità</b>	
Modalità di chiusura estremi liberi delle pareti	
-Nessuna chiusura	
-Chiusura con ferri ad U	
-Chiusura con staffe	x
Lunghezza armatura di chiusura	
-Multiplo dello spessore pari a	1.50
-Lunghezza fissa pari a <cm>	
Modalità di chiusura estremi interni delle pareti	
-Nessuna chiusura	
-Chiusura con ferri ad U	
-Chiusura con staffe	x
Lunghezza armatura di chiusura	
-Multiplo dello spessore pari a	
-Lunghezza fissa pari a <cm>	0.50
<b>Dati per progettazione agli stati limite</b>	
Gruppo di esigenza	



-Ambiente poco aggressivo	x
-Ambiente moderatamente aggressivo	
-Ambiente molto aggressivo	
Usa dominio N-M per flessioni rette	No
-Ricerca della sicurezza con sforzo normale costante	
-Ricerca della sicurezza con eccentricità costante	
Controllo rapporto X/D	No
Barre da considerare tese per verifiche a taglio	
-Solo le barre con deformazione percentuale rispetto	
Diametro armatura orizzontale <%>	
-Tutte le barre in trazione	x

## Verifiche e armature travi

### Simbologia

Caso	= Caso di verifica
Xg	= Coordinata progressiva (dal primo nodo) in cui viene effettuato il progetto/verifica
CC	= Combinazione delle condizioni di carico elementari c = momento fittizio in campata a = momento fittizio agli appoggi TG = taglio da gerarchia delle resistenze TGND = taglio non dissipativo limitante la gerarchia T = momento traslato per taglio e = eccentricità aggiuntiva in caso di compressione o pressoflessione
TCC	= Tipo di combinazione di carico SLU = Stato limite ultimo SLU S = Stato limite ultimo (azione sismica) SLE R = Stato limite d'esercizio, combinazione rara SLE F = Stato limite d'esercizio, combinazione frequente SLE Q = Stato limite d'esercizio, combinazione quasi permanente SLD = Stato limite di danno SLV = Stato limite di salvaguardia della vita SLC = Stato limite di prevenzione del collasso SLO = Stato limite di operatività SLU I = Stato limite di resistenza al fuoco SND = Stato limite di salvaguardia della vita (non dissipativo)
In	= Codice identificativo della travata facente parte dell'inviluppo
El	= Elemento (asta) in cui viene effettuato il progetto/verifica (progressivo sul numero di aste)
Sez.	= Numero della sezione
Crit.	= Numero del criterio di progetto
X	= Coordinata progressiva rispetto al nodo iniziale
AfE S	= Area di ferro effettiva totale presente nel punto di verifica, superiore
AfE I	= Area di ferro effettiva totale presente nel punto di verifica, inferiore
AfEP S	= Area di ferro effettiva parziale presente nella CC considerata, per la sollecitazione indicata, superiore
AfEP I	= Area di ferro effettiva parziale presente nella CC considerata, per la sollecitazione indicata, inferiore
My	= Momento flettente intorno all'asse Y
MRdy	= Momento resistente allo stato limite ultimo intorno all'asse Y
Sic.	= Sicurezza a rottura
$\sigma_r$ sup	= Tensione nel ferro - superiore
$\sigma_r$ inf	= Tensione nel ferro - inferiore
$\sigma_c$	= Tensione nel calcestruzzo
X0	= Coordinata progressiva (dal nodo iniziale) dell'inizio del tratto
X1	= Coordinata progressiva (dal nodo iniziale) della fine del tratto
Lung.	= Lunghezza del tratto di progettazione
Staff.	= Staffatura adottata
AfE St.	= Area di ferro effettiva della staffatura (d'anima per travi a T o L)
bw	= Larghezza membratura resistente al taglio
Vsdu	= Taglio agente nella direzione del momento ultimo
ctg $\theta$	= Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo
VRsd	= Taglio ultimo lato armatura
VRcd	= Taglio ultimo lato calcestruzzo
Vrdu	= Taglio ultimo assorbibile dal solo calcestruzzo
Sic.T	= Sicurezza a rottura per taglio
c	= Ricoprimento dell'armatura
s	= Distanza minima tra le barre
K3	= Coefficiente di forma del diagramma delle tensioni prima della fessurazione
$s_{rm}$	= Distanza media tra le fessure
$\Phi$	= Diametro della barra
$A_s$	= Area complessiva dei ferri nell'area di calcestruzzo efficace
$A_{c\ eff}$	= Area di calcestruzzo efficace
$\sigma_s$	= Tensione nell'acciaio nella sezione fessurata
$\sigma_{sr}$	= Tensione nell'acciaio corrispondente al raggiungimento della resistenza a trazione nel calcestruzzo
$\epsilon_{sm}$	= Deformazione unitaria media dell'armatura (*1000)
Wk	= Apertura delle fessure
Tipo	= Tipologia 2C = Doppia C lato labbri 2Cdx = Doppia C lato costola 2I = Doppia I 2L = Doppia L lato labbri 2Ldx = Doppia L lato costole C = Sezione a C Cdx = C destra Cir. = Circolare Cir.c = Circolare cava I = Sezione a I L = Sezione a L Ldx = L destra Om. = Omega Pg = Pi greco Pr = Poligono regolare Prc = Poligono regolare cavo Pc = Per coordinate Ia = Inerzie assegnate R = Rettangolare



Rc = Rettangolare cava  
 T = Sezione a T  
 U = Sezione a U  
 Ur = U rovescia  
 V = Sezione a V  
 Vr = V rovescia  
 Z = Sezione a Z  
 Zdx = Z destra  
 Ts = T stondata  
 Ls = L stondata  
 Cs = C stondata  
 Is = I stondata  
 Dis. = Disegnata  
 B = Base  
 H = Altezza  
 Cf sup = Coprifermo superiore  
 Cf inf = Coprifermo inferiore  
 Cls = Tipo di calcestruzzo  
 Fck = Resistenza caratteristica cilindrica a compressione del calcestruzzo  
 Fctk = Resistenza caratteristica a trazione del calcestruzzo  
 Fcd = Resistenza di calcolo a compressione del calcestruzzo  
 Fctd = Resistenza di calcolo a trazione del calcestruzzo  
 Tp = Tipo di acciaio  
 Fyk = Tensione caratteristica di snervamento dell'acciaio  
 Fyd = Resistenza di calcolo dell'acciaio

### Travata n. 101

Nodi: 101 102 -1153 103 -1154 -1155 -1156 -1157 -1158 104 105 106 -1159

#### Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

#### Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	EI	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	1	15.00	5.09	5.09	5.09	5.09	-3558.72	-8722.72	2.451
1.65	17	SLU	1	165.00	5.09	5.09	5.09	5.09	4586.91	8722.72	1.902
4.05	17	SLU	1	405.00	5.09	5.09	5.09	5.09	-7669.13	-8722.72	1.137
4.75	17	SLU	2	35.00	5.09	5.09	5.09	5.09	-5719.16	-8722.72	1.525
6.61	17	SLU	3	56.39	10.18	5.09	10.18	5.09	3174.76	8720.68	2.747
8.71	17	SLU	3	266.00	5.09	5.09	5.09	5.09	-3187.75	-8722.72	2.736
9.41	17	SLU	4	12.00	5.09	5.09	5.09	5.09	-5042.07	-8722.72	1.730
14.25	17	SLU	9	82.00	5.09	5.09	5.09	5.09	-3091.60	-8722.72	2.821
14.95	17	SLU	10	58.00	5.09	5.09	5.09	5.09	-2817.18	-8722.72	3.096
16.18	17	SLU	10	181.33	5.09	5.09	5.09	5.09	3103.90	8722.72	2.810
18.65	17	SLU	10	428.00	5.09	9.42	5.09	9.42	-5759.38	-8720.86	1.514
19.35	17	SLU	11	35.00	5.09	9.42	5.09	9.42	-3318.09	-8720.86	2.628
20.55	17	SLU	11	155.33	5.09	9.42	5.09	9.42	2357.33	15794.10	6.700
22.96	17	SLU	11	396.00	5.09	9.42	5.09	9.42	-5456.10	-8720.86	1.598
23.26	17	SLU	12	15.00	5.09	9.42	5.09	9.42	9768.00	15794.10	1.617
24.29	17	SLU	12	118.00	5.09	9.42	5.09	9.42	-2175.89	-8720.86	4.008

#### Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	EI	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>
0.15	18	SLE R	1	15.00	5.09	5.09	-2445.03	1144.74	-252.54	25.97
0.15	20	SLE Q	1	15.00	5.09	5.09	-2205.08	1032.39	-227.76	23.42
1.65	18	SLE R	1	165.00	5.09	5.09	3203.87	-330.92	1500.02	34.03
1.65	20	SLE Q	1	165.00	5.09	5.09	2786.09	-287.77	1304.42	29.60
4.05	18	SLE R	1	405.00	5.09	5.09	-5377.98	2517.91	-555.48	57.13
4.05	20	SLE Q	1	405.00	5.09	5.09	-4639.48	2172.15	-479.20	49.28
4.75	18	SLE R	2	35.00	5.09	5.09	-4006.41	1875.76	-413.82	42.56
4.75	20	SLE Q	2	35.00	5.09	5.09	-3607.76	1689.11	-372.64	38.32
6.61	18	SLE R	3	56.39	10.18	5.09	2218.75	-191.53	1034.29	20.78
6.61	20	SLE Q	3	56.39	10.18	5.09	2023.76	-174.70	943.39	18.96
8.71	18	SLE R	3	266.00	5.09	5.09	-2250.17	1053.50	-232.42	23.90
8.71	20	SLE Q	3	266.00	5.09	5.09	-1923.07	900.36	-198.63	20.43
9.41	18	SLE R	4	12.00	5.09	5.09	-3506.60	1641.75	-362.19	37.25
9.41	20	SLE Q	4	12.00	5.09	5.09	-3206.50	1501.25	-331.19	34.06
14.25	18	SLE R	9	82.00	5.09	5.09	-2198.22	1029.18	-227.05	23.35
14.25	20	SLE Q	9	82.00	5.09	5.09	-1749.66	819.17	-180.72	18.59
14.95	18	SLE R	10	58.00	5.09	5.09	-1987.91	930.72	-205.33	21.12
14.95	20	SLE Q	10	58.00	5.09	5.09	-1793.13	839.52	-185.21	19.05
16.18	18	SLE R	10	181.33	5.09	5.09	2159.20	-223.02	1010.91	22.94
16.18	20	SLE Q	10	181.33	5.09	5.09	1984.11	-204.94	928.94	21.08
18.65	18	SLE R	10	428.00	5.09	9.42	-3994.18	1862.77	-353.56	38.06
18.65	20	SLE Q	10	428.00	5.09	9.42	-3659.50	1706.69	-323.94	34.87
19.35	18	SLE R	11	35.00	5.09	9.42	-2348.10	1095.09	-207.85	22.38
19.35	20	SLE Q	11	35.00	5.09	9.42	-2199.62	1025.84	-194.71	20.96



20.55	18	SLE R	11	155.33	5.09	9.42	1640.57	-154.22	424.43	14.07
20.55	20	SLE Q	11	155.33	5.09	9.42	1513.72	-142.29	391.62	12.98
22.96	18	SLE R	11	396.00	5.09	9.42	-3766.66	1756.66	-333.42	35.90
22.96	20	SLE Q	11	396.00	5.09	9.42	-3373.86	1573.47	-298.65	32.15
23.26	18	SLE R	12	15.00	5.09	9.42	6849.07	-643.83	1771.93	58.72
23.26	20	SLE Q	12	15.00	5.09	9.42	6298.47	-592.07	1629.49	54.00
24.29	18	SLE R	12	118.00	5.09	9.42	2752.13	-258.71	712.01	23.59
24.29	20	SLE Q	12	118.00	5.09	9.42	2506.23	-235.59	648.39	21.49

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	s <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c</sub> eff <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
35	0.15	20	SLE Q	1	6	1	15.00	-2205.08	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1032.39	2415.87	0.20	0.07
37	0.15	19	SLE F	1	6	1	15.00	-2273.64	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1064.49	2415.87	0.21	0.08
57	1.65	20	SLE Q	1	6	1	165.00	2786.09	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1304.42	2415.87	0.25	0.09
58	1.65	19	SLE F	1	6	1	165.00	2905.41	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1360.28	2415.87	0.26	0.10
78	4.05	20	SLE Q	1	6	1	405.00	-4639.48	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2172.15	2415.87	0.42	0.15
79	4.05	19	SLE F	1	6	1	405.00	-4850.48	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2270.94	2415.87	0.48	0.17
99	4.75	20	SLE Q	2	6	1	35.00	-3607.76	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1689.11	2415.87	0.33	0.12
100	4.75	19	SLE F	2	6	1	35.00	-3721.66	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1742.44	2415.87	0.34	0.12
120	6.61	20	SLE Q	3	6	1	56.39	2023.76	32.00	218.00	0.17	216.90	18.00	5.09	455.32	943.39	2514.77	0.18	0.07
121	6.61	19	SLE F	3	6	1	56.39	2079.19	32.00	218.00	0.17	216.90	18.00	5.09	455.32	969.23	2514.77	0.19	0.07
150	8.71	20	SLE Q	3	6	1	266.00	-1923.07	32.00	218.00	0.17	214.99	18.00	5.09	455.32	900.36	2415.87	0.17	0.06
152	8.71	19	SLE F	3	6	1	266.00	-2016.52	32.00	218.00	0.17	214.99	18.00	5.09	455.32	944.11	2415.87	0.18	0.07
192	9.41	20	SLE Q	4	6	1	12.00	-3206.50	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1501.25	2415.87	0.29	0.11
194	9.41	19	SLE F	4	6	1	12.00	-3292.24	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1541.39	2415.87	0.30	0.11
215	14.25	20	SLE Q	9	6	1	82.00	-1749.66	32.00	218.00	0.17	214.99	18.00	5.09	455.32	819.17	2415.87	0.16	0.06
216	14.25	19	SLE F	9	6	1	82.00	-1877.82	32.00	218.00	0.17	214.99	18.00	5.09	455.32	879.17	2415.87	0.17	0.06
250	14.95	20	SLE Q	10	6	1	58.00	-1793.13	32.00	218.00	0.17	214.99	18.00	5.09	455.32	839.52	2415.87	0.16	0.06
252	14.95	19	SLE F	10	6	1	58.00	-1848.78	32.00	218.00	0.17	214.99	18.00	5.09	455.32	865.58	2415.87	0.17	0.06
272	16.18	20	SLE Q	10	6	1	181.33	1984.11	32.00	218.00	0.17	214.99	18.00	5.09	455.32	928.94	2415.87	0.18	0.07
273	16.18	19	SLE F	10	6	1	181.33	2034.13	32.00	218.00	0.17	214.99	18.00	5.09	455.32	952.36	2415.87	0.18	0.07
293	18.65	20	SLE Q	10	6	1	428.00	-3659.50	32.00	218.00	0.17	216.63	18.00	5.09	455.32	1706.69	2500.79	0.33	0.12
294	18.65	19	SLE F	10	6	1	428.00	-3755.12	32.00	218.00	0.17	216.63	18.00	5.09	455.32	1751.28	2500.79	0.34	0.13
319	19.35	20	SLE Q	11	6	1	35.00	-2199.62	32.00	218.00	0.17	216.63	18.00	5.09	455.32	1025.84	2500.79	0.20	0.07
320	19.35	19	SLE F	11	6	1	35.00	-2242.04	32.00	218.00	0.17	216.63	18.00	5.09	455.32	1045.62	2500.79	0.20	0.07
346	20.55	20	SLE Q	11	6	1	155.33	1513.72	31.00	109.00	0.16	154.28	20.00	9.42	529.56	391.62	1477.96	0.08	0.02
347	20.55	19	SLE F	11	6	1	155.33	1549.90	31.00	109.00	0.16	154.28	20.00	9.42	529.56	400.98	1477.96	0.08	0.02
368	22.96	20	SLE Q	11	6	1	396.00	-3373.86	32.00	218.00	0.17	216.63	18.00	5.09	455.32	1573.47	2500.79	0.31	0.11
369	22.96	19	SLE F	11	6	1	396.00	-3486.09	32.00	218.00	0.17	216.63	18.00	5.09	455.32	1625.81	2500.79	0.32	0.12
389	23.26	20	SLE Q	12	6	1	15.00	6298.47	31.00	109.00	0.16	154.28	20.00	9.42	529.56	1629.49	1477.96	0.47	0.12
390	23.26	19	SLE F	12	6	1	15.00	6455.78	31.00	109.00	0.16	154.28	20.00	9.42	529.56	1670.18	1477.96	0.49	0.13
429	24.29	20	SLE Q	12	6	1	118.00	-1415.72	32.00	218.00	0.17	216.63	18.00	5.09	455.32	660.25	2500.79	0.13	0.05
431	24.29	19	SLE F	12	6	1	118.00	-1446.31	32.00	218.00	0.17	216.63	18.00	5.09	455.32	674.52	2500.79	0.13	0.05

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <mm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdud <daN>	Sic.T
17 SLU	0.15	0.65	0.50	ø8/ 8 2 br.	12.57	0.30	8868.81	2.01	40736.00	40736.00	40736.00	4.59
17 SLU	0.65	3.55	2.90	ø8/20 2 br.	5.03	0.30	8432.39	2.50	20313.30	35174.00	20313.30	2.41
17 SLU	3.55	4.05	0.50	ø8/ 8 2 br.	12.57	0.30	10976.70	2.01	40736.00	40736.00	40736.00	3.71
17 SLU	4.75	5.25	0.50	ø8/ 8 2 br.	12.57	0.30	8722.64	2.01	40736.00	40736.00	40736.00	4.67
17 SLU	5.25	8.21	2.96	ø8/20 2 br.	5.03	0.30	6124.85	2.50	20313.30	35174.00	20313.30	3.32
17 SLU	8.21	8.71	0.50	ø8/ 8 2 br.	12.57	0.30	7112.07	2.01	40736.00	40736.00	40736.00	5.73
17 SLU	9.41	9.91	0.50	ø8/ 8 2 br.	12.57	0.30	13413.00	2.01	40736.00	40736.00	40736.00	3.04
17 SLU	9.91	13.75	3.84	ø8/20 2 br.	5.03	0.30	13413.00	2.50	20313.30	35174.00	20313.30	1.51
17 SLU	13.75	14.25	0.50	ø8/ 8 2 br.	12.57	0.30	4891.65	2.01	40736.00	40736.00	40736.00	8.33
17 SLU	14.95	15.45	0.50	ø8/ 8 2 br.	12.57	0.30	6808.15	2.01	40736.00	40736.00	40736.00	5.98
17 SLU	15.45	18.15	2.70	ø8/20 2 br.	5.03	0.30	6343.55	2.50	20313.30	35174.00	20313.30	3.20
17 SLU	18.15	18.65	0.50	ø8/ 8 2 br.	12.57	0.30	8398.53	2.01	40736.00	40736.00	40736.00	4.85
17 SLU	19.35	19.85	0.50	ø8/ 8 2 br.	12.57	0.30	6594.54	2.01	40736.00	40736.00	40736.00	6.18
17 SLU	19.85	22.46	2.61	ø8/20 2 br.	5.03	0.30	5788.21	2.50	20313.30	35174.00	20313.30	3.51
17 SLU	22.46	22.96	0.50	ø8/ 8 2 br.	12.57	0.30	7779.03	2.01	40736.00	40736.00	40736.00	5.24
17 SLU	23.26	24.29	1.03	ø6/ 8 2 br.	7.07	0.30	11486.40	2.50	28565.50	35174.00	28565.50	2.49

## Travata n. 102

Nodi: 107 108 109 -1170 -1171 -1172 -1173 -1174 110 111 112

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	1	15.00	5.09	5.09	5.09	5.09	-4565.81	-8722.72	1.910
1.65	17	SLU	1	165.00	5.09	5.09	5.09	5.09	5660.25	8722.72	1.541



4.05	17	SLU	1	405.00	8.23	5.09	8.23	5.09	-9870.70	-13858.80	1.404
4.75	17	SLU	2	35.00	8.23	5.09	8.23	5.09	-12954.00	-13858.80	1.070
6.58	17	SLU	2	218.23	5.09	5.09	5.09	5.09	6284.23	8722.72	1.388
8.72	17	SLU	2	432.00	5.09	5.09	5.09	5.09	-4064.48	-8722.72	2.146
9.42	17	SLU	3	13.00	5.09	5.09	5.09	5.09	-4323.16	-8722.72	2.018
11.41	17	SLU	5	42.33	5.09	5.09	5.09	5.09	2142.67	8722.72	4.071
14.24	17	SLU	8	71.67	5.09	5.09	5.09	5.09	-5344.13	-8722.72	1.632
14.94	17	SLU	9	57.00	5.09	5.09	5.09	5.09	-2791.03	-8722.72	3.125
16.18	17	SLU	9	180.67	5.09	5.09	5.09	5.09	5188.85	8722.72	1.681
18.65	17	SLU	9	428.00	8.29	5.09	8.29	5.09	-11036.00	-13961.00	1.265
19.35	17	SLU	10	35.00	8.29	5.09	8.29	5.09	-6004.51	-13961.00	2.325
20.85	17	SLU	10	185.42	6.28	5.09	6.28	5.09	4861.17	8722.09	1.794
22.96	17	SLU	10	396.00	6.28	5.09	6.28	5.09	-6827.71	-10680.40	1.564

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>
0.15	18	SLE R	1	15.00	5.09	5.09	-3149.55	1474.59	-325.31	33.46
0.15	20	SLE Q	1	15.00	5.09	5.09	-2877.12	1347.04	-297.17	30.56
1.65	18	SLE R	1	165.00	5.09	5.09	3966.79	-409.72	1857.21	42.14
1.65	20	SLE Q	1	165.00	5.09	5.09	3495.45	-361.04	1636.53	37.13
4.05	18	SLE R	1	405.00	8.23	5.09	-6925.37	2039.98	-666.01	62.10
4.05	20	SLE Q	1	405.00	8.23	5.09	-6060.88	1785.33	-582.87	54.34
4.75	18	SLE R	2	35.00	8.23	5.09	-9122.88	2587.29	-877.34	81.80
4.75	20	SLE Q	2	35.00	8.23	5.09	-8155.37	2402.30	-784.30	73.12
6.58	18	SLE R	2	218.23	5.09	5.09	4392.21	-453.66	2056.38	46.66
6.58	20	SLE Q	2	218.23	5.09	5.09	3929.67	-405.89	1839.83	41.74
8.72	18	SLE R	2	432.00	5.09	5.09	-2747.45	1286.33	-283.78	29.19
8.72	20	SLE Q	2	432.00	5.09	5.09	-2394.23	1120.95	-247.30	25.43
9.42	18	SLE R	3	13.00	5.09	5.09	-3149.76	1474.68	-325.33	33.46
9.42	20	SLE Q	3	13.00	5.09	5.09	-2611.09	1222.49	-269.69	27.74
11.41	18	SLE R	5	42.33	5.09	5.09	1576.30	-162.81	738.01	16.74
11.41	20	SLE Q	5	42.33	5.09	5.09	1259.33	-130.07	589.61	13.38
14.24	18	SLE R	8	71.67	5.09	5.09	-3832.64	1794.40	-395.87	40.71
14.24	20	SLE Q	8	71.67	5.09	5.09	-3205.91	1500.97	-331.13	34.06
14.94	18	SLE R	9	57.00	5.09	5.09	-1920.10	898.97	-198.32	20.40
14.94	20	SLE Q	9	57.00	5.09	5.09	-1631.37	763.79	-168.50	17.33
16.18	18	SLE R	9	180.67	5.09	5.09	3629.57	-374.89	1699.32	38.56
16.18	20	SLE Q	9	180.67	5.09	5.09	3229.02	-333.52	1511.79	34.30
18.65	18	SLE R	9	428.00	8.29	5.09	-7747.63	2265.60	-744.15	69.29
18.65	20	SLE Q	9	428.00	8.29	5.09	-6918.89	2023.25	-664.55	61.88
19.35	18	SLE R	10	35.00	8.29	5.09	-4192.81	1226.08	-402.71	37.50
19.35	20	SLE Q	10	35.00	8.29	5.09	-3925.25	1147.84	-377.02	35.11
20.85	18	SLE R	10	185.42	6.28	5.09	3391.92	-335.18	1585.95	34.91
20.85	20	SLE Q	10	185.42	6.28	5.09	3024.92	-298.91	1414.35	31.13
22.96	18	SLE R	10	396.00	6.28	5.09	-4743.03	1811.56	-475.88	46.68
22.96	20	SLE Q	10	396.00	6.28	5.09	-4055.11	1548.82	-406.86	39.91

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	$S_{rm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_c$ eff <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
36	0.15	20	SLE Q	1	6	1	15.00	-2877.12	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1347.04	2415.87	0.26	0.10
38	0.15	19	SLE F	1	6	1	15.00	-2954.96	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1383.48	2415.87	0.27	0.10
58	1.65	20	SLE Q	1	6	1	165.00	3495.45	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1636.53	2415.87	0.32	0.12
59	1.65	19	SLE F	1	6	1	165.00	3630.07	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1699.56	2415.87	0.33	0.12
79	4.05	20	SLE Q	1	6	1	405.00	-6060.88	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1785.33	1638.16	0.50	0.14
80	4.05	19	SLE F	1	6	1	405.00	-6307.88	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1858.09	1638.16	0.55	0.15
100	4.75	20	SLE Q	2	6	1	35.00	-8155.37	31.00	109.00	0.16	161.14	20.00	8.23	504.93	2402.30	1638.16	0.90	0.25
101	4.75	19	SLE F	2	6	1	35.00	-8431.80	31.00	109.00	0.16	161.14	20.00	8.23	504.93	2483.72	1638.16	0.94	0.26
121	6.58	20	SLE Q	2	6	1	218.23	3929.67	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1839.83	2415.87	0.36	0.13
122	6.58	19	SLE F	2	6	1	218.23	4061.81	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1901.69	2415.87	0.37	0.13
161	8.72	20	SLE Q	2	6	1	432.00	-2394.23	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1120.95	2415.87	0.22	0.08
163	8.72	19	SLE F	2	6	1	432.00	-2495.15	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1168.20	2415.87	0.23	0.08
184	9.42	20	SLE Q	3	6	1	13.00	-2611.09	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1222.49	2415.87	0.24	0.09
185	9.42	19	SLE F	3	6	1	13.00	-2765.00	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1294.54	2415.87	0.25	0.09
205	11.41	20	SLE Q	5	6	1	42.33	1259.33	32.00	218.00	0.17	214.99	18.00	5.09	455.32	589.61	2415.87	0.11	0.04
206	11.41	19	SLE F	5	6	1	42.33	1349.70	32.00	218.00	0.17	214.99	18.00	5.09	455.32	631.91	2415.87	0.12	0.04
226	14.24	20	SLE Q	8	6	1	71.67	-3205.91	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1500.97	2415.87	0.29	0.11
227	14.24	19	SLE F	8	6	1	71.67	-3384.97	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1584.81	2415.87	0.31	0.11
267	14.94	20	SLE Q	9	6	1	57.00	-1631.37	32.00	218.00	0.17	214.99	18.00	5.09	455.32	763.79	2415.87	0.15	0.05
269	14.94	19	SLE F	9	6	1	57.00	-1713.86	32.00	218.00	0.17	214.99	18.00	5.09	455.32	802.41	2415.87	0.16	0.06
289	16.18	20	SLE Q	9	6	1	180.67	3229.02	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1511.79	2415.87	0.29	0.11
290	16.18	19	SLE F	9	6	1	180.67	3343.37	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1565.33	2415.87	0.30	0.11
310	18.65	20	SLE Q	9	6	1	428.00	-6918.89	31.00	109.00	0.16	161.01	20.00	8.29	508.05	2023.25	1628.59	0.66	0.18
311	18.65	19	SLE F	9	6	1	428.00	-7155.68	31.00	109.00	0.16	161.01	20.00	8.29	508.05	2092.50	1628.59	0.71	0.19
331	19.35	20	SLE Q	10	6	1	35.00	-3925.25	31.00	109.00	0.16	161.01	20.00	8.29	508.05	1147.84	1628.59	0.22	0.06
332	19.35	19	SLE F	10	6	1	35.00	-4001.70	31.00	109.00	0.16	161.01	20.00	8.29	508.05	1170.20	1628.59	0.23	0.06
352	20.85	20	SLE Q	10	6	1	185.42	3024.92	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1414.35	2440.03	0.27	0.10





353	20.85	19	SLE F	10	6	1	185.42	3129.48	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1463.24	2440.03	0.28	0.10
373	22.96	20	SLE Q	10	6	1	396.00	-4055.11	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1548.82	2029.24	0.30	0.11
374	22.96	19	SLE F	10	6	1	396.00	-4251.66	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1623.89	2029.24	0.32	0.11

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17 SLU	0.15	0.65	0.50	ø8/ 8 2 br.	12.57	0.30	11173.10	2.01	40736.00	40736.00	40736.00	3.65
17 SLU	0.65	3.55	2.90	ø8/20 2 br.	5.03	0.30	10679.90	2.50	20313.30	35174.00	20313.30	1.90
17 SLU	3.55	4.05	0.50	ø8/ 8 2 br.	12.57	0.30	13893.60	2.01	40736.00	40736.00	40736.00	2.93
17 SLU	4.75	5.25	0.50	ø8/ 8 2 br.	12.57	0.30	16209.90	2.01	40736.00	40736.00	40736.00	2.51
17 SLU	5.25	8.22	2.97	ø8/20 2 br.	5.03	0.30	12690.80	2.50	20313.30	35174.00	20313.30	1.60
17 SLU	8.22	8.72	0.50	ø8/ 8 2 br.	12.57	0.30	11731.60	2.01	40736.00	40736.00	40736.00	3.47
17 SLU	9.42	9.92	0.50	ø8/ 8 2 br.	12.57	0.30	4656.68	2.01	40736.00	40736.00	40736.00	8.75
17 SLU	9.92	13.74	3.82	ø8/20 2 br.	5.03	0.30	4285.29	2.50	20313.30	35174.00	20313.30	4.74
17 SLU	13.74	14.24	0.50	ø8/ 8 2 br.	12.57	0.30	4994.90	2.01	40736.00	40736.00	40736.00	8.16
17 SLU	14.94	15.44	0.50	ø8/ 8 2 br.	12.57	0.30	9910.34	2.01	40736.00	40736.00	40736.00	4.11
17 SLU	15.44	18.15	2.71	ø8/20 2 br.	5.03	0.30	11084.70	2.50	20313.30	35174.00	20313.30	1.83
17 SLU	18.15	18.65	0.50	ø8/ 8 2 br.	12.57	0.30	14355.00	2.01	40736.00	40736.00	40736.00	2.84
17 SLU	19.35	19.85	0.50	ø8/ 8 2 br.	12.57	0.30	11773.60	2.01	40736.00	40736.00	40736.00	3.46
17 SLU	19.85	22.46	2.61	ø8/20 2 br.	5.03	0.30	8905.05	2.50	20313.30	35174.00	20313.30	2.28
17 SLU	22.46	22.96	0.50	ø8/ 8 2 br.	12.57	0.30	12229.60	2.01	40736.00	40736.00	40736.00	3.33

## Travata n. 103

Nodi: 113 114 115 -1236 -1237 116 117 118

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfeP S <cmq>	AfeP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	1	15.00	5.09	5.09	5.09	5.09	-4596.01	-8722.72	1.898
1.65	17	SLU	1	165.00	5.09	5.09	5.09	5.09	4577.42	8722.72	1.906
4.05	17	SLU	1	405.00	6.63	5.09	6.63	5.09	-7458.98	-11245.50	1.508
4.75	17	SLU	2	35.00	6.63	5.09	6.63	5.09	-10113.70	-11245.50	1.112
6.62	17	SLU	2	222.07	5.09	5.09	5.09	5.09	5472.77	8722.72	1.594
9.12	17	SLU	2	471.50	5.09	5.09	5.09	5.09	-6071.22	-8722.72	1.437
9.41	17	SLU	3	12.50	5.09	5.09	5.09	5.09	-7378.80	-8722.72	1.182
11.70	17	SLU	3	240.64	5.09	5.09	5.09	5.09	3465.53	8722.72	2.517
14.24	17	SLU	5	56.00	5.09	5.09	5.09	5.09	-6565.71	-8722.72	1.329
14.54	17	SLU	6	17.50	5.09	5.09	5.09	5.09	-5387.65	-8722.72	1.619
16.12	17	SLU	6	175.38	5.09	5.09	5.09	5.09	4670.06	8722.72	1.868
18.65	17	SLU	6	428.00	6.28	5.09	6.28	5.09	-8981.09	-10680.40	1.189
19.35	17	SLU	7	35.00	6.28	5.09	6.28	5.09	-4352.21	-10680.40	2.454
20.55	17	SLU	7	155.33	6.28	5.09	6.28	5.09	3735.44	8722.09	2.335
22.96	17	SLU	7	396.00	6.28	5.09	6.28	5.09	-5990.09	-10680.40	1.783

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cm²>	σ <sub>f</sub> inf <daN/cm²>	σ <sub>c</sub> <daN/cm²>
0.15	18	SLE R	1	15.00	5.09	5.09	-3186.88	1492.06	-329.17	33.85
0.15	20	SLE Q	1	15.00	5.09	5.09	-2776.99	1300.16	-286.83	29.50
1.65	18	SLE R	1	165.00	5.09	5.09	3194.03	-329.91	1495.41	33.93
1.65	20	SLE Q	1	165.00	5.09	5.09	2790.37	-288.21	1306.42	29.64
4.05	18	SLE R	1	405.00	6.63	5.09	-5215.56	1891.85	-519.12	50.37
4.05	20	SLE Q	1	405.00	6.63	5.09	-4573.67	1659.01	-455.23	44.17
4.75	18	SLE R	2	35.00	6.63	5.09	-7131.31	2586.75	-709.80	68.88
4.75	20	SLE Q	2	35.00	6.63	5.09	-6321.33	2292.94	-629.18	61.05
6.62	18	SLE R	2	222.07	5.09	5.09	3816.25	-394.17	1786.72	40.54
6.62	20	SLE Q	2	222.07	5.09	5.09	3338.45	-344.82	1563.02	35.46
9.12	18	SLE R	2	471.50	5.09	5.09	-4164.57	1949.81	-430.15	44.24
9.12	20	SLE Q	2	471.50	5.09	5.09	-3554.39	1664.13	-367.13	37.76
9.41	18	SLE R	3	12.50	5.09	5.09	-5158.30	2415.06	-532.79	54.80
9.41	20	SLE Q	3	12.50	5.09	5.09	-4462.37	2089.23	-460.91	47.40
11.70	18	SLE R	3	240.64	5.09	5.09	2455.46	-253.62	1149.62	26.08
11.70	20	SLE Q	3	240.64	5.09	5.09	2113.35	-218.28	989.45	22.45
14.24	18	SLE R	5	56.00	5.09	5.09	-4593.12	2150.45	-474.42	48.79
14.24	20	SLE Q	5	56.00	5.09	5.09	-3974.43	1860.78	-410.51	42.22
14.54	18	SLE R	6	17.50	5.09	5.09	-3700.28	1732.43	-382.19	39.31
14.54	20	SLE Q	6	17.50	5.09	5.09	-3197.98	1497.26	-330.31	33.97



16.12	18	SLE R	6	175.38	5.09	5.09	3252.62	-335.96	1522.84	34.55
16.12	20	SLE Q	6	175.38	5.09	5.09	2851.40	-294.52	1334.99	30.29
18.65	18	SLE R	6	428.00	6.28	5.09	-6334.77	2419.52	-635.59	62.35
18.65	20	SLE Q	6	428.00	6.28	5.09	-5561.13	2124.03	-557.97	54.74
19.35	18	SLE R	7	35.00	6.28	5.09	-3047.99	1164.16	-305.81	30.00
19.35	20	SLE Q	7	35.00	6.28	5.09	-2835.80	1083.11	-284.52	27.91
20.55	18	SLE R	7	155.33	6.28	5.09	2604.75	-257.39	1217.90	26.81
20.55	20	SLE Q	7	155.33	6.28	5.09	2268.40	-224.16	1060.63	23.35
22.96	18	SLE R	7	396.00	6.28	5.09	-4160.23	1588.97	-417.41	40.95
22.96	20	SLE Q	7	396.00	6.28	5.09	-3470.42	1325.50	-348.20	34.16

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <cm>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
25	0.15	20	SLE Q	1	6	1	15.00	-2776.99	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1300.16	2415.87	0.25	0.09
26	0.15	19	SLE F	1	6	1	15.00	-2894.10	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1354.99	2415.87	0.26	0.10
46	1.65	20	SLE Q	1	6	1	165.00	2790.37	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1306.42	2415.87	0.25	0.09
47	1.65	19	SLE F	1	6	1	165.00	2905.70	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1360.42	2415.87	0.26	0.10
67	4.05	20	SLE Q	1	6	1	405.00	-4573.67	32.00	109.00	0.17	169.36	18.00	6.63	464.16	1659.01	1943.19	0.32	0.09
68	4.05	19	SLE F	1	6	1	405.00	-4757.07	32.00	109.00	0.17	169.36	18.00	6.63	464.16	1725.54	1943.19	0.34	0.10
88	4.75	20	SLE Q	2	6	1	35.00	-6321.33	32.00	109.00	0.17	169.36	18.00	6.63	464.16	2292.94	1943.19	0.71	0.21
89	4.75	19	SLE F	2	6	1	35.00	-6552.75	32.00	109.00	0.17	169.36	18.00	6.63	464.16	2376.89	1943.19	0.77	0.22
109	6.62	20	SLE Q	2	6	1	222.07	3338.45	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1563.02	2415.87	0.30	0.11
110	6.62	19	SLE F	2	6	1	222.07	3474.90	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1626.91	2415.87	0.32	0.12
130	9.12	20	SLE Q	2	6	1	471.50	-3554.39	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1664.13	2415.87	0.32	0.12
131	9.12	19	SLE F	2	6	1	471.50	-3728.73	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1745.75	2415.87	0.34	0.12
151	9.41	20	SLE Q	3	6	1	12.50	-4462.37	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2089.23	2415.87	0.41	0.15
152	9.41	19	SLE F	3	6	1	12.50	-4661.21	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2182.32	2415.87	0.42	0.15
172	11.70	20	SLE Q	3	6	1	240.64	2113.35	32.00	218.00	0.17	214.99	18.00	5.09	455.32	989.45	2415.87	0.19	0.07
173	11.70	19	SLE F	3	6	1	240.64	2210.56	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1034.96	2415.87	0.20	0.07
193	14.24	20	SLE Q	5	6	1	56.00	-3974.43	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1860.78	2415.87	0.36	0.13
194	14.24	19	SLE F	5	6	1	56.00	-4151.20	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1943.54	2415.87	0.38	0.14
214	14.54	20	SLE Q	6	6	1	17.50	-3197.98	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1497.26	2415.87	0.29	0.11
215	14.54	19	SLE F	6	6	1	17.50	-3341.49	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1564.45	2415.87	0.30	0.11
235	16.12	20	SLE Q	6	6	1	175.38	2851.40	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1334.99	2415.87	0.26	0.09
236	16.12	19	SLE F	6	6	1	175.38	2966.02	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1388.66	2415.87	0.27	0.10
256	18.65	20	SLE Q	6	6	1	428.00	-5561.13	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2124.03	2029.24	0.56	0.20
257	18.65	19	SLE F	6	6	1	428.00	-5782.17	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2208.46	2029.24	0.62	0.22
278	19.35	20	SLE Q	7	6	1	35.00	-2835.80	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1083.11	2029.24	0.21	0.07
279	19.35	19	SLE F	7	6	1	35.00	-2896.42	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1106.27	2029.24	0.21	0.08
302	20.55	20	SLE Q	7	6	1	155.33	2268.40	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1060.63	2440.03	0.21	0.08
303	20.55	19	SLE F	7	6	1	155.33	2364.50	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1105.56	2440.03	0.21	0.08
323	22.96	20	SLE Q	7	6	1	396.00	-3470.42	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1325.50	2029.24	0.26	0.09
324	22.96	19	SLE F	7	6	1	396.00	-3667.51	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1400.78	2029.24	0.27	0.10

## Staffe - Verifiche armatura

CC	X0 <cm>	X1 <cm>	Lung. <cm>	Staff.	AfE St. <cmq/m>	bw <cm>	Vsd <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17 SLU	0.15	0.65	0.50	ø8/ 8 2 br.	12.57	0.30	9664.15	2.01	40736.00	40736.00	40736.00	4.22
17 SLU	0.65	3.55	2.90	ø8/20 2 br.	5.03	0.30	8466.09	2.50	20313.30	35174.00	20313.30	2.40
17 SLU	3.55	4.05	0.50	ø8/ 8 2 br.	12.57	0.30	11132.30	2.01	40736.00	40736.00	40736.00	3.66
17 SLU	4.75	5.25	0.50	ø8/ 8 2 br.	12.57	0.30	12829.00	2.01	40736.00	40736.00	40736.00	3.18
17 SLU	5.25	8.66	3.41	ø8/20 2 br.	5.03	0.30	10102.10	2.50	20313.30	35174.00	20313.30	2.01
17 SLU	8.66	9.16	0.50	ø8/ 8 2 br.	12.57	0.30	10976.80	2.01	40736.00	40736.00	40736.00	3.71
17 SLU	9.41	9.91	0.50	ø8/ 8 2 br.	12.57	0.30	7591.90	2.01	40736.00	40736.00	40736.00	5.37
17 SLU	9.91	13.74	3.83	ø8/20 2 br.	5.03	0.30	6302.90	2.50	20313.30	35174.00	20313.30	3.22
17 SLU	13.74	14.24	0.50	ø8/ 8 2 br.	12.57	0.30	7671.41	2.01	40736.00	40736.00	40736.00	5.31
17 SLU	14.49	14.99	0.50	ø8/ 8 2 br.	12.57	0.30	10192.90	2.01	40736.00	40736.00	40736.00	4.00
17 SLU	14.99	18.15	3.15	ø8/20 2 br.	5.03	0.30	9247.36	2.50	20313.30	35174.00	20313.30	2.20
17 SLU	18.15	18.65	0.50	ø8/ 8 2 br.	12.57	0.30	11943.70	2.01	40736.00	40736.00	40736.00	3.41
17 SLU	19.35	19.85	0.50	ø8/ 8 2 br.	12.57	0.30	9017.08	2.01	40736.00	40736.00	40736.00	4.52
17 SLU	19.85	22.46	2.61	ø8/20 2 br.	5.03	0.30	7300.97	2.50	20313.30	35174.00	20313.30	2.78
17 SLU	22.46	22.96	0.50	ø8/ 8 2 br.	12.57	0.30	9924.49	2.01	40736.00	40736.00	40736.00	4.10

## Travata n. 104

Nodi: -1133 101 107 -1197 113 -1243

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione



Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.30	17	SLU	1	163.00	5.09	5.09	5.09	5.09	1921.45	8722.72	4.540
1.41	17	SLU	1	52.00	5.09	5.09	5.09	5.09	7158.34	8722.72	1.219
1.78	17	SLU	1	15.00	5.09	5.09	5.09	5.09	7158.34	8722.72	1.219
2.98	17	SLU	2	105.00	5.09	5.09	5.09	5.09	-6012.68	-8722.72	1.451
4.67	17	SLU	2	274.50	5.09	5.09	5.09	5.09	2808.65	8722.72	3.106
6.37	17	SLU	2	444.00	5.09	5.09	5.09	5.09	1827.88	8722.72	4.772
7.57	17	SLU	3	60.00	5.09	5.09	5.09	5.09	-5064.18	-8722.72	1.722
9.19	17	SLU	4	61.20	5.09	8.23	5.09	8.23	3307.78	13858.80	4.190
11.64	17	SLU	4	306.00	5.09	8.23	5.09	8.23	-3971.45	-8721.26	2.196
12.84	17	SLU	5	15.00	5.09	8.23	5.09	8.23	12909.00	13858.80	1.074
13.87	17	SLU	5	118.00	5.09	8.23	5.09	8.23	5661.48	13858.80	2.448

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>
0.30	18	SLE R	1	163.00	5.09	5.09	1355.67	-140.03	634.71	14.40
0.30	20	SLE Q	1	163.00	5.09	5.09	1147.34	-118.51	537.17	12.19
1.41	18	SLE R	1	52.00	5.09	5.09	4975.87	-513.95	2329.65	52.86
1.41	20	SLE Q	1	52.00	5.09	5.09	4398.85	-454.35	2059.49	46.73
1.78	18	SLE R	1	15.00	5.09	5.09	4975.87	-513.95	2329.65	52.86
1.78	20	SLE Q	1	15.00	5.09	5.09	4398.85	-454.35	2059.49	46.73
2.98	18	SLE R	2	105.00	5.09	5.09	-4173.44	1953.96	-431.07	44.33
2.98	20	SLE Q	2	105.00	5.09	5.09	-3548.57	1661.40	-366.52	37.70
4.67	18	SLE R	2	274.50	5.09	5.09	1949.35	-201.34	912.66	20.71
4.67	20	SLE Q	2	274.50	5.09	5.09	1680.33	-173.56	786.71	17.85
6.37	18	SLE R	2	444.00	5.09	5.09	1258.94	-130.03	589.42	13.37
6.37	20	SLE Q	2	444.00	5.09	5.09	993.36	-102.60	465.08	10.55
7.57	18	SLE R	3	60.00	5.09	5.09	-3570.53	1671.68	-368.79	37.93
7.57	20	SLE Q	3	60.00	5.09	5.09	-3116.66	1459.18	-321.91	33.11
9.19	18	SLE R	4	61.20	5.09	8.23	2303.27	-221.50	678.46	20.65
9.19	20	SLE Q	4	61.20	5.09	8.23	2039.63	-196.15	600.81	18.29
11.64	18	SLE R	4	306.00	5.09	8.23	-2727.22	1272.96	-251.46	26.73
11.64	20	SLE Q	4	306.00	5.09	8.23	-2475.39	1155.42	-228.24	24.26
12.84	18	SLE R	5	15.00	5.09	8.23	8953.91	-861.10	2537.52	80.28
12.84	20	SLE Q	5	15.00	5.09	8.23	7354.56	-707.29	2166.40	65.94
13.87	18	SLE R	5	118.00	5.09	8.23	3939.70	-378.88	1160.50	35.32
13.87	20	SLE Q	5	118.00	5.09	8.23	3230.96	-310.72	951.73	28.97

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	$s_{rm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_c$ eff <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
40	0.30	20	SLE Q	1	6	1	163.00	1147.34	32.00	218.00	0.17	214.99	18.00	5.09	455.32	537.17	2415.87	0.10	0.04
42	0.30	19	SLE F	1	6	1	163.00	1206.86	32.00	218.00	0.17	214.99	18.00	5.09	455.32	565.04	2415.87	0.11	0.04
62	1.41	20	SLE Q	1	6	1	52.00	4398.85	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2059.49	2415.87	0.40	0.15
63	1.41	19	SLE F	1	6	1	52.00	4563.71	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2136.68	2415.87	0.41	0.15
83	1.78	20	SLE Q	1	6	1	15.00	4398.85	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2059.49	2415.87	0.40	0.15
84	1.78	19	SLE F	1	6	1	15.00	4563.71	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2136.68	2415.87	0.41	0.15
104	2.98	20	SLE Q	2	6	1	105.00	-3548.57	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1661.40	2415.87	0.32	0.12
105	2.98	19	SLE F	2	6	1	105.00	-3727.10	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1744.99	2415.87	0.34	0.12
125	4.67	20	SLE Q	2	6	1	274.50	1680.33	32.00	218.00	0.17	214.99	18.00	5.09	455.32	786.71	2415.87	0.15	0.06
126	4.67	19	SLE F	2	6	1	274.50	1756.75	32.00	218.00	0.17	214.99	18.00	5.09	455.32	822.49	2415.87	0.16	0.06
161	6.37	20	SLE Q	2	6	1	444.00	993.36	32.00	218.00	0.17	214.99	18.00	5.09	455.32	465.08	2415.87	0.09	0.03
163	6.37	19	SLE F	2	6	1	444.00	1069.24	32.00	218.00	0.17	214.99	18.00	5.09	455.32	500.61	2415.87	0.10	0.04
183	7.57	20	SLE Q	3	6	1	60.00	-3116.66	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1459.18	2415.87	0.28	0.10
184	7.57	19	SLE F	3	6	1	60.00	-3246.34	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1519.90	2415.87	0.30	0.11
204	9.19	20	SLE Q	4	6	1	61.20	2039.63	31.00	109.00	0.16	160.63	20.00	8.23	501.57	600.81	1606.98	0.12	0.03
205	9.19	19	SLE F	4	6	1	61.20	2114.92	31.00	109.00	0.16	160.63	20.00	8.23	501.57	622.98	1606.98	0.12	0.03
225	11.64	20	SLE Q	4	6	1	306.00	-2475.39	32.00	218.00	0.17	216.20	18.00	5.09	455.32	1155.42	2490.10	0.22	0.08
226	11.64	19	SLE F	4	6	1	306.00	-2547.34	32.00	218.00	0.17	216.20	18.00	5.09	455.32	1189.00	2490.10	0.23	0.08
246	12.84	20	SLE Q	5	6	1	15.00	7354.56	31.00	109.00	0.16	160.63	20.00	8.23	501.57	2166.40	1606.98	0.76	0.21
247	12.84	19	SLE F	5	6	1	15.00	7811.52	31.00	109.00	0.16	160.63	20.00	8.23	501.57	2301.01	1606.98	0.84	0.23
287	13.87	20	SLE Q	5	6	1	118.00	3230.96	31.00	109.00	0.16	160.63	20.00	8.23	501.57	951.73	1606.98	0.18	0.05
289	13.87	19	SLE F	5	6	1	118.00	3433.46	31.00	109.00	0.16	160.63	20.00	8.23	501.57	1011.38	1606.98	0.20	0.05

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctg $\theta$	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic. T	
17	SLU	0.30	1.78	1.48	ø6/ 8 2 br.	7.07	0.30	7325.03	2.50	28565.50	35174.00	28565.50	3.90
17	SLU	2.98	3.48	0.50	ø8/ 8 2 br.	12.57	0.30	7885.31	2.01	40736.00	40736.00	40736.00	5.17
17	SLU	3.48	5.87	2.39	ø8/20 2 br.	5.03	0.30	6070.62	2.50	20313.30	35174.00	20313.30	3.35
17	SLU	5.87	6.37	0.50	ø8/ 8 2 br.	12.57	0.30	4418.16	2.01	40736.00	40736.00	40736.00	9.22
17	SLU	7.57	8.07	0.50	ø8/ 8 2 br.	12.57	0.30	7654.19	2.01	40736.00	40736.00	40736.00	5.32
17	SLU	8.07	11.14	3.07	ø8/20 2 br.	5.03	0.30	5839.50	2.50	20313.30	35174.00	20313.30	3.48
17	SLU	11.14	11.64	0.50	ø8/ 8 2 br.	12.57	0.30	7117.23	2.01	40736.00	40736.00	40736.00	5.72
17	SLU	12.84	13.87	1.03	ø6/ 8 2 br.	7.07	0.30	14674.80	2.50	28565.50	35174.00	28565.50	1.95



## Travata n. 105

Nodi: 102 108 -1198 114

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	1	15.00	5.09	5.09	5.09	5.09	-3736.25	-8722.72	2.335
2.99	17	SLU	1	299.40	5.09	5.09	5.09	5.09	2894.21	8722.72	3.014
4.89	17	SLU	1	489.00	7.10	5.09	7.10	5.09	-4210.58	-12015.90	2.854
5.19	17	SLU	2	15.00	7.10	5.09	7.10	5.09	-6568.50	-12015.90	1.829
7.87	17	SLU	3	121.85	5.09	5.09	5.09	5.09	4310.68	8722.72	2.024
10.61	17	SLU	3	396.00	5.09	5.09	5.09	5.09	-3039.48	-8722.72	2.870

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>
0.15	18	SLE R	1	15.00	5.09	5.09	-2632.69	1232.60	-271.93	27.97
0.15	20	SLE Q	1	15.00	5.09	5.09	-2259.82	1058.02	-233.41	24.01
2.99	18	SLE R	1	299.40	5.09	5.09	2062.82	-213.06	965.79	21.91
2.99	20	SLE Q	1	299.40	5.09	5.09	1830.44	-189.06	856.99	19.44
4.89	18	SLE R	1	489.00	7.10	5.09	-3040.54	1032.33	-299.45	28.67
4.89	20	SLE Q	1	489.00	7.10	5.09	-2736.59	929.13	-269.51	25.81
5.19	18	SLE R	2	15.00	7.10	5.09	-4716.52	1601.36	-464.51	44.48
5.19	20	SLE Q	2	15.00	7.10	5.09	-4109.75	1395.35	-404.75	38.75
7.87	18	SLE R	3	121.85	5.09	5.09	3074.89	-317.60	1439.63	32.66
7.87	20	SLE Q	3	121.85	5.09	5.09	2696.38	-278.50	1262.42	28.64
10.61	18	SLE R	3	396.00	5.09	5.09	-2143.24	1003.44	-221.37	22.77
10.61	20	SLE Q	3	396.00	5.09	5.09	-1969.63	922.16	-203.44	20.92

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	$s_{rm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_{c\ eff}$ <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
20	0.15	20	SLE Q	1	6	1	15.00	-2259.82	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1058.02	2415.87	0.21	0.08
21	0.15	19	SLE F	1	6	1	15.00	-2366.36	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1107.90	2415.87	0.22	0.08
41	2.99	20	SLE Q	1	6	1	299.40	1830.44	32.00	218.00	0.17	214.99	18.00	5.09	455.32	856.99	2415.87	0.17	0.06
42	2.99	19	SLE F	1	6	1	299.40	1896.84	32.00	218.00	0.17	214.99	18.00	5.09	455.32	888.08	2415.87	0.17	0.06
62	4.89	20	SLE Q	1	6	1	489.00	-2736.59	32.00	109.00	0.17	165.23	18.00	7.10	473.40	929.13	1839.27	0.18	0.05
63	4.89	19	SLE F	1	6	1	489.00	-2823.44	32.00	109.00	0.17	165.23	18.00	7.10	473.40	958.62	1839.27	0.19	0.05
83	5.19	20	SLE Q	2	6	1	15.00	-4109.75	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1395.35	1839.27	0.27	0.08
84	5.19	19	SLE F	2	6	1	15.00	-4283.11	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1454.21	1839.27	0.28	0.08
104	7.87	20	SLE Q	3	6	1	121.85	2696.38	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1262.42	2415.87	0.25	0.09
105	7.87	19	SLE F	3	6	1	121.85	2804.48	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1313.03	2415.87	0.25	0.09
125	10.61	20	SLE Q	3	6	1	396.00	-1969.63	32.00	218.00	0.17	214.99	18.00	5.09	455.32	922.16	2415.87	0.18	0.07
126	10.61	19	SLE F	3	6	1	396.00	-2019.23	32.00	218.00	0.17	214.99	18.00	5.09	455.32	945.38	2415.87	0.18	0.07

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <cm>	Vsdu <daN>	ctg $\theta$	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic. T
17	SLU	0.15	0.65	0.50	ø8/ 8 2 br.	12.57	0.30	5471.56	2.01	40736.00	40736.00	7.45
17	SLU	0.65	4.39	3.74	ø8/20 2 br.	5.03	0.30	4496.24	2.50	20313.30	35174.00	4.52
17	SLU	4.39	4.89	0.50	ø8/ 8 2 br.	12.57	0.30	5671.70	2.01	40736.00	40736.00	7.18
17	SLU	5.19	5.69	0.50	ø8/ 8 2 br.	12.57	0.30	7022.05	2.01	40736.00	40736.00	5.80
17	SLU	5.69	10.11	4.42	ø8/20 2 br.	5.03	0.30	5846.59	2.50	20313.30	35174.00	3.47
17	SLU	10.11	10.61	0.50	ø8/ 8 2 br.	12.57	0.30	5719.83	2.01	40736.00	40736.00	7.12

## Travata n. 106

Nodi: -1140 -1153

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.30	13	SLV	1	30.00	5.09	5.09	5.09	5.09	-5131.75	-8722.72	1.700



## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>
0.30	18	SLE R	1	30.00	5.09	5.09	-3199.41	1497.93	-330.46	33.99
0.30	20	SLE Q	1	30.00	5.09	5.09	-2864.80	1341.27	-295.90	30.43

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	$s_{xm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_c$ eff <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
20	0.30	20	SLE Q	1	6	1	30.00	-2864.80	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1341.27	2415.87	0.26	0.10
21	0.30	19	SLE F	1	6	1	30.00	-2960.41	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1386.03	2415.87	0.27	0.10

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctg $\theta$	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17	SLU	0.30	0.80	0.50	$\emptyset 8 / 8$ 2 br.	12.57	0.30	4377.07	2.01	40736.00	40736.00	9.31
13	SLV	0.80	1.93	1.13	$\emptyset 8 / 20$ 2 br.	5.03	0.30	3785.69	2.50	20313.30	35174.00	5.37

## Travata n. 107

Nodi: 103 109 -1183 -1199 -2021

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	1	15.00	6.63	5.09	6.63	5.09	-10282.30	-11245.50	1.094
2.34	17	SLU	1	233.87	5.09	5.09	5.09	5.09	6924.75	8722.72	1.260
4.84	17	SLU	1	484.00	10.18	10.18	10.18	10.18	-6405.59	-17047.60	2.661
5.24	17	SLU	2	20.00	5.09	5.09	5.09	5.09	-7019.86	-8722.72	1.243
6.68	17	SLU	4	0.00	5.09	5.09	5.09	5.09	4769.08	8722.72	1.829
8.91	17	SLU	4	223.00	5.09	5.09	5.09	5.09	2423.85	8722.72	3.599

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>
0.15	18	SLE R	1	15.00	6.63	5.09	-7195.82	2610.14	-716.22	69.50
0.15	20	SLE Q	1	15.00	6.63	5.09	-6386.82	2316.70	-635.70	61.69
2.34	18	SLE R	1	233.87	5.09	5.09	4829.14	-498.79	2260.95	51.30
2.34	20	SLE Q	1	233.87	5.09	5.09	4361.98	-450.54	2042.23	46.34
4.84	18	SLE R	1	484.00	10.18	10.18	-4421.31	1051.83	-351.55	32.61
4.84	20	SLE Q	1	484.00	10.18	10.18	-4104.67	976.51	-326.37	30.28
5.24	18	SLE R	2	20.00	5.09	5.09	-5027.13	2353.65	-519.24	53.40
5.24	20	SLE Q	2	20.00	5.09	5.09	-4330.20	2027.35	-447.26	46.00
6.68	18	SLE R	4	0.00	5.09	5.09	3361.11	-347.16	1573.64	35.70
6.68	20	SLE Q	4	0.00	5.09	5.09	2920.31	-301.63	1367.25	31.02
8.91	18	SLE R	4	223.00	5.09	5.09	1703.36	-175.94	797.50	18.09
8.91	20	SLE Q	4	223.00	5.09	5.09	1506.84	-155.64	705.49	16.01

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	$s_{xm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_c$ eff <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
20	0.15	20	SLE Q	1	6	1	15.00	-6386.82	32.00	109.00	0.17	169.36	18.00	6.63	464.16	2316.70	1943.19	0.73	0.21
21	0.15	19	SLE F	1	6	1	15.00	-6617.96	32.00	109.00	0.17	169.36	18.00	6.63	464.16	2400.54	1943.19	0.78	0.23
41	2.34	20	SLE Q	1	6	1	233.87	4361.98	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2042.23	2415.87	0.40	0.14
42	2.34	19	SLE F	1	6	1	233.87	4495.37	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2104.68	2415.87	0.41	0.15
62	4.84	20	SLE Q	1	6	1	484.00	-4104.67	32.00	72.67	0.17	136.53	18.00	10.18	491.84	976.51	1443.49	0.19	0.04
63	4.84	19	SLE F	1	6	1	484.00	-4195.14	32.00	72.67	0.17	136.53	18.00	10.18	491.84	998.03	1443.49	0.19	0.04
83	5.24	20	SLE Q	2	6	1	20.00	-4330.20	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2027.35	2415.87	0.39	0.14
84	5.24	19	SLE F	2	6	1	20.00	-4529.33	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2120.58	2415.87	0.41	0.15
104	6.68	20	SLE Q	4	6	1	0.00	2920.31	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1367.25	2415.87	0.27	0.10
105	6.68	19	SLE F	4	6	1	0.00	3045.88	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1426.05	2415.87	0.28	0.10
137	8.91	20	SLE Q	4	6	1	223.00	1506.84	32.00	218.00	0.17	214.99	18.00	5.09	455.32	705.49	2415.87	0.14	0.05
139	8.91	19	SLE F	4	6	1	223.00	1562.99	32.00	218.00	0.17	214.99	18.00	5.09	455.32	731.77	2415.87	0.14	0.05

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctg $\theta$	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17	SLU	0.15	0.65	0.50	$\emptyset 10 / 8$ 2 br.	19.64	0.30	13257.10	1.49	47224.80	47224.80	3.56



17 SLU	0.65	4.34	3.69	ø10/32 2 br.	4.91	0.30	10606.60	2.50	19837.20	35174.00	19837.20	1.87
17 SLU	4.34	4.84	0.50	ø10/ 8 2 br.	19.64	0.30	11603.90	1.49	47224.80	47224.80	47224.80	4.07
17 SLU	5.24	5.74	0.50	ø10/ 8 2 br.	19.64	0.30	9172.92	1.49	47224.80	47224.80	47224.80	5.15
17 SLU	5.74	8.41	2.67	ø10/32 2 br.	4.91	0.30	7743.31	2.50	19837.20	35174.00	19837.20	2.56
17 SLU	8.41	8.91	0.50	ø10/ 8 2 br.	19.64	0.30	4968.09	1.49	47224.80	47224.80	47224.80	9.51

**Travata n. 109**

Nodi: 105 111 -1190 117

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	1	15.00	5.09	5.09	5.09	5.09	-3948.93	-8722.72	2.209
2.05	17	SLU	1	204.60	5.09	5.09	5.09	5.09	2738.74	8722.72	3.185
4.89	17	SLU	1	489.00	7.10	5.09	7.10	5.09	-4278.20	-12015.90	2.809
5.19	17	SLU	2	15.00	7.10	5.09	7.10	5.09	-6597.60	-12015.90	1.821
7.88	17	SLU	3	151.43	5.09	5.09	5.09	5.09	4288.14	8722.72	2.034
10.61	17	SLU	3	424.00	5.09	5.09	5.09	5.09	-3052.96	-8722.72	2.857

**Stato limite d'esercizio - Verifiche tensionali**

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cm²>	σ <sub>f</sub> inf <daN/cm²>	σ <sub>c</sub> <daN/cm²>
0.15	18	SLE R	1	15.00	5.09	5.09	-2806.34	1313.90	-289.86	29.81
0.15	20	SLE Q	1	15.00	5.09	5.09	-2390.51	1119.21	-246.91	25.39
2.05	18	SLE R	1	204.60	5.09	5.09	1955.93	-202.02	915.74	20.78
2.05	20	SLE Q	1	204.60	5.09	5.09	1730.74	-178.76	810.31	18.39
4.89	18	SLE R	1	489.00	7.10	5.09	-3058.59	1038.46	-301.23	28.84
4.89	20	SLE Q	1	489.00	7.10	5.09	-2786.02	945.91	-274.38	26.27
5.19	18	SLE R	2	15.00	7.10	5.09	-4708.37	1598.59	-463.71	44.40
5.19	20	SLE Q	2	15.00	7.10	5.09	-4132.73	1403.15	-407.01	38.97
7.88	18	SLE R	3	151.43	5.09	5.09	3058.39	-315.90	1431.91	32.49
7.88	20	SLE Q	3	151.43	5.09	5.09	2683.74	-277.20	1256.50	28.51
10.61	18	SLE R	3	424.00	5.09	5.09	-2177.04	1019.26	-224.86	23.13
10.61	20	SLE Q	3	424.00	5.09	5.09	-1971.70	923.13	-203.65	20.95

**Stato limite d'esercizio - Verifiche a fessurazione**

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	s <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c</sub> eff <cmq>	σ <sub>s</sub> <daN/cm²>	σ <sub>sr</sub> <daN/cm²>	ε <sub>sm</sub>	Wk <mm>
20	0.15	20	SLE Q	1	6	1	15.00	-2390.51	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1119.21	2415.87	0.22	0.08
21	0.15	19	SLE F	1	6	1	15.00	-2509.32	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1174.84	2415.87	0.23	0.08
41	2.05	20	SLE Q	1	6	1	204.60	1730.74	32.00	218.00	0.17	214.99	18.00	5.09	455.32	810.31	2415.87	0.16	0.06
42	2.05	19	SLE F	1	6	1	204.60	1794.97	32.00	218.00	0.17	214.99	18.00	5.09	455.32	840.39	2415.87	0.16	0.06
62	4.89	20	SLE Q	1	6	1	489.00	-2786.02	32.00	109.00	0.17	165.23	18.00	7.10	473.40	945.91	1839.27	0.18	0.05
63	4.89	19	SLE F	1	6	1	489.00	-2863.90	32.00	109.00	0.17	165.23	18.00	7.10	473.40	972.35	1839.27	0.19	0.05
83	5.19	20	SLE Q	2	6	1	15.00	-4132.73	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1403.15	1839.27	0.27	0.08
84	5.19	19	SLE F	2	6	1	15.00	-4297.20	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1458.99	1839.27	0.28	0.08
104	7.88	20	SLE Q	3	6	1	151.43	2683.74	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1256.50	2415.87	0.24	0.09
105	7.88	19	SLE F	3	6	1	151.43	2790.77	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1306.61	2415.87	0.25	0.09
126	10.61	20	SLE Q	3	6	1	424.00	-1971.70	32.00	218.00	0.17	214.99	18.00	5.09	455.32	923.13	2415.87	0.18	0.07
127	10.61	19	SLE F	3	6	1	424.00	-2030.36	32.00	218.00	0.17	214.99	18.00	5.09	455.32	950.59	2415.87	0.18	0.07

**Staffe - Verifiche armatura**

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic. T
17 SLU	0.15	0.65	0.50	ø8/ 8 2 br.	12.57	0.30	5502.17	2.01	40736.00	40736.00	40736.00	7.40
17 SLU	0.65	4.39	3.74	ø8/20 2 br.	5.03	0.30	4465.64	2.50	20313.30	35174.00	20313.30	4.55
17 SLU	4.39	4.89	0.50	ø8/ 8 2 br.	12.57	0.30	5641.10	2.01	40736.00	40736.00	40736.00	7.22
17 SLU	5.19	5.69	0.50	ø8/ 8 2 br.	12.57	0.30	7024.93	2.01	40736.00	40736.00	40736.00	5.80
17 SLU	5.69	10.11	4.42	ø8/20 2 br.	5.03	0.30	5849.47	2.50	20313.30	35174.00	20313.30	3.47
17 SLU	10.11	10.61	0.50	ø8/ 8 2 br.	12.57	0.30	5716.95	2.01	40736.00	40736.00	40736.00	7.13

**Travata n. 110**

Nodi: 106 112 118 -1268

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
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6R	30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
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**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
1.05	17	SLU	1	105.00	5.09	5.09	5.09	5.09	-5658.67	-8722.72	1.541
2.75	17	SLU	1	274.50	5.09	5.09	5.09	5.09	2438.07	8722.72	3.578
4.44	13	SLV	1	444.00	5.09	5.09	5.09	5.09	-2247.73	-8722.72	3.881
5.64	17	SLU	2	60.00	5.09	5.09	5.09	5.09	-5768.32	-8722.72	1.512
7.52	17	SLU	2	247.85	5.09	5.09	5.09	5.09	3290.73	8722.72	2.651
9.71	17	SLU	2	467.00	5.09	6.28	5.09	6.28	-3312.76	-8722.09	2.633
10.91	17	SLU	3	15.00	5.09	6.28	5.09	6.28	8654.13	10680.40	1.234
11.94	17	SLU	3	118.00	5.09	6.28	5.09	6.28	3866.96	10680.40	2.762

**Stato limite d'esercizio - Verifiche tensionali**

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>c</sub> <daN/cmq>
1.05	18	SLE R	1	105.00	5.09	5.09	-3960.17	1854.11	-409.04	42.07
1.05	20	SLE Q	1	105.00	5.09	5.09	-3456.13	1618.12	-356.98	36.71
2.75	18	SLE R	1	274.50	5.09	5.09	1699.72	-175.56	795.79	18.06
2.75	20	SLE Q	1	274.50	5.09	5.09	1498.24	-154.75	701.46	15.92
4.44	18	SLE R	1	444.00	5.09	5.09	853.81	-88.19	399.75	9.07
4.44	20	SLE Q	1	444.00	5.09	5.09	716.78	-74.04	335.59	7.61
5.64	18	SLE R	2	60.00	5.09	5.09	-4037.48	1890.30	-417.02	42.89
5.64	20	SLE Q	2	60.00	5.09	5.09	-3523.48	1649.65	-363.93	37.43
7.52	18	SLE R	2	247.85	5.09	5.09	2292.25	-236.76	1073.21	24.35
7.52	20	SLE Q	2	247.85	5.09	5.09	2032.41	-209.92	951.55	21.59
9.71	18	SLE R	2	467.00	5.09	6.28	-2290.22	1070.83	-226.31	23.57
9.71	20	SLE Q	2	467.00	5.09	6.28	-2092.97	978.60	-206.82	21.54
10.91	18	SLE R	3	15.00	5.09	6.28	6019.62	-603.97	2299.15	59.25
10.91	20	SLE Q	3	15.00	5.09	6.28	5483.92	-550.22	2094.55	53.98
11.94	18	SLE R	3	118.00	5.09	6.28	2700.38	-270.94	1031.39	26.58
11.94	20	SLE Q	3	118.00	5.09	6.28	2428.92	-243.70	927.71	23.91

**Stato limite d'esercizio - Verifiche a fessurazione**

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c</sub> eff <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sf</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
21	1.05	20	SLE Q	1	6	1	105.00	-3456.13	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1618.12	2415.87	0.31	0.11
22	1.05	19	SLE F	1	6	1	105.00	-3600.14	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1685.55	2415.87	0.33	0.12
45	2.75	20	SLE Q	1	6	1	274.50	1498.24	32.00	218.00	0.17	214.99	18.00	5.09	455.32	701.46	2415.87	0.14	0.05
46	2.75	19	SLE F	1	6	1	274.50	1555.81	32.00	218.00	0.17	214.99	18.00	5.09	455.32	728.41	2415.87	0.14	0.05
77	4.44	20	SLE Q	1	6	1	444.00	716.78	32.00	218.00	0.17	214.99	18.00	5.09	455.32	335.59	2415.87	0.07	0.02
79	4.44	19	SLE F	1	6	1	444.00	755.93	32.00	218.00	0.17	214.99	18.00	5.09	455.32	353.92	2415.87	0.07	0.03
99	5.64	20	SLE Q	2	6	1	60.00	-3523.48	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1649.65	2415.87	0.32	0.12
100	5.64	19	SLE F	2	6	1	60.00	-3670.34	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1718.41	2415.87	0.33	0.12
120	7.52	20	SLE Q	2	6	1	247.85	2032.41	32.00	218.00	0.17	214.99	18.00	5.09	455.32	951.55	2415.87	0.18	0.07
121	7.52	19	SLE F	2	6	1	247.85	2106.59	32.00	218.00	0.17	214.99	18.00	5.09	455.32	986.28	2415.87	0.19	0.07
146	9.71	20	SLE Q	2	6	1	467.00	-2092.97	32.00	218.00	0.17	215.47	18.00	5.09	455.32	978.60	2440.03	0.19	0.07
147	9.71	19	SLE F	2	6	1	467.00	-2149.33	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1004.95	2440.03	0.20	0.07
167	10.91	20	SLE Q	3	6	1	15.00	5483.92	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2094.55	2029.24	0.54	0.19
168	10.91	19	SLE F	3	6	1	15.00	5636.98	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2153.00	2029.24	0.58	0.20
208	11.94	20	SLE Q	3	6	1	118.00	2428.92	31.00	218.00	0.16	207.29	20.00	6.28	502.57	927.71	2029.24	0.18	0.06
210	11.94	19	SLE F	3	6	1	118.00	2506.48	31.00	218.00	0.16	207.29	20.00	6.28	502.57	957.33	2029.24	0.19	0.07

**Staffe - Verifiche armatura**

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T	
17	SLU	1.05	1.55	0.50	ø8/ 8 2 br.	12.57	0.30	7544.00	2.01	40736.00	40736.00	40736.00	5.40
17	SLU	1.55	3.94	2.39	ø8/20 2 br.	5.03	0.30	5737.33	2.50	20313.30	35174.00	20313.30	3.54
17	SLU	3.94	4.44	0.50	ø8/ 8 2 br.	12.57	0.30	4705.10	2.01	40736.00	40736.00	40736.00	8.66
17	SLU	5.64	6.14	0.50	ø8/ 8 2 br.	12.57	0.30	7956.41	2.01	40736.00	40736.00	40736.00	5.12
17	SLU	6.14	9.21	3.07	ø8/20 2 br.	5.03	0.30	6149.74	2.50	20313.30	35174.00	20313.30	3.30
17	SLU	9.21	9.71	0.50	ø8/ 8 2 br.	12.57	0.30	6749.74	2.01	40736.00	40736.00	40736.00	6.04
17	SLU	10.91	11.94	1.03	ø6/ 8 2 br.	7.07	0.30	10307.70	2.50	28565.50	35174.00	28565.50	2.77

**Travate n. 201 301 401**

201 (a) Nodi: 201 202 203 204 205 206

301 (b) Nodi: 301 302 303 304 305 306

401 (c) Nodi: 401 402 403 404 405 406

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
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6R	30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
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## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	9	SLV	b	1	15.00	7.10	5.09	7.10	5.09	-9916.65	-12015.90	1.212
3.14	9	SLV	b	1	314.25	7.10	5.09	7.10	5.09	4426.47	8721.68	1.970
4.05	1	SLV	b	1	405.00	7.10	5.09	7.10	5.09	-8250.71	-12015.90	1.456
4.75	9	SLV	b	2	35.00	7.10	5.09	7.10	5.09	-10026.60	-12015.90	1.198
7.49	9	SLV	b	2	309.15	5.09	5.09	5.09	5.09	4522.81	8722.72	1.929
8.71	9	SLV	b	2	431.00	10.18	5.09	10.18	5.09	4476.93	8720.68	1.948
9.41	9	SLV	b	3	12.00	10.18	5.09	10.18	5.09	-9102.50	-17008.80	1.869
13.64	1	SLV	b	3	435.50	7.10	5.09	7.10	5.09	-7478.02	-12015.90	1.607
14.25	1	SLV	b	3	496.00	7.10	5.09	7.10	5.09	-8019.21	-12015.90	1.498
14.95	9	SLV	b	4	58.00	7.10	5.09	7.10	5.09	-8118.25	-12015.90	1.480
18.65	1	SLV	b	4	428.00	7.63	5.09	7.63	5.09	-9535.88	-12887.30	1.351
19.35	9	SLV	b	5	35.00	7.63	5.09	7.63	5.09	-8102.13	-12887.30	1.591
22.96	1	SLV	c	5	396.00	7.63	5.09	7.63	5.09	-9347.44	-12887.30	1.379

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cm <sup>2</sup> >	$\sigma_f$ inf <daN/cm <sup>2</sup> >	$\sigma_c$ <daN/cm <sup>2</sup> >	
0.15	18	SLE	R	c	1	15.00	7.10	5.09	-4742.66	1610.23	-467.08	44.72
0.15	20	SLE	Q	b	1	15.00	7.10	5.09	-4170.66	1416.03	-410.75	39.33
3.14	18	SLE	R	c	1	314.25	7.10	5.09	2019.44	-193.76	943.48	20.35
3.14	20	SLE	Q	b	1	314.25	7.10	5.09	1694.31	-162.56	791.58	17.08
4.05	18	SLE	R	a	1	405.00	7.10	5.09	-3134.67	1064.29	-308.72	29.56
4.05	20	SLE	Q	a	1	405.00	7.10	5.09	-2870.66	974.65	-282.72	27.07
4.75	18	SLE	R	c	2	35.00	7.10	5.09	-4794.48	1627.82	-472.19	45.21
4.75	20	SLE	Q	c	2	35.00	7.10	5.09	-4329.08	1469.81	-426.35	40.82
7.49	18	SLE	R	b	2	309.15	5.09	5.09	2427.66	-250.75	1136.60	25.79
7.49	20	SLE	Q	b	2	309.15	5.09	5.09	2210.82	-228.35	1035.08	23.49
8.71	18	SLE	R	a	2	431.00	10.18	5.09	-3140.02	754.72	-291.28	26.26
8.71	20	SLE	Q	a	2	431.00	10.18	5.09	-2830.10	680.23	-262.53	23.67
9.41	18	SLE	R	b	3	12.00	10.18	5.09	-4334.58	1041.84	-402.09	36.25
9.41	20	SLE	Q	b	3	12.00	10.18	5.09	-4033.84	969.55	-374.19	33.73
13.64	18	SLE	R	a	3	435.50	7.10	5.09	-2999.38	1018.35	-295.39	28.28
13.64	20	SLE	Q	a	3	435.50	7.10	5.09	-2845.02	965.94	-280.19	26.83
14.25	18	SLE	R	a	3	496.00	7.10	5.09	-3385.02	1149.28	-333.38	31.92
14.25	20	SLE	Q	a	3	496.00	7.10	5.09	-3211.06	1090.22	-316.24	30.28
14.95	18	SLE	R	b	4	58.00	7.10	5.09	-2326.61	789.93	-229.14	21.94
14.95	20	SLE	Q	b	4	58.00	7.10	5.09	-2078.52	705.70	-204.70	19.60
18.65	18	SLE	R	a	4	428.00	7.63	5.09	-4037.42	1278.45	-393.07	37.14
18.65	20	SLE	Q	a	4	428.00	7.63	5.09	-3683.40	1166.34	-358.61	33.88
19.35	18	SLE	R	a	5	35.00	7.63	5.09	-2304.15	729.61	-224.33	21.19
19.35	20	SLE	Q	a	5	35.00	7.63	5.09	-2137.53	676.85	-208.10	19.66
22.96	18	SLE	R	c	5	396.00	7.63	5.09	-3767.63	1193.02	-366.81	34.65
22.96	20	SLE	Q	c	5	396.00	7.63	5.09	-3428.50	1085.63	-333.79	31.53

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	In	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	$s_{cr}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_{c\ eff}$ <cmq>	$\sigma_s$ <daN/cm <sup>2</sup> >	$\sigma_{cr}$ <daN/cm <sup>2</sup> >	$\epsilon_{sm}$	Wk <mm>
67	0.15	20	SLE	Q	b	1	6	15.00	-4170.66	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1416.03	1839.27	0.27	0.08
70	0.15	19	SLE	F	b	1	6	15.00	-4316.95	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1465.69	1839.27	0.28	0.08
169	3.14	20	SLE	Q	b	1	6	314.25	1694.31	32.00	218.00	0.17	215.78	18.00	5.09	455.32	791.58	2456.22	0.15	0.06
177	3.14	19	SLE	F	c	1	6	314.25	1776.28	32.00	218.00	0.17	215.78	18.00	5.09	455.32	829.88	2456.22	0.16	0.06
245	4.05	20	SLE	Q	a	1	6	405.00	-2870.66	32.00	109.00	0.17	165.23	18.00	7.10	473.40	974.65	1839.27	0.19	0.05
248	4.05	19	SLE	F	a	1	6	405.00	-2946.09	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1000.26	1839.27	0.19	0.05
318	4.75	20	SLE	Q	c	2	6	35.00	-4329.08	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1469.81	1839.27	0.29	0.08
321	4.75	19	SLE	F	c	2	6	35.00	-4462.05	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1514.96	1839.27	0.29	0.08
404	7.49	20	SLE	Q	b	2	6	309.15	2210.82	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1035.08	2415.87	0.20	0.07
407	7.49	19	SLE	F	b	2	6	309.15	2272.78	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1064.09	2415.87	0.21	0.08
477	8.71	20	SLE	Q	a	2	6	431.00	-2830.10	32.00	72.67	0.16	135.42	18.00	10.18	491.84	680.23	1396.02	0.13	0.03
480	8.71	19	SLE	F	a	2	6	431.00	-2918.65	32.00	72.67	0.16	135.42	18.00	10.18	491.84	701.51	1396.02	0.14	0.03
547	9.41	20	SLE	Q	b	3	6	12.00	-4033.84	32.00	72.67	0.16	135.42	18.00	10.18	491.84	969.55	1396.02	0.19	0.04
550	9.41	19	SLE	F	b	3	6	12.00	-4119.76	32.00	72.67	0.16	135.42	18.00	10.18	491.84	990.20	1396.02	0.19	0.04
641	13.64	20	SLE	Q	a	3	6	435.50	-2845.02	32.00	109.00	0.17	165.23	18.00	7.10	473.40	965.94	1839.27	0.19	0.05
647	13.64	19	SLE	F	a	3	6	435.50	-2889.12	32.00	109.00	0.17	165.23	18.00	7.10	473.40	980.92	1839.27	0.19	0.05
716	14.25	20	SLE	Q	a	3	6	496.00	-3211.06	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1090.22	1839.27	0.21	0.06
719	14.25	19	SLE	F	a	3	6	496.00	-3260.76	32.00	109.00	0.17	165.23	18.00	7.10	473.40	1107.10	1839.27	0.21	0.06
797	14.95	20	SLE	Q	b	4	6	58.00	-2078.52	32.00	109.00	0.17	165.23	18.00	7.10	473.40	705.70	1839.27	0.14	0.04
801	14.95	19	SLE	F	b	4	6	58.00	-2149.40	32.00	109.00	0.17	165.23	18.00	7.10	473.40	729.77	1839.27	0.14	0.04
866	18.65	20	SLE	Q	a	4	6	428.00	-3683.40	32.00	109.00	0.17	161.61	18.00	7.63	486.81	1166.34	1736.92	0.23	0.06
869	18.65	19	SLE	F	a	4	6	428.00	-3784.55	32.00	109.00	0.17	161.61	18.00	7.63	486.81	1198.37	1736.92	0.23	0.06
941	19.35	20	SLE	Q	a	5	6	35.00	-2137.53	32.00	109.00	0.17	161.61	18.00	7.63	486.81	676.85	1736.92	0.13	0.04
945	19.35	19	SLE	F	a	5	6	35.00	-2185.14	32.00	109.00	0.17	161.61	18.00	7.63	486.81	691.92	1736.92	0.13	0.04
1018	22.96	20	SLE	Q	c	5	6	396.00	-3428.50	32.00	109.00	0.17	161.61	18.00	7.63	486.81	1085.63	1736.92	0.21	0.06
1021	22.96	19	SLE	F	c	5	6	396.00	-3525.40	32.00	109.00	0.17	161.61	18.00	7.63	486.81	1116.31	1736.92	0.22	0.06

## Staffe - Verifiche armatura

CC	X0	X1	Lung.	In	Staff.	AfE St.	bw	Vsdu	ctg $\theta$	VRsd	VRcd	Vrdu	Sic.T
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	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
17 SLU	0.15	0.65	0.50	ø8/ 8 2 br.	12.57	0.30	8897.80	2.01	40736.00	40736.00	40736.00	4.58
9 SLV	0.65	3.55	2.90	ø8/20 2 br.	5.03	0.30	7199.82	2.50	20313.30	35174.00	20313.30	2.82
1 SLV	3.55	4.05	0.50	ø8/ 8 2 br.	12.57	0.30	7564.79	2.01	40736.00	40736.00	40736.00	5.38
17 SLU	4.75	5.25	0.50	ø8/ 8 2 br.	12.57	0.30	9126.45	2.01	40736.00	40736.00	40736.00	4.46
9 SLV	5.25	8.21	2.96	ø8/20 2 br.	5.03	0.30	7332.32	2.50	20313.30	35174.00	20313.30	2.77
17 SLU	8.21	8.71	0.50	ø8/ 8 2 br.	12.57	0.30	7942.41	2.01	40736.00	40736.00	40736.00	5.13
17 SLU	9.41	9.91	0.50	ø8/ 8 2 br.	12.57	0.30	6911.48	2.01	40736.00	40736.00	40736.00	5.89
9 SLV	9.91	13.75	3.84	ø8/20 2 br.	5.03	0.30	5734.26	2.50	20313.30	35174.00	20313.30	3.54
17 SLU	13.75	14.25	0.50	ø8/ 8 2 br.	12.57	0.30	6373.04	2.01	40736.00	40736.00	40736.00	6.39
9 SLV	14.95	15.45	0.50	ø8/ 8 2 br.	12.57	0.30	7765.90	2.01	40736.00	40736.00	40736.00	5.25
1 SLV	15.45	18.15	2.70	ø8/20 2 br.	5.03	0.30	7183.24	2.50	20313.30	35174.00	20313.30	2.83
1 SLV	18.15	18.65	0.50	ø8/ 8 2 br.	12.57	0.30	8492.67	2.01	40736.00	40736.00	40736.00	4.80
9 SLV	19.35	19.85	0.50	ø8/ 8 2 br.	12.57	0.30	7676.80	2.01	40736.00	40736.00	40736.00	5.31
1 SLV	19.85	22.46	2.61	ø8/20 2 br.	5.03	0.30	7098.80	2.50	20313.30	35174.00	20313.30	2.86
1 SLV	22.46	22.96	0.50	ø8/ 8 2 br.	12.57	0.30	8370.15	2.01	40736.00	40736.00	40736.00	4.87

**Travate n. 202 302 402**

202 (a) Nodi: 207 208 209 -1322 -1323 -1324 -1325 -1326 210 211 212

302 (b) Nodi: 307 308 309 -1534 -1535 -1536 -1537 -1538 310 311 312

402 (c) Nodi: 407 408 409 -1746 -1747 -1748 -1749 -1750 410 411 412

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
7R		30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	b	1	15.00	8.29	6.28	8.29	6.28	-14624.40	-17210.70	1.177
1.95	17	SLU	b	1	195.00	8.29	6.28	8.29	6.28	5191.14	13137.10	2.531
4.05	1	SLV	b	1	405.00	8.29	6.28	8.29	6.28	-9760.05	-17210.70	1.763
4.75	9	SLV	b	2	35.00	8.29	6.28	8.29	6.28	-15356.00	-17210.70	1.121
7.80	17	SLU	b	2	340.38	6.28	6.28	6.28	6.28	6890.67	13138.60	1.907
8.72	1	SLV	b	2	432.00	6.28	6.28	6.28	6.28	-7451.39	-13138.60	1.763
9.42	9	SLV	b	3	13.00	6.28	6.28	6.28	6.28	-8178.41	-13138.60	1.607
11.11	17	SLU	a	5	13.12	6.28	6.28	6.28	6.28	3576.48	13138.60	3.674
14.24	1	SLV	b	8	71.67	6.28	6.28	6.28	6.28	-8991.67	-13138.60	1.461
14.94	9	SLV	b	9	57.00	6.28	6.28	6.28	6.28	-7680.95	-13138.60	1.711
16.06	1	SLV	b	9	169.26	6.28	6.28	6.28	6.28	5906.72	13138.60	2.224
18.65	1	SLV	b	9	428.00	8.29	6.28	8.29	6.28	-12168.60	-17210.70	1.414
19.35	1	SLV	c	10	35.00	8.29	6.28	8.29	6.28	5526.29	13137.10	2.377
20.48	1	SLV	c	10	147.93	6.28	6.28	6.28	6.28	5555.19	13138.60	2.365
22.96	1	SLV	c	10	396.00	6.28	6.28	6.28	6.28	-10969.80	-13138.60	1.198

**Stato limite d'esercizio - Verifiche tensionali**

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>e</sub> <daN/cmq>
0.15	18	SLE R	b	1	15.00	8.29	6.28	-10169.70	2411.62	-719.51	64.49
0.15	20	SLE Q	b	1	15.00	8.29	6.28	-8848.75	2098.38	-626.06	56.11
1.95	18	SLE R	b	1	195.00	8.29	6.28	3597.59	-251.33	1112.13	23.95
1.95	20	SLE Q	b	1	195.00	8.29	6.28	3396.18	-237.26	1049.87	22.61
4.05	18	SLE R	a	1	405.00	8.29	6.28	-5396.30	1279.67	-381.79	34.22
4.05	20	SLE Q	a	1	405.00	8.29	6.28	-4970.03	1178.58	-351.63	31.52
4.75	18	SLE R	b	2	35.00	8.29	6.28	-10136.20	2403.68	-717.14	64.28
4.75	20	SLE Q	b	2	35.00	8.29	6.28	-9122.83	2163.37	-645.45	57.85
7.80	18	SLE R	b	2	340.38	6.28	6.28	4828.33	-359.18	1496.86	33.74
7.80	20	SLE Q	b	2	340.38	6.28	6.28	4301.87	-320.02	1333.64	30.06
8.72	18	SLE R	a	2	432.00	6.28	6.28	-2732.68	847.17	-203.29	19.10
8.72	20	SLE Q	a	2	432.00	6.28	6.28	-2369.29	734.52	-176.25	16.56
9.42	18	SLE R	b	3	13.00	6.28	6.28	-3579.57	1109.72	-266.29	25.01
9.42	20	SLE Q	a	3	13.00	6.28	6.28	-3159.67	979.54	-235.05	22.08
11.11	18	SLE R	a	5	13.12	6.28	6.28	2546.49	-189.44	789.45	17.79
11.11	20	SLE Q	a	5	13.12	6.28	6.28	2240.66	-166.69	694.64	15.66
14.24	18	SLE R	a	8	71.67	6.28	6.28	-5153.46	1597.65	-383.37	36.01
14.24	20	SLE Q	a	8	71.67	6.28	6.28	-4503.45	1396.14	-335.01	31.47
14.94	18	SLE R	c	9	57.00	6.28	6.28	-2023.68	627.37	-150.54	14.14
14.94	20	SLE Q	c	9	57.00	6.28	6.28	-1574.70	488.18	-117.14	11.00
16.06	18	SLE R	b	9	169.26	6.28	6.28	3257.25	-242.31	1009.80	22.76
16.06	20	SLE Q	b	9	169.26	6.28	6.28	2840.12	-211.28	880.48	19.85
18.65	18	SLE R	a	9	428.00	8.29	6.28	-6626.54	1571.41	-468.83	42.02
18.65	20	SLE Q	a	9	428.00	8.29	6.28	-5874.91	1393.16	-415.65	37.25
19.35	18	SLE R	c	10	35.00	8.29	6.28	2399.25	-167.61	741.68	15.97
19.35	20	SLE Q	c	10	35.00	8.29	6.28	1930.03	-134.83	596.63	12.85



20.48	18	SLE R	c	10	147.93	6.28	6.28	3363.20	-250.19	1042.64	23.50
20.48	20	SLE Q	c	10	147.93	6.28	6.28	2850.43	-212.04	883.68	19.92
22.96	18	SLE R	c	10	396.00	6.28	6.28	-6834.27	2118.73	-508.41	47.76
22.96	20	SLE Q	c	10	396.00	6.28	6.28	-5742.75	1780.34	-427.21	40.13

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	In	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>sm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>s,eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
62	0.15	20	SLE Q	b	1	7	1	15.00	-8848.75	31.00	109.00	0.17	168.97	20.00	8.29	508.05	2098.38	1869.87	0.61	0.18
65	0.15	19	SLE F	b	1	7	1	15.00	-9226.16	31.00	109.00	0.17	168.97	20.00	8.29	508.05	2187.87	1869.87	0.67	0.19
149	1.95	20	SLE Q	b	1	7	1	195.00	3396.18	31.00	218.00	0.18	218.06	20.00	6.28	502.57	1049.87	2375.47	0.20	0.08
153	1.95	19	SLE F	b	1	7	1	195.00	3453.19	31.00	218.00	0.18	218.06	20.00	6.28	502.57	1067.49	2375.47	0.21	0.08
233	4.05	20	SLE Q	a	1	7	1	405.00	-4970.03	31.00	109.00	0.17	168.97	20.00	8.29	508.05	1178.58	1869.87	0.23	0.07
238	4.05	19	SLE F	a	1	7	1	405.00	-5091.82	31.00	109.00	0.17	168.97	20.00	8.29	508.05	1207.46	1869.87	0.23	0.07
309	4.75	20	SLE Q	b	2	7	1	35.00	-9122.83	31.00	109.00	0.17	168.97	20.00	8.29	508.05	2163.37	1869.87	0.66	0.19
312	4.75	19	SLE F	b	2	7	1	35.00	-9412.36	31.00	109.00	0.17	168.97	20.00	8.29	508.05	2232.03	1869.87	0.70	0.20
399	7.80	20	SLE Q	b	2	7	1	340.38	4301.87	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1333.64	2342.93	0.26	0.10
403	7.80	19	SLE F	b	2	7	1	340.38	4452.29	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1380.28	2342.93	0.27	0.10
496	8.72	20	SLE Q	a	2	7	1	432.00	-2369.29	31.00	218.00	0.17	217.44	20.00	6.28	502.57	734.52	2342.93	0.14	0.05
502	8.72	19	SLE F	a	2	7	1	432.00	-2473.12	31.00	218.00	0.17	217.44	20.00	6.28	502.57	766.70	2342.93	0.15	0.06
570	9.42	20	SLE Q	a	3	7	1	13.00	-3159.67	31.00	218.00	0.17	217.44	20.00	6.28	502.57	979.54	2342.93	0.19	0.07
574	9.42	19	SLE F	b	3	7	1	13.00	-3279.54	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1016.71	2342.93	0.20	0.07
640	11.11	20	SLE Q	a	5	7	1	13.12	2240.66	31.00	218.00	0.17	217.44	20.00	6.28	502.57	694.64	2342.93	0.13	0.05
643	11.11	19	SLE F	a	5	7	1	13.12	2327.97	31.00	218.00	0.17	217.44	20.00	6.28	502.57	721.71	2342.93	0.14	0.05
705	14.24	20	SLE Q	a	8	7	1	71.67	-4503.45	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1396.14	2342.93	0.27	0.10
708	14.24	19	SLE F	a	8	7	1	71.67	-4689.16	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1453.71	2342.93	0.28	0.10
798	14.94	20	SLE Q	c	9	7	1	57.00	-1574.70	31.00	218.00	0.17	217.44	20.00	6.28	502.57	488.18	2342.93	0.09	0.04
804	14.94	19	SLE F	c	9	7	1	57.00	-1702.98	31.00	218.00	0.17	217.44	20.00	6.28	502.57	527.95	2342.93	0.10	0.04
881	16.06	20	SLE Q	b	9	7	1	169.26	2840.12	31.00	218.00	0.17	217.44	20.00	6.28	502.57	880.48	2342.93	0.17	0.06
884	16.06	19	SLE F	b	9	7	1	169.26	2958.92	31.00	218.00	0.17	217.44	20.00	6.28	502.57	917.31	2342.93	0.18	0.07
949	18.65	20	SLE Q	a	9	7	1	428.00	-5874.91	31.00	109.00	0.17	168.97	20.00	8.29	508.05	1393.16	1869.87	0.27	0.08
952	18.65	19	SLE F	a	9	7	1	428.00	-6089.66	31.00	109.00	0.17	168.97	20.00	8.29	508.05	1444.09	1869.87	0.28	0.08
1046	19.35	20	SLE Q	c	10	7	1	35.00	1930.03	31.00	218.00	0.18	218.06	20.00	6.28	502.57	596.63	2375.47	0.12	0.04
1052	19.35	19	SLE F	c	10	7	1	35.00	2064.09	31.00	218.00	0.18	218.06	20.00	6.28	502.57	638.08	2375.47	0.12	0.05
1130	20.48	20	SLE Q	c	10	7	1	147.93	2850.43	31.00	218.00	0.17	217.44	20.00	6.28	502.57	883.68	2342.93	0.17	0.06
1133	20.48	19	SLE F	c	10	7	1	147.93	2996.22	31.00	218.00	0.17	217.44	20.00	6.28	502.57	928.87	2342.93	0.18	0.07
1202	22.96	20	SLE Q	c	10	7	1	396.00	-5742.75	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1780.34	2342.93	0.35	0.13
1205	22.96	19	SLE F	c	10	7	1	396.00	-6054.61	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1877.02	2342.93	0.36	0.13

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	In	Staff.	AfE St. <cmq/m>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17	SLU	0.15	0.75	0.60	ø8/ 8 2 br.	12.57	0.30	17553.90	2.01	49610.90	49610.90	49610.90	2.83
17	SLU	0.75	3.45	2.70	ø8/20 2 br.	5.03	0.30	12774.90	2.50	24738.80	42837.20	24738.80	1.94
17	SLU	3.45	4.05	0.60	ø8/ 8 2 br.	12.57	0.30	13825.40	2.01	49610.90	49610.90	49610.90	3.59
17	SLU	4.75	5.35	0.60	ø8/ 8 2 br.	12.57	0.30	17169.50	2.01	49610.90	49610.90	49610.90	2.89
17	SLU	5.35	8.12	2.77	ø8/20 2 br.	5.03	0.30	12888.10	2.50	24738.80	42837.20	24738.80	1.92
17	SLU	8.12	8.72	0.60	ø8/12 2 br.	8.38	0.30	11841.30	2.50	41231.40	42837.20	41231.40	3.48
9	SLV	9.42	10.02	0.60	ø8/12 2 br.	8.38	0.30	6968.79	2.50	41231.40	42837.20	41231.40	5.92
17	SLU	10.02	13.64	3.62	ø8/20 2 br.	5.03	0.30	5941.64	2.50	24738.80	42837.20	24738.80	4.16
17	SLU	13.64	14.24	0.60	ø8/12 2 br.	8.38	0.30	7715.68	2.50	41231.40	42837.20	41231.40	5.34
17	SLU	14.94	15.54	0.60	ø8/12 2 br.	8.38	0.30	8830.71	2.50	41231.40	42837.20	41231.40	4.67
17	SLU	15.54	18.05	2.51	ø8/20 2 br.	5.03	0.30	8903.78	2.50	24738.80	42837.20	24738.80	2.78
17	SLU	18.05	18.65	0.60	ø8/ 8 2 br.	12.57	0.30	12252.10	2.01	49610.90	49610.90	49610.90	4.05
17	SLU	19.35	19.95	0.60	ø8/ 8 2 br.	12.57	0.30	7859.76	2.01	49610.90	49610.90	49610.90	6.31
17	SLU	19.95	22.36	2.41	ø8/20 2 br.	5.03	0.30	8969.09	2.50	24738.80	42837.20	24738.80	2.76
17	SLU	22.36	22.96	0.60	ø8/12 2 br.	8.38	0.30	12153.10	2.50	41231.40	42837.20	41231.40	3.39

## Travate n. 203 303 403

203 (a) Nodi: 213 -1395 -1396 -1397 -1398 214 -1399 -1400 -1401 -1402 21 -1403 -1404 -1405 -1406 -1407 216 -1408 -1409 -1410 -1411 217 -1412 -1413 -1414 -1415 218

303 (b) Nodi: 313 -1607 -1608 -1609 -1610 314 -1611 -1612 -1613 -1614 315 -1615 -1616 -1617 -1618 -1619 316 -1620 -1621 -1622 -1623 317 -1624 -1625 -1626 -1627 318

403 (c) Nodi: 413 -1819 -1820 -1821 -1822 414 -1823 -1824 -1825 -1826 415 -1827 -1828 -1829 -1830 -1831 416 -1832 -1833 -1834 -1835 417 -1836 -1837 -1838 -1839 418

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
7R		30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfE P S <cmq>	AfE P I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	1	SLV	b	1	15.00	6.28	5.09	6.28	5.09	-8560.01	-10680.40	1.248
2.10	17	SLU	c	3	34.00	6.28	5.09	6.28	5.09	3890.89	8722.09	2.242
4.05	9	SLV	b	5	53.00	6.28	5.09	6.28	5.09	-7282.06	-10680.40	1.467
4.75	1	SLV	c	6	35.00	6.28	5.09	6.28	5.09	-9491.14	-10680.40	1.125
6.36	17	SLU	c	8	0.00	6.28	5.09	6.28	5.09	5540.08	8722.09	1.574
9.12	17	SLU	a	10	80.30	6.28	5.09	6.28	5.09	-9185.83	-10680.40	1.163



9.41	17	SLU	b	11	12.50	6.28	11.37	6.28	11.37	-11000.10	-13135.30	1.194
12.07	17	SLU	b	14	0.00	6.28	6.28	6.28	6.28	7182.05	13138.60	1.829
14.24	17	SLU	b	16	56.00	6.28	11.37	6.28	11.37	-10813.00	-13135.30	1.215
14.54	17	SLU	b	17	17.50	6.28	5.09	6.28	5.09	-9165.16	-10680.40	1.165
16.22	17	SLU	c	19	0.00	6.28	5.09	6.28	5.09	4574.57	8722.09	1.907
18.65	9	SLV	c	21	57.60	6.28	5.09	6.28	5.09	-8553.96	-10680.40	1.249
19.35	1	SLV	b	22	35.00	6.28	5.09	6.28	5.09	-6920.63	-10680.40	1.543
20.64	17	SLU	c	24	0.00	6.28	5.09	6.28	5.09	4575.55	8722.09	1.906
22.96	9	SLV	c	26	67.20	6.28	5.09	6.28	5.09	-9282.23	-10680.40	1.151

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>	
0.15	18	SLE	R	c	1	15.00	6.28	5.09	-5351.06	2043.80	-536.89	52.67
0.15	20	SLE	Q	b	1	15.00	6.28	5.09	-4381.55	1673.50	-439.61	43.13
2.10	18	SLE	R	c	3	34.00	6.28	5.09	2724.32	-269.21	1273.80	28.04
2.10	20	SLE	Q	b	3	34.00	6.28	5.09	2168.13	-214.25	1013.74	22.31
4.05	18	SLE	R	a	5	53.00	6.28	5.09	-3611.91	1379.54	-362.39	35.55
4.05	20	SLE	Q	a	5	53.00	6.28	5.09	-3139.81	1199.23	-315.03	30.90
4.75	18	SLE	R	c	6	35.00	6.28	5.09	-6330.44	2417.87	-635.15	62.31
4.75	20	SLE	Q	c	6	35.00	6.28	5.09	-5472.33	2090.12	-549.05	53.86
6.36	18	SLE	R	c	8	0.00	6.28	5.09	3863.24	-381.75	1806.32	39.76
6.36	20	SLE	Q	c	8	0.00	6.28	5.09	3321.48	-328.22	1553.01	34.18
9.12	18	SLE	R	a	10	80.30	6.28	5.09	-6377.50	2435.84	-639.87	62.77
9.12	20	SLE	Q	a	10	80.30	6.28	5.09	-5326.86	2034.56	-534.46	52.43
9.41	18	SLE	R	b	11	12.50	6.28	11.37	-7689.11	2369.00	-490.45	47.79
9.41	20	SLE	Q	b	11	12.50	6.28	11.37	-6431.39	1981.50	-410.23	39.97
12.07	18	SLE	R	b	14	0.00	6.28	6.28	5068.02	-377.01	1571.16	35.41
12.07	20	SLE	Q	b	14	0.00	6.28	6.28	4208.78	-313.09	1304.78	29.41
14.24	18	SLE	R	b	16	56.00	6.28	11.37	-7551.18	2326.50	-481.65	46.93
14.24	20	SLE	Q	b	16	56.00	6.28	11.37	-6368.79	1962.21	-406.23	39.58
14.54	18	SLE	R	b	17	17.50	6.28	5.09	-6365.38	2431.21	-638.66	62.65
14.54	20	SLE	Q	b	17	17.50	6.28	5.09	-5383.38	2056.14	-540.13	52.99
16.22	18	SLE	R	c	19	0.00	6.28	5.09	3188.51	-315.08	1490.84	32.81
16.22	20	SLE	Q	c	19	0.00	6.28	5.09	2746.87	-271.44	1284.34	28.27
18.65	18	SLE	R	a	21	57.60	6.28	5.09	-5675.38	2167.67	-569.43	55.86
18.65	20	SLE	Q	a	21	57.60	6.28	5.09	-4887.36	1866.69	-490.36	48.10
19.35	18	SLE	R	a	22	35.00	6.28	5.09	-2671.25	1020.27	-268.01	26.29
19.35	20	SLE	Q	a	22	35.00	6.28	5.09	-2418.19	923.61	-242.62	23.80
20.64	18	SLE	R	c	24	0.00	6.28	5.09	3200.44	-316.26	1496.42	32.94
20.64	20	SLE	Q	c	24	0.00	6.28	5.09	2714.58	-268.25	1269.24	27.94
22.96	18	SLE	R	c	26	67.20	6.28	5.09	-5579.88	2131.19	-559.85	54.92
22.96	20	SLE	Q	c	26	67.20	6.28	5.09	-4642.58	1773.20	-465.80	45.69

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	In	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	$s_{rm}$ <mm>	$\phi$	$A_s$ <cmq>	$A_c$ eff <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sz}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>	
61	0.15	20	SLE	Q	b	1	6	1	15.00	-4381.55	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1673.50	2029.24	0.32	0.11
65	0.15	19	SLE	F	c	1	6	1	15.00	-4611.66	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1761.39	2029.24	0.34	0.12
124	2.10	20	SLE	Q	b	3	6	1	34.00	2168.13	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1013.74	2440.03	0.20	0.07
128	2.10	19	SLE	F	c	3	6	1	34.00	2326.97	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1088.01	2440.03	0.21	0.08
196	4.05	20	SLE	Q	a	5	6	1	53.00	-3139.81	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1199.23	2029.24	0.23	0.08
199	4.05	19	SLE	F	a	5	6	1	53.00	-3274.70	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1250.75	2029.24	0.24	0.09
263	4.75	20	SLE	Q	c	6	6	1	35.00	-5472.33	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2090.12	2029.24	0.54	0.19
266	4.75	19	SLE	F	c	6	6	1	35.00	-5717.50	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2183.76	2029.24	0.60	0.21
326	6.36	20	SLE	Q	c	8	6	1	0.00	3321.48	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1553.01	2440.03	0.30	0.11
329	6.36	19	SLE	F	c	8	6	1	0.00	3476.26	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1625.38	2440.03	0.32	0.12
387	9.12	20	SLE	Q	a	10	6	1	80.30	-5326.86	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2034.56	2029.24	0.50	0.17
390	9.12	19	SLE	F	a	10	6	1	80.30	-5627.04	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2149.21	2029.24	0.58	0.20
451	9.41	20	SLE	Q	b	11	7	1	12.50	-6431.39	31.00	218.00	0.18	218.93	20.00	6.28	502.57	1981.50	2423.39	0.38	0.14
454	9.41	19	SLE	F	b	11	7	1	12.50	-6790.74	31.00	218.00	0.18	218.93	20.00	6.28	502.57	2092.21	2423.39	0.41	0.15
514	12.07	20	SLE	Q	b	14	7	1	0.00	4208.78	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1304.78	2342.93	0.25	0.09
517	12.07	19	SLE	F	b	14	7	1	0.00	4452.65	31.00	218.00	0.17	217.44	20.00	6.28	502.57	1380.39	2342.93	0.27	0.10
578	14.24	20	SLE	Q	b	16	7	1	56.00	-6368.79	31.00	218.00	0.18	218.93	20.00	6.28	502.57	1962.21	2423.39	0.38	0.14
581	14.24	19	SLE	F	b	16	7	1	56.00	-6706.61	31.00	218.00	0.18	218.93	20.00	6.28	502.57	2066.29	2423.39	0.40	0.15
641	14.54	20	SLE	Q	b	17	6	1	17.50	-5383.38	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2056.14	2029.24	0.51	0.18
644	14.54	19	SLE	F	b	17	6	1	17.50	-5663.95	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2163.31	2029.24	0.59	0.21
705	16.22	20	SLE	Q	c	19	6	1	0.00	2746.87	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1284.34	2440.03	0.25	0.09
708	16.22	19	SLE	F	c	19	6	1	0.00	2873.05	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1343.34	2440.03	0.26	0.10
776	18.65	20	SLE	Q	a	21	6	1	57.60	-4887.36	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1866.69	2029.24	0.37	0.13
779	18.65	19	SLE	F	a	21	6	1	57.60	-5112.51	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1952.69	2029.24	0.44	0.15
858	19.35	20	SLE	Q	a	22	6	1	35.00	-2418.19	31.00	218.00	0.16	207.29	20.00	6.28	502.57	923.61	2029.24	0.18	0.06
862	19.35	19	SLE	F	a	22	6	1	35.00	-2490.49	31.00	218.00	0.16	207.29	20.00	6.28	502.57	951.23	2029.24	0.18	0.07
925	20.64	20	SLE	Q	c	24	6	1	0.00	2714.58	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1269.24	2440.03	0.25	0.09
928	20.64	19	SLE	F	c	24	6	1	0.00	2853.35	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1334.13	2440.03	0.26	0.09
995	22.96	20	SLE	Q	c	26	6	1	67.20	-4642.58	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1773.20	2029.24	0.34	0.12
998	22.96	19	SLE	F	c	26	6	1	67.20	-4910.38	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1875.49	2029.24	0.38	0.13



## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	In	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17 SLU	0.15	0.65	0.50		ø10/ 8 2 br.	19.64	0.30	7943.29	1.49	47224.80	47224.80	47224.80	5.95
9 SLV	0.65	3.55	2.90		ø10/32 2 br.	4.91	0.30	7483.45	2.50	19837.20	35174.00	19837.20	2.65
17 SLU	3.55	4.05	0.50		ø10/ 8 2 br.	19.64	0.30	8936.26	1.49	47224.80	47224.80	47224.80	5.28
17 SLU	4.75	5.25	0.50		ø10/ 8 2 br.	19.64	0.30	12047.20	1.49	47224.80	47224.80	47224.80	3.92
17 SLU	5.25	8.62	3.36		ø10/32 2 br.	4.91	0.30	9803.78	2.50	19837.20	35174.00	19837.20	2.02
17 SLU	8.62	9.12	0.50		ø10/ 8 2 br.	19.64	0.30	10800.30	1.49	47224.80	47224.80	47224.80	4.37
17 SLU	9.41	10.02	0.60		ø10/12 2 br.	13.09	0.30	9720.44	1.95	50370.90	50370.90	50370.90	5.18
17 SLU	10.02	13.64	3.63		ø10/32 2 br.	4.91	0.30	8599.93	2.50	24159.00	42837.20	24159.00	2.81
17 SLU	13.64	14.24	0.60		ø10/12 2 br.	13.09	0.30	17291.70	1.95	50370.90	50370.90	50370.90	2.91
17 SLU	14.54	15.04	0.50		ø10/ 8 2 br.	19.64	0.30	10920.00	1.49	47224.80	47224.80	47224.80	4.32
17 SLU	15.04	18.15	3.10		ø10/32 2 br.	4.91	0.30	9315.02	2.50	19837.20	35174.00	19837.20	2.13
17 SLU	18.15	18.65	0.50		ø10/ 8 2 br.	19.64	0.30	11527.90	1.49	47224.80	47224.80	47224.80	4.10
1 SLV	19.35	19.85	0.50		ø10/ 8 2 br.	19.64	0.30	8977.93	1.49	47224.80	47224.80	47224.80	5.26
17 SLU	19.85	22.46	2.61		ø10/32 2 br.	4.91	0.30	7967.81	2.50	19837.20	35174.00	19837.20	2.49
17 SLU	22.46	22.96	0.50		ø10/ 8 2 br.	19.64	0.30	10107.80	1.49	47224.80	47224.80	47224.80	4.67

## Travata n. 204

Nodi: 201 -1303 -1306 -1309 -1314 -1318 207 -1337 -1354 -1367 -1378 -1389 213

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
1.05	17	SLU	1	105.00	7.82	5.09	7.82	5.09	-5979.15	-13194.10	2.207
2.10	17	SLU	3	42.00	6.28	5.09	6.28	5.09	4355.40	8722.09	2.003
4.44	9	SLV	6	24.00	6.28	5.09	6.28	5.09	-4869.48	-10680.40	2.193
5.64	17	SLU	7	60.00	6.28	5.09	6.28	5.09	-8350.34	-10680.40	1.279
7.90	17	SLU	10	0.00	6.28	5.09	6.28	5.09	4768.70	8722.09	1.829
9.71	17	SLU	12	-9.67	6.28	5.09	6.28	5.09	-4795.59	-10680.40	2.227

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>c</sub> <daN/cmq>
1.05	18	SLE R	1	105.00	7.82	5.09	-4170.79	1290.09	-404.46	38.04
1.05	20	SLE Q	1	105.00	7.82	5.09	-3535.19	1093.49	-342.82	32.25
2.10	18	SLE R	3	42.00	6.28	5.09	3046.22	-301.02	1424.31	31.35
2.10	20	SLE Q	3	42.00	6.28	5.09	2586.34	-255.57	1209.29	26.62
4.44	18	SLE R	6	24.00	6.28	5.09	-3082.65	1177.39	-309.29	30.34
4.44	20	SLE Q	6	24.00	6.28	5.09	-2661.23	1016.44	-267.01	26.19
5.64	18	SLE R	7	60.00	6.28	5.09	-5892.63	2250.65	-591.23	58.00
5.64	20	SLE Q	7	60.00	6.28	5.09	-5027.67	1920.28	-504.44	49.48
7.90	18	SLE R	10	0.00	6.28	5.09	3345.04	-330.55	1564.03	34.43
7.90	20	SLE Q	10	0.00	6.28	5.09	2855.69	-282.19	1335.23	29.39
9.71	18	SLE R	12	-9.67	6.28	5.09	-3327.05	1270.74	-333.81	32.75
9.71	20	SLE Q	12	-9.67	6.28	5.09	-2830.63	1081.14	-284.00	27.86

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	s <sub>zm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
20	1.05	20	SLE Q	1	6	1	105.00	-3535.19	31.00	109.00	0.16	165.12	20.00	7.82	503.64	1093.49	1704.12	0.21	0.06
21	1.05	19	SLE F	1	6	1	105.00	-3716.79	31.00	109.00	0.16	165.12	20.00	7.82	503.64	1149.66	1704.12	0.22	0.06
41	2.10	20	SLE Q	3	6	1	42.00	2586.34	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1209.29	2440.03	0.23	0.09
42	2.10	19	SLE F	3	6	1	42.00	2717.65	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1270.68	2440.03	0.25	0.09
65	4.44	20	SLE Q	6	6	1	24.00	-2661.23	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1016.44	2029.24	0.20	0.07
66	4.44	19	SLE F	6	6	1	24.00	-2781.63	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1062.43	2029.24	0.21	0.07
86	5.64	20	SLE Q	7	6	1	60.00	-5027.67	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1920.28	2029.24	0.41	0.15
87	5.64	19	SLE F	7	6	1	60.00	-5274.80	31.00	218.00	0.16	207.29	20.00	6.28	502.57	2014.67	2029.24	0.48	0.17
107	7.90	20	SLE Q	10	6	1	0.00	2855.69	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1335.23	2440.03	0.26	0.09
108	7.90	19	SLE F	10	6	1	0.00	2995.31	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1400.50	2440.03	0.27	0.10
128	9.71	20	SLE Q	12	6	1	-9.67	-2830.63	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1081.14	2029.24	0.21	0.07
129	9.71	19	SLE F	12	6	1	-9.67	-2972.46	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1135.31	2029.24	0.22	0.08

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17 SLU	1.05	1.55	0.50	ø8/ 8 2 br.	12.57	0.30	3568.64	2.01	40736.00	40736.00	40736.00	11.41
17 SLU	1.55	3.94	2.39	ø8/20 2 br.	5.03	0.30	3747.17	2.50	20313.30	35174.00	20313.30	5.42



17 SLU	3.94	4.44	0.50	ø8/ 8 2 br.	12.57	0.30	10654.60	2.01	40736.00	40736.00	40736.00	3.82
17 SLU	5.64	6.14	0.50	ø8/ 8 2 br.	12.57	0.30	13844.80	2.01	40736.00	40736.00	40736.00	2.94
17 SLU	6.14	9.21	3.07	ø8/20 2 br.	5.03	0.30	4982.49	2.50	20313.30	35174.00	20313.30	4.08
17 SLU	9.21	9.71	0.50	ø8/ 8 2 br.	12.57	0.30	4216.51	2.01	40736.00	40736.00	40736.00	9.66

**Travate n. 207 307 407**

207 (a) Nodi: 203 209 -1334 -1348 -2023

307 (b) Nodi: 303 309 -1546 -1560 -2024

407 (c) Nodi: 403 409 -1758 -1772 -2025

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Typo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
8R		90.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	a	1	15.00	22.87	12.57	22.87	12.57	-12224.70	-15331.60	1.254
2.36	17	SLU	a	1	236.20	12.57	12.57	12.57	12.57	7582.18	8945.21	1.180
4.89	17	SLU	a	1	489.00	18.85	12.57	18.85	12.57	-10920.00	-12863.40	1.178
5.19	17	SLU	a	2	15.00	18.85	17.66	18.85	17.66	-7020.93	-31190.70	4.443
7.00	17	SLU	b	4	31.86	6.28	5.09	6.28	5.09	5071.44	8722.09	1.720
8.91	17	SLU	a	4	223.00	6.28	5.09	6.28	5.09	2887.69	8722.09	3.020

**Stato limite d'esercizio - Verifiche tensionali**

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cm²>	σ <sub>f</sub> inf <daN/cm²>	σ <sub>c</sub> <daN/cm²>	
0.15	18	SLE	R	a	1	15.00	22.87	12.57	-8512.16	2209.60	-817.91	106.90
0.15	20	SLE	Q	a	1	15.00	22.87	12.57	-7777.64	2018.93	-747.33	97.68
2.36	18	SLE	R	a	1	236.20	12.57	12.57	5257.74	-471.21	2417.25	81.38
2.36	20	SLE	Q	a	1	236.20	12.57	12.57	4856.80	-435.27	2232.92	75.18
4.89	18	SLE	R	a	1	489.00	18.85	12.57	-7561.61	2359.92	-718.58	101.16
4.89	20	SLE	Q	a	1	489.00	18.85	12.57	-7029.23	2193.77	-667.99	94.04
5.19	18	SLE	R	a	2	15.00	18.85	17.66	-4978.71	646.68	-301.61	26.31
5.19	20	SLE	Q	a	2	15.00	18.85	17.66	-4370.09	567.63	-264.74	23.09
7.00	18	SLE	R	b	4	31.86	6.28	5.09	3579.55	-353.72	1673.68	36.84
7.00	20	SLE	Q	b	4	31.86	6.28	5.09	3063.81	-302.76	1432.53	31.53
8.91	18	SLE	R	a	4	223.00	6.28	5.09	2027.24	-200.33	947.87	20.86
8.91	20	SLE	Q	a	4	223.00	6.28	5.09	1757.12	-173.63	821.57	18.08

**Stato limite d'esercizio - Verifiche a fessurazione**

Caso	Xg <m>	CC	TCC	In	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	s <sub>zm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c</sub> eff <cmq>	σ <sub>s</sub> <daN/cm²>	σ <sub>sr</sub> <daN/cm²>	ε <sub>sm</sub>	Wk <mm>	
58	0.15	20	SLE	Q	a	1	8	11	15.00	-7777.64	31.00	116.86	0.13	151.97	20.00	22.87	1523.16	2018.93	1042.46	0.85	0.22
61	0.15	19	SLE	F	a	1	8	11	15.00	-7987.50	31.00	116.86	0.13	151.97	20.00	22.87	1523.16	2073.41	1042.46	0.88	0.23
121	2.36	20	SLE	Q	a	1	8	11	236.20	4856.80	31.00	272.67	0.13	226.65	20.00	12.57	1383.79	2232.92	1658.02	0.79	0.29
124	2.36	19	SLE	F	a	1	8	11	236.20	4971.33	31.00	272.67	0.13	226.65	20.00	12.57	1383.79	2285.58	1658.02	0.82	0.32
184	4.89	20	SLE	Q	a	1	8	11	489.00	-7029.23	31.00	163.60	0.13	176.75	20.00	18.85	1546.22	2193.77	1204.08	0.90	0.27
187	4.89	19	SLE	F	a	1	8	11	489.00	-7181.34	31.00	163.60	0.13	176.75	20.00	18.85	1546.22	2241.24	1204.08	0.93	0.28
255	5.19	20	SLE	Q	a	2	6	1	15.00	-4370.09	31.00	43.60	0.16	106.93	20.00	18.85	536.28	567.63	982.19	0.11	0.02
258	5.19	19	SLE	F	a	2	6	1	15.00	-4543.98	31.00	43.60	0.16	106.93	20.00	18.85	536.28	590.22	982.19	0.11	0.02
319	7.00	20	SLE	Q	b	4	6	1	31.86	3063.81	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1432.53	2440.03	0.28	0.10
322	7.00	19	SLE	F	b	4	6	1	31.86	3210.39	32.00	218.00	0.17	215.47	18.00	5.09	455.32	1501.07	2440.03	0.29	0.11
394	8.91	20	SLE	Q	a	4	6	1	223.00	1757.12	32.00	218.00	0.17	215.47	18.00	5.09	455.32	821.57	2440.03	0.16	0.06
397	8.91	19	SLE	F	a	4	6	1	223.00	1834.30	32.00	218.00	0.17	215.47	18.00	5.09	455.32	857.65	2440.03	0.17	0.06

**Staffe - Verifiche armatura**

CC	X0 <m>	X1 <m>	Lung. <m>	In	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17 SLU	0.15	0.39	0.24		ø10/ 4 2 br.	39.27	0.90	15852.90	1.95	53795.10	53795.10	53795.10	3.39
17 SLU	0.39	4.60	4.21		ø10/ 8 2 br.	19.64	0.90	14275.40	2.50	34401.70	45749.20	34401.70	2.41
17 SLU	4.60	4.84	0.24		ø10/ 4 2 br.	39.27	0.90	14973.70	1.95	53795.10	53795.10	53795.10	3.59
17 SLU	5.24	5.74	0.50		ø10/ 8 2 br.	19.64	0.30	8205.68	1.49	47224.80	47224.80	47224.80	5.76
17 SLU	5.74	8.41	2.67		ø10/32 2 br.	4.91	0.30	6776.07	2.50	19837.20	35174.00	19837.20	2.93
17 SLU	8.41	8.91	0.50		ø10/ 8 2 br.	19.64	0.30	5012.49	1.49	47224.80	47224.80	47224.80	9.42

**Travate n. 209 309 409 509 205 305 405**

209 (a) Nodi: 205 211 217

309 (b) Nodi: 305 311 317

409 (c) Nodi: 405 411 417





509 (d) Nodi: 505 511 517  
 205 (e) Nodi: 202 208 214  
 305 (f) Nodi: 302 308 314  
 405 (g) Nodi: 402 408 414

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
8R		90.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	e	1	15.00	10.05	8.04	10.05	8.04	-5046.26	-7355.58	1.458
2.33	17	SLU	g	1	233.04	8.04	8.04	8.04	8.04	2922.22	6078.25	2.080
4.89	5	SLV	c	1	489.00	14.33	8.04	14.33	8.04	-4906.37	-10051.20	2.049
5.19	17	SLU	a	2	15.00	14.33	8.04	14.33	8.04	-5802.91	-10051.20	1.732
7.56	17	SLU	b	2	252.25	8.04	8.04	8.04	8.04	3367.11	6078.25	1.805
10.61	17	SLU	g	2	557.00	15.68	8.04	15.68	8.04	-8372.93	-10896.50	1.301

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>c</sub> <daN/cmq>	
0.15	18	SLE	R	e	1	15.00	10.05	8.04	-3606.12	2044.91	-330.67	63.14
0.15	20	SLE	Q	e	1	15.00	10.05	8.04	-3188.15	1807.89	-292.34	55.82
2.33	18	SLE	R	g	1	233.04	8.04	8.04	2094.97	-174.53	1470.33	40.09
2.33	20	SLE	Q	e	1	233.04	8.04	8.04	1853.21	-154.39	1300.65	35.46
4.89	18	SLE	R	f	1	489.00	14.33	8.04	-3316.27	1341.33	-330.39	50.95
4.89	20	SLE	Q	b	1	489.00	14.33	8.04	-2978.67	1204.78	-296.75	45.76
5.19	18	SLE	R	a	2	15.00	14.33	8.04	-4180.00	1690.67	-416.44	64.21
5.19	20	SLE	Q	a	2	15.00	14.33	8.04	-3784.70	1530.79	-377.06	58.14
7.56	18	SLE	R	b	2	252.25	8.04	8.04	2425.45	-202.07	1702.27	46.42
7.56	20	SLE	Q	b	2	252.25	8.04	8.04	2191.68	-182.59	1538.20	41.94
10.61	18	SLE	R	g	2	557.00	15.68	8.04	-5953.93	2210.17	-600.38	88.65
10.61	20	SLE	Q	g	2	557.00	15.68	8.04	-4940.31	1833.90	-498.17	73.56

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	In	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	s <sub>m</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>s</sub> eff <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>	
138	0.15	20	SLE	Q	e	1	8	11	15.00	-3188.15	33.00	204.50	0.13	203.31	16.00	10.05	1211.49	1807.89	1954.71	0.36	0.13
145	0.15	19	SLE	F	e	1	8	11	15.00	-3307.57	33.00	204.50	0.13	203.31	16.00	10.05	1211.49	1875.61	1954.71	0.42	0.14
285	2.33	20	SLE	Q	e	1	8	11	233.04	1853.21	33.00	224.00	0.13	223.15	16.00	2.01	282.37	1300.65	2362.52	0.25	0.10
292	2.33	19	SLE	F	e	1	8	11	233.04	1916.83	33.00	224.00	0.13	223.15	16.00	2.01	282.37	1345.30	2362.52	0.26	0.10
429	4.89	20	SLE	Q	b	1	8	11	489.00	-2978.67	31.00	163.60	0.13	191.18	20.00	14.33	1381.89	1204.78	1462.79	0.23	0.08
440	4.89	19	SLE	F	f	1	8	11	489.00	-3071.32	31.00	163.60	0.13	191.18	20.00	14.33	1381.89	1242.25	1462.79	0.24	0.08
575	5.19	20	SLE	Q	a	2	8	11	15.00	-3784.70	31.00	163.60	0.13	191.18	20.00	14.33	1381.89	1530.79	1462.79	0.40	0.13
582	5.19	19	SLE	F	a	2	8	11	15.00	-3897.64	31.00	163.60	0.13	191.18	20.00	14.33	1381.89	1576.47	1462.79	0.44	0.14
723	7.56	20	SLE	Q	b	2	8	11	252.25	2191.68	33.00	224.00	0.13	223.15	16.00	2.01	282.37	1538.20	2362.52	0.30	0.11
730	7.56	19	SLE	F	b	2	8	11	252.25	2258.47	33.00	224.00	0.13	223.15	16.00	2.01	282.37	1585.07	2362.52	0.31	0.12
875	10.61	20	SLE	Q	g	2	8	11	557.00	-4940.31	32.00	136.33	0.13	169.77	18.00	15.68	1367.40	1833.90	1362.18	0.64	0.19
882	10.61	19	SLE	F	g	2	8	11	557.00	-5229.92	32.00	136.33	0.13	169.77	18.00	15.68	1367.40	1941.41	1362.18	0.71	0.21

## Staffe - Verifiche armatura

CC	X0 <cm>	X1 <cm>	Lung. <cm>	In	Staff.	AfE St <cmq/m>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17	SLU	0.15	0.39	0.24	ø8/ 4 4 br.	50.27	0.90	6277.28	1.66	58589.60	58589.60	58589.60	9.33
17	SLU	0.39	4.65	4.26	ø8/12 4 br.	16.76	0.90	5661.58	2.50	29356.10	45749.20	29356.10	5.19
17	SLU	4.65	4.89	0.24	ø8/ 4 4 br.	50.27	0.90	6102.79	1.66	58589.60	58589.60	58589.60	9.60
17	SLU	5.19	5.43	0.24	ø8/ 4 4 br.	50.27	0.90	6696.20	1.66	58589.60	58589.60	58589.60	8.75
17	SLU	5.43	10.37	4.94	ø8/12 4 br.	16.76	0.90	7030.74	2.50	29356.10	45749.20	29356.10	4.18
17	SLU	10.37	10.61	0.24	ø8/ 4 4 br.	50.27	0.90	7651.48	1.66	58589.60	58589.60	58589.60	7.66

## Travate n. 210 310 410 510

210 (a) Nodi: 206 212 218  
 310 (b) Nodi: 306 312 318  
 410 (c) Nodi: 406 412 418  
 510 (d) Nodi: 506 512 518

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
1.05	5	SLV	c	1	105.00	12.19	9.05	12.19	9.05	10121.10	15202.10	1.502
3.98	5	SLV	c	1	397.80	11.06	10.59	11.06	10.59	-12726.00	-18482.90	1.452





4.44	5	SLV	c	1	444.00	11.06	10.59	11.06	10.59	-12726.00	-18482.90	1.452
5.64	13	SLV	b	2	60.00	11.06	10.59	11.06	10.59	-11804.00	-18482.90	1.566
9.71	5	SLV	c	2	467.00	11.06	9.05	11.06	9.05	-12539.40	-18475.80	1.473

**Stato limite d'esercizio - Verifiche tensionali**

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>c</sub> <daN/cmq>
1.05	18	SLE R	a	1	105.00	12.19	9.05	-3436.91	688.91	-274.66	24.61
1.05	20	SLE Q	a	1	105.00	12.19	9.05	-3093.54	620.09	-247.22	22.15
3.98	18	SLE R	a	1	397.80	11.06	10.59	1624.22	-125.28	371.51	11.60
3.98	20	SLE Q	a	1	397.80	11.06	10.59	1453.93	-112.15	332.56	10.38
4.44	18	SLE R	c	1	444.00	11.06	10.59	-1574.07	345.49	-122.26	11.21
4.44	20	SLE Q	c	1	444.00	11.06	10.59	-1426.46	313.10	-110.79	10.16
5.64	18	SLE R	a	2	60.00	11.06	10.59	-3444.12	755.96	-267.50	24.53
5.64	20	SLE Q	a	2	60.00	11.06	10.59	-3161.32	693.88	-245.53	22.51
9.71	18	SLE R	c	2	467.00	11.06	9.05	-3195.41	703.26	-259.24	23.58
9.71	20	SLE Q	c	2	467.00	11.06	9.05	-2892.16	636.52	-234.64	21.34

**Stato limite d'esercizio - Verifiche a fessurazione**

Caso	Xg <m>	CC	TCC	In	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	s <sub>zm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c</sub> eff <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
82	1.05	20	SLE Q	a	1	6	1	105.00	-3093.54	29.00	109.00	0.14	147.05	24.00	12.19	595.11	620.09	1257.73	0.12	0.03
86	1.05	19	SLE F	a	1	6	1	105.00	-3191.64	29.00	109.00	0.14	147.05	24.00	12.19	595.11	639.75	1257.73	0.12	0.03
183	3.98	20	SLE Q	a	1	6	1	397.80	1453.93	29.00	109.00	0.15	158.38	24.00	10.59	593.08	332.56	1409.52	0.06	0.02
190	3.98	19	SLE F	a	1	6	1	397.80	1502.58	29.00	109.00	0.15	158.38	24.00	10.59	593.08	343.69	1409.52	0.07	0.02
283	4.44	20	SLE Q	c	1	6	1	444.00	-1426.46	29.00	109.00	0.15	154.69	24.00	11.06	593.08	313.10	1361.36	0.06	0.02
288	4.44	19	SLE F	c	1	6	1	444.00	-1468.64	29.00	109.00	0.15	154.69	24.00	11.06	593.08	322.35	1361.36	0.06	0.02
374	5.64	20	SLE Q	a	2	6	1	60.00	-3161.32	29.00	109.00	0.15	154.69	24.00	11.06	593.08	693.88	1361.36	0.13	0.04
379	5.64	19	SLE F	a	2	6	1	60.00	-3242.12	29.00	109.00	0.15	154.69	24.00	11.06	593.08	711.62	1361.36	0.14	0.04
471	9.71	20	SLE Q	c	2	6	1	467.00	-2892.16	29.00	109.00	0.14	154.10	24.00	11.06	593.08	636.52	1348.67	0.12	0.03
475	9.71	19	SLE F	c	2	6	1	467.00	-2978.80	29.00	109.00	0.14	154.10	24.00	11.06	593.08	655.59	1348.67	0.13	0.03

**Staffe - Verifiche armatura**

CC	X0 <m>	X1 <m>	Lung. <m>	In	Staff.	AfE St. <cmq/m>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic. T
13 SLV	1.05	1.55	0.50		ø8/ 8 2 br.	12.57	0.30	9659.86	2.01	40736.00	40736.00	40736.00	4.22
13 SLV	1.55	3.94	2.39		ø8/20 2 br.	5.03	0.30	8768.36	2.50	20313.30	35174.00	20313.30	2.32
5 SLV	3.94	4.44	0.50		ø8/ 8 2 br.	12.57	0.30	9490.33	2.01	40736.00	40736.00	40736.00	4.29
13 SLV	5.64	6.14	0.50		ø8/ 8 2 br.	12.57	0.30	8241.96	2.01	40736.00	40736.00	40736.00	4.94
5 SLV	6.14	9.21	3.07		ø8/20 2 br.	5.03	0.30	7880.57	2.50	20313.30	35174.00	20313.30	2.58
5 SLV	9.21	9.71	0.50		ø8/ 8 2 br.	12.57	0.30	8772.08	2.01	40736.00	40736.00	40736.00	4.64

**Travata n. 304**

Nodi: 301 -1515 -1518 -1521 -1526 -1530 307 -1549 -1566 -1579 -1590 -1601 313

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
1.05	1	SLV	1	105.00	9.17	5.09	9.17	5.09	-7907.82	-15387.20	1.946
2.86	1	SLV	4	34.07	5.09	5.09	5.09	5.09	4287.25	8722.72	2.035
4.44	9	SLV	6	24.00	8.23	5.09	8.23	5.09	-9695.34	-13858.80	1.429
5.64	1	SLV	7	60.00	8.23	5.09	8.23	5.09	-9857.25	-13858.80	1.406
7.41	17	SLU	9	45.84	5.09	5.09	5.09	5.09	5027.07	8722.72	1.735
9.71	9	SLV	12	-9.67	9.17	5.09	9.17	5.09	-8455.99	-15387.20	1.820

**Stato limite d'esercizio - Verifiche tensionali**

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>c</sub> <daN/cmq>
1.05	18	SLE R	1	105.00	9.17	5.09	-3170.98	841.87	-299.46	27.43
1.05	20	SLE Q	1	105.00	9.17	5.09	-2728.28	724.34	-257.65	23.60
2.86	18	SLE R	4	34.07	5.09	5.09	2822.71	-291.55	1321.56	29.99
2.86	20	SLE Q	4	34.07	5.09	5.09	2402.01	-248.10	1124.59	25.52
4.44	18	SLE R	6	24.00	8.23	5.09	-4240.79	1249.19	-407.83	38.02
4.44	20	SLE Q	6	24.00	8.23	5.09	-3593.70	1058.58	-345.61	32.22
5.64	18	SLE R	7	60.00	8.23	5.09	-4691.54	1381.97	-451.18	42.07
5.64	20	SLE Q	7	60.00	8.23	5.09	-4067.17	1198.05	-391.14	36.47
7.41	18	SLE R	9	45.84	5.09	5.09	3514.08	-362.96	1645.25	37.33
7.41	20	SLE Q	9	45.84	5.09	5.09	2992.19	-309.06	1400.91	31.79



9.71	18	SLE R	12	-9.67	9.17	5.09	-4380.31	1162.94	-413.66	37.89
9.71	20	SLE Q	12	-9.67	9.17	5.09	-3698.07	981.81	-349.24	31.99

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	Crit.	X	My	c	s	K3	s <sub>zm</sub>	Φ	A <sub>s</sub>	A <sub>c eff</sub>	σ <sub>s</sub>	σ <sub>sr</sub>	ε <sub>sm</sub>	Wk
	<m>						<cm>	<daNm>	<mm>	<mm>		<mm>		<cmq>	<cmq>	<daN/cmq>	<daN/cmq>		<mm>
22	1.05	20	SLE Q	1	6	1	105.00	-2728.28	32.00	72.67	0.16	140.84	18.00	9.17	483.57	724.34	1491.87	0.14	0.03
23	1.05	19	SLE F	1	6	1	105.00	-2854.76	32.00	72.67	0.16	140.84	18.00	9.17	483.57	757.92	1491.87	0.15	0.04
47	2.86	20	SLE Q	4	6	1	34.07	2402.01	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1124.59	2415.87	0.22	0.08
48	2.86	19	SLE F	4	6	1	34.07	2522.21	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1180.87	2415.87	0.23	0.08
70	4.44	20	SLE Q	6	6	1	24.00	-3593.70	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1058.58	1638.16	0.21	0.06
71	4.44	19	SLE F	6	6	1	24.00	-3778.58	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1113.04	1638.16	0.22	0.06
95	5.64	20	SLE Q	7	6	1	60.00	-4067.17	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1198.05	1638.16	0.23	0.06
96	5.64	19	SLE F	7	6	1	60.00	-4245.56	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1250.60	1638.16	0.24	0.07
118	7.41	20	SLE Q	9	6	1	45.84	2992.19	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1400.91	2415.87	0.27	0.10
119	7.41	19	SLE F	9	6	1	45.84	3141.12	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1470.64	2415.87	0.29	0.10
141	9.71	20	SLE Q	12	6	1	-9.67	-3698.07	32.00	72.67	0.16	140.84	18.00	9.17	483.57	981.81	1491.87	0.19	0.05
142	9.71	19	SLE F	12	6	1	-9.67	-3892.99	32.00	72.67	0.16	140.84	18.00	9.17	483.57	1033.56	1491.87	0.20	0.05

## Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T	
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>		
1	SLV	1.05	1.55	0.50	ø8/ 8 2 br.	12.57	0.30	3564.67	2.01	40736.00	40736.00	40736.00	11.43
9	SLV	1.55	3.94	2.39	ø8/20 2 br.	5.03	0.30	4688.58	2.50	20313.30	35174.00	20313.30	4.33
9	SLV	3.94	4.44	0.50	ø8/ 8 2 br.	12.57	0.30	13234.30	2.01	40736.00	40736.00	40736.00	3.08
1	SLV	5.64	6.14	0.50	ø8/ 8 2 br.	12.57	0.30	12748.70	2.01	40736.00	40736.00	40736.00	3.20
17	SLU	6.14	9.21	3.07	ø8/20 2 br.	5.03	0.30	4545.77	2.50	20313.30	35174.00	20313.30	4.47
17	SLU	9.21	9.71	0.50	ø8/ 8 2 br.	12.57	0.30	4684.06	2.01	40736.00	40736.00	40736.00	8.70

## Travata n. 404

Nodi: 401 -1727 -1730 -1733 -1738 -1742 407 -1761 -1778 -1791 -1802 -1813 413

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	TP	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
6	R	30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.75	5	SLV	1	75.00	5.09	5.09	5.09	5.09	-6495.88	-8722.72	1.343
1.96	17	SLU	3	28.30	5.09	5.09	5.09	5.09	4667.45	8722.72	1.869
4.74	13	SLV	6	54.00	8.23	5.09	8.23	5.09	-10336.90	-13858.80	1.341
5.34	5	SLV	7	30.00	8.23	5.09	8.23	5.09	-10090.30	-13858.80	1.373
7.20	17	SLU	9	25.45	5.09	5.09	5.09	5.09	5590.67	8722.72	1.560
10.31	13	SLV	12	50.33	6.63	5.09	6.63	5.09	-9098.92	-11245.50	1.236

## Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ <sub>f</sub> sup	σ <sub>f</sub> inf	σ <sub>c</sub>
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.75	18	SLE R	1	75.00	5.09	5.09	-2517.19	1178.52	-260.00	26.74
0.75	20	SLE Q	1	75.00	5.09	5.09	-2116.02	990.70	-218.56	22.48
1.96	18	SLE R	3	28.30	5.09	5.09	3266.66	-337.41	1529.41	34.70
1.96	20	SLE Q	3	28.30	5.09	5.09	2692.89	-278.14	1260.78	28.61
4.74	18	SLE R	6	54.00	8.23	5.09	-5098.32	1501.79	-490.30	45.71
4.74	20	SLE Q	6	54.00	8.23	5.09	-4168.03	1227.76	-400.84	37.37
5.34	18	SLE R	7	30.00	8.23	5.09	-5142.22	1514.72	-494.53	46.11
5.34	20	SLE Q	7	30.00	8.23	5.09	-4298.72	1266.26	-413.41	38.54
7.20	18	SLE R	9	25.45	5.09	5.09	3908.49	-403.70	1829.91	41.52
7.20	20	SLE Q	9	25.45	5.09	5.09	3239.36	-334.59	1516.63	34.41
10.31	18	SLE R	12	50.33	6.63	5.09	-5529.02	2005.54	-550.32	53.40
10.31	20	SLE Q	12	50.33	6.63	5.09	-4549.80	1650.35	-452.86	43.94

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	Crit.	X	My	c	s	K3	s <sub>zm</sub>	Φ	A <sub>s</sub>	A <sub>c eff</sub>	σ <sub>s</sub>	σ <sub>sr</sub>	ε <sub>sm</sub>	Wk
	<m>						<cm>	<daNm>	<mm>	<mm>		<mm>		<cmq>	<cmq>	<daN/cmq>	<daN/cmq>		<mm>
22	0.75	20	SLE Q	1	6	1	75.00	-2116.02	32.00	218.00	0.17	214.99	18.00	5.09	455.32	990.70	2415.87	0.19	0.07
23	0.75	19	SLE F	1	6	1	75.00	-2230.64	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1044.36	2415.87	0.20	0.07
43	1.96	20	SLE Q	3	6	1	28.30	2692.89	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1260.78	2415.87	0.24	0.09
44	1.96	19	SLE F	3	6	1	28.30	2856.80	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1337.52	2415.87	0.26	0.09
68	4.74	20	SLE Q	6	6	1	54.00	-4168.03	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1227.76	1638.16	0.24	0.07
69	4.74	19	SLE F	6	6	1	54.00	-4433.83	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1306.06	1638.16	0.25	0.07



93	5.34	20	SLE Q	7	6	1	30.00	-4298.72	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1266.26	1638.16	0.25	0.07
94	5.34	19	SLE F	7	6	1	30.00	-4539.72	31.00	109.00	0.16	161.14	20.00	8.23	504.93	1337.25	1638.16	0.26	0.07
114	7.20	20	SLE Q	9	6	1	25.45	3239.36	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1516.63	2415.87	0.29	0.11
115	7.20	19	SLE F	9	6	1	25.45	3430.51	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1606.12	2415.87	0.31	0.11
137	10.31	20	SLE Q	12	6	1	50.33	-4549.80	32.00	109.00	0.17	169.36	18.00	6.63	464.16	1650.35	1943.19	0.32	0.09
138	10.31	19	SLE F	12	6	1	50.33	-4829.57	32.00	109.00	0.17	169.36	18.00	6.63	464.16	1751.84	1943.19	0.34	0.10

## Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
<m>	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
5 SLV	1.05	1.55	0.50	ø8/ 8 2 br.	12.57	0.30	3438.33	2.01	40736.00	40736.00	40736.00	11.85
13 SLV	1.55	3.94	2.39	ø8/20 2 br.	5.03	0.30	4120.19	2.50	20313.30	35174.00	20313.30	4.93
13 SLV	3.94	4.44	0.50	ø8/ 8 2 br.	12.57	0.30	9332.69	2.01	40736.00	40736.00	40736.00	4.36
5 SLV	5.64	6.14	0.50	ø8/ 8 2 br.	12.57	0.30	8687.57	2.01	40736.00	40736.00	40736.00	4.69
17 SLU	6.14	9.21	3.07	ø8/20 2 br.	5.03	0.30	4259.79	2.50	20313.30	35174.00	20313.30	4.77
17 SLU	9.21	9.71	0.50	ø8/ 8 2 br.	12.57	0.30	5095.56	2.01	40736.00	40736.00	40736.00	7.99

## Travata n. 501

Nodi: 502 503 504 505 506

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	TP	Fyk	Fyd
<cm>	<cm>	<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.35	9	SLV	1	35.00	6.63	5.09	6.63	5.09	-6579.91	-11245.50	1.709
3.35	9	SLV	1	334.63	5.09	5.09	5.09	5.09	2926.38	8722.72	2.981
4.31	1	SLV	1	431.00	5.09	5.09	5.09	5.09	-4712.93	-8722.72	1.851
5.01	9	SLV	2	12.00	5.09	5.09	5.09	5.09	-5333.08	-8722.72	1.636
8.42	9	SLV	2	353.11	5.09	5.09	5.09	5.09	2208.64	8722.72	3.949
9.85	1	SLV	2	496.00	5.09	5.09	5.09	5.09	-4612.68	-8722.72	1.891
10.55	9	SLV	3	58.00	5.09	5.09	5.09	5.09	-4228.44	-8722.72	2.063
14.25	1	SLV	3	428.00	5.09	5.09	5.09	5.09	-5656.23	-8722.72	1.542
14.95	9	SLV	4	35.00	5.09	5.09	5.09	5.09	-4104.16	-8722.72	2.125
15.59	9	SLV	4	99.12	5.09	5.09	5.09	5.09	-3600.02	-8722.72	2.423
18.56	1	SLV	4	396.00	5.09	5.09	5.09	5.09	-5724.65	-8722.72	1.524

## Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ <sub>f</sub> sup	σ <sub>f</sub> inf	σ <sub>c</sub>
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.35	18	SLE R	1	35.00	6.63	5.09	-2638.78	957.17	-262.65	25.49
0.35	20	SLE Q	1	35.00	6.63	5.09	-2330.62	845.39	-231.97	22.51
3.35	18	SLE R	1	334.63	5.09	5.09	1553.48	-160.46	727.32	16.50
3.35	20	SLE Q	1	334.63	5.09	5.09	1331.57	-137.54	623.43	14.14
4.31	18	SLE R	1	431.00	5.09	5.09	-1339.60	627.19	-138.37	14.23
4.31	20	SLE Q	1	431.00	5.09	5.09	-1107.76	518.64	-114.42	11.77
5.01	18	SLE R	2	12.00	5.09	5.09	-2548.15	1193.02	-263.19	27.07
5.01	20	SLE Q	2	12.00	5.09	5.09	-2257.07	1056.74	-233.13	23.98
8.42	18	SLE R	2	353.11	5.09	5.09	1046.28	-108.07	489.86	11.11
8.42	20	SLE Q	2	353.11	5.09	5.09	963.20	-99.49	450.96	10.23
9.85	18	SLE R	2	496.00	5.09	5.09	-1640.23	767.93	-169.42	17.42
9.85	20	SLE Q	2	496.00	5.09	5.09	-1500.76	702.64	-155.01	15.94
10.55	18	SLE R	3	58.00	5.09	5.09	-982.23	459.87	-101.45	10.43
10.55	20	SLE Q	3	58.00	5.09	5.09	-794.07	371.77	-82.02	8.44
14.25	18	SLE R	3	428.00	5.09	5.09	-2464.99	1154.08	-254.60	26.19
14.25	20	SLE Q	3	428.00	5.09	5.09	-2175.03	1018.33	-224.66	23.11
14.95	18	SLE R	4	35.00	5.09	5.09	-701.19	328.29	-72.42	7.45
14.95	20	SLE Q	4	35.00	5.09	5.09	-554.36	259.55	-57.26	5.89
15.59	18	SLE R	4	99.12	5.09	5.09	1232.33	-127.28	576.96	13.09
15.59	20	SLE Q	4	99.12	5.09	5.09	1076.66	-111.21	504.08	11.44
18.56	18	SLE R	4	396.00	5.09	5.09	-2435.43	1140.24	-251.55	25.87
18.56	20	SLE Q	4	396.00	5.09	5.09	-2158.10	1010.40	-222.91	22.93

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	Crit.	X	My	c	s	K3	S <sub>rm</sub>	Φ	A <sub>s</sub>	A <sub>c</sub> eff	σ <sub>c</sub>	σ <sub>st</sub>	ε <sub>sm</sub>	Wk
	<m>						<cm>	<daNm>	<mm>	<mm>		<mm>		<cmq>	<cmq>	<daN/cmq>	<daN/cmq>		<mm>
22	0.35	20	SLE Q	1	6	1	35.00	-2330.62	32.00	109.00	0.17	169.36	18.00	6.63	464.16	845.39	1943.19	0.16	0.05
23	0.35	19	SLE F	1	6	1	35.00	-2418.66	32.00	109.00	0.17	169.36	18.00	6.63	464.16	877.32	1943.19	0.17	0.05
55	3.35	20	SLE Q	1	6	1	334.63	1331.57	32.00	218.00	0.17	214.99	18.00	5.09	455.32	623.43	2415.87	0.12	0.04
57	3.35	19	SLE F	1	6	1	334.63	1394.97	32.00	218.00	0.17	214.99	18.00	5.09	455.32	653.11	2415.87	0.13	0.05
83	4.31	20	SLE Q	1	6	1	431.00	-1107.76	32.00	218.00	0.17	214.99	18.00	5.09	455.32	518.64	2415.87	0.10	0.04



85	4.31	19	SLE F	1	6	1	431.00	-1174.00	32.00	218.00	0.17	214.99	18.00	5.09	455.32	549.66	2415.87	0.11	0.04
109	5.01	20	SLE Q	2	6	1	12.00	-2257.07	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1056.74	2415.87	0.21	0.07
110	5.01	19	SLE F	2	6	1	12.00	-2340.24	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1095.67	2415.87	0.21	0.08
138	8.42	20	SLE Q	2	6	1	353.11	963.20	32.00	218.00	0.17	214.99	18.00	5.09	455.32	450.96	2415.87	0.09	0.03
139	8.42	19	SLE F	2	6	1	353.11	986.94	32.00	218.00	0.17	214.99	18.00	5.09	455.32	462.07	2415.87	0.09	0.03
160	9.85	20	SLE Q	2	6	1	496.00	-1500.76	32.00	218.00	0.17	214.99	18.00	5.09	455.32	702.64	2415.87	0.14	0.05
161	9.85	19	SLE F	2	6	1	496.00	-1540.61	32.00	218.00	0.17	214.99	18.00	5.09	455.32	721.29	2415.87	0.14	0.05
187	10.55	20	SLE Q	3	6	1	58.00	-794.07	32.00	218.00	0.17	214.99	18.00	5.09	455.32	371.77	2415.87	0.07	0.03
189	10.55	19	SLE F	3	6	1	58.00	-847.83	32.00	218.00	0.17	214.99	18.00	5.09	455.32	396.94	2415.87	0.08	0.03
211	14.25	20	SLE Q	3	6	1	428.00	-2175.03	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1018.33	2415.87	0.20	0.07
212	14.25	19	SLE F	3	6	1	428.00	-2257.88	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1057.11	2415.87	0.21	0.08
238	14.95	20	SLE Q	4	6	1	35.00	-554.36	32.00	218.00	0.17	214.99	18.00	5.09	455.32	259.55	2415.87	0.05	0.02
240	14.95	19	SLE F	4	6	1	35.00	-596.32	32.00	218.00	0.17	214.99	18.00	5.09	455.32	279.19	2415.87	0.05	0.02
270	15.59	20	SLE Q	4	6	1	99.12	1076.66	32.00	218.00	0.17	214.99	18.00	5.09	455.32	504.08	2415.87	0.10	0.04
272	15.59	19	SLE F	4	6	1	99.12	1121.14	32.00	218.00	0.17	214.99	18.00	5.09	455.32	524.90	2415.87	0.10	0.04
296	18.56	20	SLE Q	4	6	1	396.00	-2158.10	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1010.40	2415.87	0.20	0.07
297	18.56	19	SLE F	4	6	1	396.00	-2237.33	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1047.49	2415.87	0.20	0.07

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17 SLU	0.35	0.85	0.50	ø8/ 8 2 br.	12.57	0.30	5338.63	2.01	40736.00	40736.00	40736.00	7.63
9 SLV	0.85	3.81	2.96	ø8/20 2 br.	5.03	0.30	4530.37	2.50	20313.30	35174.00	20313.30	4.48
1 SLV	3.81	4.31	0.50	ø8/ 8 2 br.	12.57	0.30	4668.90	2.01	40736.00	40736.00	40736.00	8.72
17 SLU	5.01	5.51	0.50	ø8/ 8 2 br.	12.57	0.30	3790.74	2.01	40736.00	40736.00	40736.00	10.75
9 SLV	5.51	9.35	3.84	ø8/20 2 br.	5.03	0.30	3262.60	2.50	20313.30	35174.00	20313.30	6.23
1 SLV	9.35	9.85	0.50	ø8/ 8 2 br.	12.57	0.30	3426.07	2.01	40736.00	40736.00	40736.00	11.89
9 SLV	10.55	11.05	0.50	ø8/ 8 2 br.	12.57	0.30	4255.13	2.01	40736.00	40736.00	40736.00	9.57
1 SLV	11.05	13.75	2.70	ø8/20 2 br.	5.03	0.30	4255.80	2.50	20313.30	35174.00	20313.30	4.77
17 SLU	13.75	14.25	0.50	ø8/ 8 2 br.	12.57	0.30	5054.85	2.01	40736.00	40736.00	40736.00	8.06
9 SLV	14.95	15.45	0.50	ø8/ 8 2 br.	12.57	0.30	4130.47	2.01	40736.00	40736.00	40736.00	9.86
1 SLV	15.45	18.06	2.61	ø8/20 2 br.	5.03	0.30	4297.75	2.50	20313.30	35174.00	20313.30	4.73
1 SLV	18.06	18.56	0.50	ø8/ 8 2 br.	12.57	0.30	5018.96	2.01	40736.00	40736.00	40736.00	8.12

## Travata n. 502

Nodi: 508 509 -1937 -1938 -1939 -1940 -1941 510 511 512

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfeP S <cmq>	AfeP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.35	9	SLV	1	35.00	6.63	5.09	6.63	5.09	-8115.47	-11245.50	1.386
2.33	17	SLU	1	233.50	5.09	5.09	5.09	5.09	4274.80	8722.72	2.041
4.32	9	SLV	1	432.00	5.09	5.09	5.09	5.09	3463.71	8722.72	2.518
5.02	9	SLV	2	13.00	5.09	5.09	5.09	5.09	-2984.11	-8722.72	2.923
9.84	1	SLV	7	71.67	5.09	5.09	5.09	5.09	-3872.99	-8722.72	2.252
10.54	9	SLV	8	57.00	5.09	5.09	5.09	5.09	-3646.84	-8722.72	2.392
11.70	17	SLU	8	172.53	5.09	5.09	5.09	5.09	3459.40	8722.72	2.521
14.25	1	SLV	8	428.00	5.09	5.09	5.09	5.09	-6663.23	-8722.72	1.309
14.95	9	SLV	9	35.00	5.09	5.09	5.09	5.09	-2902.55	-8722.72	3.005
15.85	17	SLU	9	125.25	5.09	5.09	5.09	5.09	3128.68	8722.72	2.788
18.56	1	SLV	9	396.00	5.09	5.09	5.09	5.09	-6101.01	-8722.72	1.430

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>c</sub> <daN/cmq>
0.35	18	SLE R	1	35.00	6.63	5.09	-5440.95	1973.60	-541.55	52.55
0.35	20	SLE Q	1	35.00	6.63	5.09	-4638.95	1682.69	-461.73	44.80
2.33	18	SLE R	1	233.50	5.09	5.09	3065.60	-316.64	1435.28	32.57
2.33	20	SLE Q	1	233.50	5.09	5.09	2522.66	-260.56	1181.08	26.80
4.32	18	SLE R	1	432.00	5.09	5.09	1293.34	-133.59	605.53	13.74
4.32	20	SLE Q	1	432.00	5.09	5.09	1198.05	-123.75	560.91	12.73
5.02	18	SLE R	2	13.00	5.09	5.09	-980.29	458.96	-101.25	10.41
5.02	20	SLE Q	2	13.00	5.09	5.09	-739.67	346.31	-76.40	7.86
9.84	18	SLE R	7	71.67	5.09	5.09	-1769.70	828.55	-182.79	18.80
9.84	20	SLE Q	7	71.67	5.09	5.09	-1473.76	690.00	-152.22	15.66
10.54	18	SLE R	8	57.00	5.09	5.09	-1165.39	545.62	-120.37	12.38
10.54	20	SLE Q	8	57.00	5.09	5.09	-804.36	376.59	-83.08	8.54
11.70	18	SLE R	8	172.53	5.09	5.09	2477.34	-255.88	1159.86	26.32
11.70	20	SLE Q	8	172.53	5.09	5.09	2039.18	-210.62	954.72	21.66
14.25	18	SLE R	8	428.00	5.09	5.09	-4263.10	1995.94	-440.33	45.29



14.25	20	SLE Q	8	428.00	5.09	5.09	-3615.93	1692.94	-373.48	38.41
14.95	18	SLE R	9	35.00	5.09	5.09	1042.79	-107.71	488.22	11.08
14.95	20	SLE Q	9	35.00	5.09	5.09	866.12	-89.46	405.51	9.20
15.85	18	SLE R	9	125.25	5.09	5.09	2252.15	-232.62	1054.43	23.92
15.85	20	SLE Q	9	125.25	5.09	5.09	1832.65	-189.29	858.02	19.47
18.56	18	SLE R	9	396.00	5.09	5.09	-4369.32	2045.67	-451.30	46.41
18.56	20	SLE Q	9	396.00	5.09	5.09	-3603.57	1687.15	-372.21	38.28

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c</sub> eff <cmq>	G <sub>s</sub> <daN/cmq>	G <sub>sf</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
24	0.35	20	SLE Q	1	6	1	35.00	-4638.95	32.00	109.00	0.17	169.36	18.00	6.63	464.16	1682.69	1943.19	0.33	0.09
25	0.35	19	SLE F	1	6	1	35.00	-4868.09	32.00	109.00	0.17	169.36	18.00	6.63	464.16	1765.81	1943.19	0.34	0.10
45	2.33	20	SLE Q	1	6	1	233.50	2522.66	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1181.08	2415.87	0.23	0.08
46	2.33	19	SLE F	1	6	1	233.50	2677.22	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1253.44	2415.87	0.24	0.09
76	4.32	20	SLE Q	1	6	1	432.00	1198.05	32.00	218.00	0.17	214.99	18.00	5.09	455.32	560.91	2415.87	0.11	0.04
78	4.32	19	SLE F	1	6	1	432.00	1225.28	32.00	218.00	0.17	214.99	18.00	5.09	455.32	573.66	2415.87	0.11	0.04
99	5.02	20	SLE Q	2	6	1	13.00	-739.67	32.00	218.00	0.17	214.99	18.00	5.09	455.32	346.31	2415.87	0.07	0.02
100	5.02	19	SLE F	2	6	1	13.00	-808.42	32.00	218.00	0.17	214.99	18.00	5.09	455.32	378.49	2415.87	0.07	0.03
121	9.84	20	SLE Q	7	6	1	71.67	-1473.76	32.00	218.00	0.17	214.99	18.00	5.09	455.32	690.00	2415.87	0.13	0.05
122	9.84	19	SLE F	7	6	1	71.67	-1558.31	32.00	218.00	0.17	214.99	18.00	5.09	455.32	729.59	2415.87	0.14	0.05
150	10.54	20	SLE Q	8	6	1	57.00	-804.36	32.00	218.00	0.17	214.99	18.00	5.09	455.32	376.59	2415.87	0.07	0.03
152	10.54	19	SLE F	8	6	1	57.00	-907.51	32.00	218.00	0.17	214.99	18.00	5.09	455.32	424.89	2415.87	0.08	0.03
176	11.70	20	SLE Q	8	6	1	172.53	2039.18	32.00	218.00	0.17	214.99	18.00	5.09	455.32	954.72	2415.87	0.19	0.07
177	11.70	19	SLE F	8	6	1	172.53	2164.02	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1013.17	2415.87	0.20	0.07
201	14.25	20	SLE Q	8	6	1	428.00	-3615.93	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1692.94	2415.87	0.33	0.12
202	14.25	19	SLE F	8	6	1	428.00	-3800.83	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1779.51	2415.87	0.35	0.13
231	14.95	20	SLE Q	9	6	1	35.00	866.12	32.00	218.00	0.17	214.99	18.00	5.09	455.32	405.51	2415.87	0.08	0.03
233	14.95	19	SLE F	9	6	1	35.00	916.60	32.00	218.00	0.17	214.99	18.00	5.09	455.32	429.14	2415.87	0.08	0.03
260	15.85	20	SLE Q	9	6	1	125.25	1832.65	32.00	218.00	0.17	214.99	18.00	5.09	455.32	858.02	2415.87	0.17	0.06
261	15.85	19	SLE F	9	6	1	125.25	1952.49	32.00	218.00	0.17	214.99	18.00	5.09	455.32	914.13	2415.87	0.18	0.06
285	18.56	20	SLE Q	9	6	1	396.00	-3603.57	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1687.15	2415.87	0.33	0.12
286	18.56	19	SLE F	9	6	1	396.00	-3822.35	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1789.58	2415.87	0.35	0.13

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic. T
17	SLU	0.35	0.85	0.50	ø8/ 8 2 br.	12.57	0.30	9557.42	2.01	40736.00	40736.00	4.26
17	SLU	0.85	3.82	2.97	ø8/20 2 br.	5.03	0.30	7564.66	2.50	20313.30	35174.00	2.69
17	SLU	3.82	4.32	0.50	ø8/ 8 2 br.	12.57	0.30	6264.93	2.01	40736.00	40736.00	6.50
9	SLV	5.02	5.52	0.50	ø8/ 8 2 br.	12.57	0.30	2792.70	2.01	40736.00	40736.00	14.59
1	SLV	5.52	9.34	3.82	ø8/20 2 br.	5.03	0.30	2685.09	2.50	20313.30	35174.00	7.57
1	SLV	9.34	9.84	0.50	ø8/ 8 2 br.	12.57	0.30	3051.09	2.01	40736.00	40736.00	13.35
17	SLU	10.54	11.04	0.50	ø8/ 8 2 br.	12.57	0.30	6063.26	2.01	40736.00	40736.00	6.72
17	SLU	11.04	13.75	2.71	ø8/20 2 br.	5.03	0.30	6477.17	2.50	20313.30	35174.00	3.14
17	SLU	13.75	14.25	0.50	ø8/ 8 2 br.	12.57	0.30	8430.53	2.01	40736.00	40736.00	4.83
17	SLU	14.95	15.45	0.50	ø8/ 8 2 br.	12.57	0.30	5269.35	2.01	40736.00	40736.00	7.73
17	SLU	15.45	18.06	2.61	ø8/20 2 br.	5.03	0.30	6297.27	2.50	20313.30	35174.00	3.23
17	SLU	18.06	18.56	0.50	ø8/ 8 2 br.	12.57	0.30	8156.88	2.01	40736.00	40736.00	4.99

## Travata n. 503

Nodi: 514 515 -2000 -2001 -2002 -2003 -2004 516 517 518

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.35	1	SLV	1	35.00	5.09	5.09	5.09	5.09	-5497.92	-8722.72	1.587
1.479	SLV	1	146.87	5.09	5.09	5.09	5.09	5.09	3012.72	8722.72	2.895
4.71	17	SLU	1	471.50	5.09	5.09	5.09	5.09	-4183.17	-8722.72	2.085
5.01	17	SLU	2	12.50	5.09	5.09	5.09	5.09	-3845.62	-8722.72	2.268
6.75	13	SLV	4	0.00	5.09	5.09	5.09	5.09	2203.69	8722.72	3.958
9.85	17	SLU	7	56.00	5.09	5.09	5.09	5.09	-2637.74	-8722.72	3.307
10.14	1	SLV	8	17.50	5.09	5.09	5.09	5.09	-3547.69	-8722.72	2.459
11.72	17	SLU	8	175.38	5.09	5.09	5.09	5.09	2776.56	8722.72	3.142
14.25	9	SLV	8	428.00	5.09	5.09	5.09	5.09	-4712.78	-8722.72	1.851
14.95	9	SLV	9	35.00	5.09	5.09	5.09	5.09	3888.17	8722.72	2.243
18.56	9	SLV	9	396.00	5.09	5.09	5.09	5.09	-6460.70	-8722.72	1.350

## Stato limite d'esercizio - Verifiche tensionali



Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>c</sub> <daN/cmq>
0.35	18	SLE R	1	35.00	5.09	5.09	-2549.65	1193.72	-263.35	27.08
0.35	20	SLE Q	1	35.00	5.09	5.09	-2267.49	1061.61	-234.21	24.09
1.47	18	SLE R	1	146.87	5.09	5.09	1738.48	-179.56	813.94	18.47
1.47	20	SLE Q	1	146.87	5.09	5.09	1441.64	-148.90	674.96	15.31
4.71	18	SLE R	1	471.50	5.09	5.09	-2973.89	1392.34	-307.17	31.59
4.71	20	SLE Q	1	471.50	5.09	5.09	-2462.79	1153.05	-254.38	26.16
5.01	18	SLE R	2	12.50	5.09	5.09	-2742.07	1283.81	-283.22	29.13
5.01	20	SLE Q	2	12.50	5.09	5.09	-2286.42	1070.47	-236.16	24.29
6.75	18	SLE R	4	0.00	5.09	5.09	693.35	-71.61	324.62	7.37
6.75	20	SLE Q	4	0.00	5.09	5.09	644.04	-66.52	301.53	6.84
9.85	18	SLE R	7	56.00	5.09	5.09	-1894.88	887.16	-195.72	20.13
9.85	20	SLE Q	7	56.00	5.09	5.09	-1667.81	780.85	-172.26	17.72
10.14	18	SLE R	8	17.50	5.09	5.09	-2079.11	973.42	-214.75	22.09
10.14	20	SLE Q	8	17.50	5.09	5.09	-1820.63	852.40	-188.05	19.34
11.72	18	SLE R	8	175.38	5.09	5.09	1976.78	-204.18	925.50	21.00
11.72	20	SLE Q	8	175.38	5.09	5.09	1659.09	-171.37	776.77	17.62
14.25	18	SLE R	8	428.00	5.09	5.09	-2298.29	1076.03	-237.39	24.41
14.25	20	SLE Q	8	428.00	5.09	5.09	-1956.77	916.14	-202.11	20.79
14.95	18	SLE R	9	35.00	5.09	5.09	1292.95	-133.55	605.35	13.73
14.95	20	SLE Q	9	35.00	5.09	5.09	1027.97	-106.18	481.28	10.92
18.56	18	SLE R	9	396.00	5.09	5.09	-3755.58	1758.32	-387.91	39.89
18.56	20	SLE Q	9	396.00	5.09	5.09	-3116.43	1459.08	-321.89	33.11

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	s <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c</sub> eff <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
23	0.35	20	SLE Q	1	6	1	35.00	-2267.49	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1061.61	2415.87	0.21	0.08
24	0.35	19	SLE F	1	6	1	35.00	-2348.11	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1099.36	2415.87	0.21	0.08
55	1.47	20	SLE Q	1	6	1	146.87	1441.64	32.00	218.00	0.17	214.99	18.00	5.09	455.32	674.96	2415.87	0.13	0.05
57	1.47	19	SLE F	1	6	1	146.87	1526.45	32.00	218.00	0.17	214.99	18.00	5.09	455.32	714.67	2415.87	0.14	0.05
81	4.71	20	SLE Q	1	6	1	471.50	-2462.79	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1153.05	2415.87	0.22	0.08
82	4.71	19	SLE F	1	6	1	471.50	-2608.82	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1221.42	2415.87	0.24	0.09
102	5.01	20	SLE Q	2	6	1	12.50	-2286.42	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1070.47	2415.87	0.21	0.08
103	5.01	19	SLE F	2	6	1	12.50	-2416.60	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1131.43	2415.87	0.22	0.08
123	6.75	20	SLE Q	4	6	1	0.00	644.04	32.00	218.00	0.17	214.99	18.00	5.09	455.32	301.53	2415.87	0.06	0.02
124	6.75	19	SLE F	4	6	1	0.00	658.08	32.00	218.00	0.17	214.99	18.00	5.09	455.32	308.11	2415.87	0.06	0.02
144	9.85	20	SLE Q	7	6	1	56.00	-1667.81	32.00	218.00	0.17	214.99	18.00	5.09	455.32	780.85	2415.87	0.15	0.06
145	9.85	19	SLE F	7	6	1	56.00	-1732.69	32.00	218.00	0.17	214.99	18.00	5.09	455.32	811.23	2415.87	0.16	0.06
171	10.14	20	SLE Q	8	6	1	17.50	-1820.63	32.00	218.00	0.17	214.99	18.00	5.09	455.32	852.40	2415.87	0.17	0.06
172	10.14	19	SLE F	8	6	1	17.50	-1894.48	32.00	218.00	0.17	214.99	18.00	5.09	455.32	886.98	2415.87	0.17	0.06
192	11.72	20	SLE Q	8	6	1	175.38	1659.09	32.00	218.00	0.17	214.99	18.00	5.09	455.32	776.77	2415.87	0.15	0.06
193	11.72	19	SLE F	8	6	1	175.38	1749.86	32.00	218.00	0.17	214.99	18.00	5.09	455.32	819.26	2415.87	0.16	0.06
216	14.25	20	SLE Q	8	6	1	428.00	-1956.77	32.00	218.00	0.17	214.99	18.00	5.09	455.32	916.14	2415.87	0.18	0.07
217	14.25	19	SLE F	8	6	1	428.00	-2054.35	32.00	218.00	0.17	214.99	18.00	5.09	455.32	961.82	2415.87	0.19	0.07
238	14.95	20	SLE Q	9	6	1	35.00	1027.97	32.00	218.00	0.17	214.99	18.00	5.09	455.32	481.28	2415.87	0.09	0.03
239	14.95	19	SLE F	9	6	1	35.00	1103.68	32.00	218.00	0.17	214.99	18.00	5.09	455.32	516.73	2415.87	0.10	0.04
262	18.56	20	SLE Q	9	6	1	396.00	-3116.43	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1459.08	2415.87	0.28	0.10
263	18.56	19	SLE F	9	6	1	396.00	-3299.05	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1544.58	2415.87	0.30	0.11

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic. T
17	SLU	0.35	0.85	0.50	ø8/ 8 2 br.	12.57	0.30	5683.56	2.01	40736.00	40736.00	7.17
17	SLU	0.85	4.26	3.41	ø8/20 2 br.	5.03	0.30	4796.97	2.50	20313.30	35174.00	4.23
17	SLU	4.26	4.76	0.50	ø8/ 8 2 br.	12.57	0.30	6001.64	2.01	40736.00	40736.00	6.79
17	SLU	5.01	5.51	0.50	ø8/ 8 2 br.	12.57	0.30	4308.97	2.01	40736.00	40736.00	9.45
17	SLU	5.51	9.35	3.83	ø8/20 2 br.	5.03	0.30	3900.22	2.50	20313.30	35174.00	5.21
17	SLU	9.35	9.85	0.50	ø8/ 8 2 br.	12.57	0.30	2808.96	2.01	40736.00	40736.00	14.50
17	SLU	10.10	10.60	0.50	ø8/ 8 2 br.	12.57	0.30	5358.29	2.01	40736.00	40736.00	7.60
17	SLU	10.60	13.75	3.15	ø8/20 2 br.	5.03	0.30	4172.47	2.50	20313.30	35174.00	4.87
17	SLU	13.75	14.25	0.50	ø8/ 8 2 br.	12.57	0.30	5458.93	2.01	40736.00	40736.00	7.46
1	SLV	14.95	15.45	0.50	ø8/ 8 2 br.	12.57	0.30	3763.46	2.01	40736.00	40736.00	10.82
17	SLU	15.45	18.06	2.61	ø8/20 2 br.	5.03	0.30	4915.61	2.50	20313.30	35174.00	4.13
17	SLU	18.06	18.56	0.50	ø8/ 8 2 br.	12.57	0.30	6183.35	2.01	40736.00	40736.00	6.59

Travata n. 505

Nodi: 502 508 514

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione





Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfeP S <cmq>	AfeP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	5	SLV	1	15.00	5.09	5.09	5.09	5.09	-4235.30	-8722.72	2.060
2.05	13	SLV	1	204.60	5.09	5.09	5.09	5.09	2043.19	8722.72	4.269
4.89	13	SLV	1	489.00	5.09	5.09	5.09	5.09	-3513.25	-8722.72	2.483
5.19	5	SLV	2	15.00	5.09	5.09	5.09	5.09	-3804.93	-8722.72	2.292
7.60	17	SLU	2	255.89	5.09	5.09	5.09	5.09	3014.64	8722.72	2.893
10.61	13	SLV	2	557.00	5.09	5.09	5.09	5.09	-3809.28	-8722.72	2.290

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>
0.15	18	SLE R	1	15.00	5.09	5.09	-1846.19	864.37	-190.69	19.61
0.15	20	SLE Q	1	15.00	5.09	5.09	-1642.88	769.18	-169.69	17.45
2.05	18	SLE R	1	204.60	5.09	5.09	1385.26	-143.08	648.57	14.72
2.05	20	SLE Q	1	204.60	5.09	5.09	1258.30	-129.97	589.12	13.37
4.89	18	SLE R	1	489.00	5.09	5.09	-1536.54	719.39	-158.71	16.32
4.89	20	SLE Q	1	489.00	5.09	5.09	-1418.89	664.31	-146.56	15.07
5.19	18	SLE R	2	15.00	5.09	5.09	-2231.45	1044.74	-230.48	23.70
5.19	20	SLE Q	2	15.00	5.09	5.09	-2022.87	947.09	-208.94	21.49
7.60	18	SLE R	2	255.89	5.09	5.09	2161.99	-223.31	1012.22	22.97
7.60	20	SLE Q	2	255.89	5.09	5.09	1924.19	-198.75	900.88	20.44
10.61	18	SLE R	2	557.00	5.09	5.09	-1563.36	731.95	-161.48	16.61
10.61	20	SLE Q	2	557.00	5.09	5.09	-1480.69	693.24	-152.94	15.73

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	$S_{rm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_c$ eff <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sz}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
22	0.15	20	SLE Q	1	6	1	15.00	-1642.88	32.00	218.00	0.17	214.99	18.00	5.09	455.32	769.18	2415.87	0.15	0.05
23	0.15	19	SLE F	1	6	1	15.00	-1700.97	32.00	218.00	0.17	214.99	18.00	5.09	455.32	796.37	2415.87	0.15	0.06
47	2.05	20	SLE Q	1	6	1	204.60	1258.30	32.00	218.00	0.17	214.99	18.00	5.09	455.32	589.12	2415.87	0.11	0.04
48	2.05	19	SLE F	1	6	1	204.60	1294.57	32.00	218.00	0.17	214.99	18.00	5.09	455.32	606.11	2415.87	0.12	0.04
71	4.89	20	SLE Q	1	6	1	489.00	-1418.89	32.00	218.00	0.17	214.99	18.00	5.09	455.32	664.31	2415.87	0.13	0.05
72	4.89	19	SLE F	1	6	1	489.00	-1452.51	32.00	218.00	0.17	214.99	18.00	5.09	455.32	680.05	2415.87	0.13	0.05
96	5.19	20	SLE Q	2	6	1	15.00	-2022.87	32.00	218.00	0.17	214.99	18.00	5.09	455.32	947.09	2415.87	0.18	0.07
97	5.19	19	SLE F	2	6	1	15.00	-2082.46	32.00	218.00	0.17	214.99	18.00	5.09	455.32	974.99	2415.87	0.19	0.07
117	7.60	20	SLE Q	2	6	1	255.89	1924.19	32.00	218.00	0.17	214.99	18.00	5.09	455.32	900.88	2415.87	0.17	0.06
118	7.60	19	SLE F	2	6	1	255.89	1992.13	32.00	218.00	0.17	214.99	18.00	5.09	455.32	932.69	2415.87	0.18	0.07
141	10.61	20	SLE Q	2	6	1	557.00	-1480.69	32.00	218.00	0.17	214.99	18.00	5.09	455.32	693.24	2415.87	0.13	0.05
142	10.61	19	SLE F	2	6	1	557.00	-1504.31	32.00	218.00	0.17	214.99	18.00	5.09	455.32	704.30	2415.87	0.14	0.05

## Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <cm>	Vsdu <daN>	ctg $\theta$	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T	
17	SLU	0.15	0.65	0.50	$\emptyset 8 / 8$ 2 br.	12.57	0.30	3556.93	2.01	40736.00	40736.00	40736.00	11.45
17	SLU	0.65	4.39	3.74	$\emptyset 8 / 20$ 2 br.	5.03	0.30	2829.33	2.50	20313.30	35174.00	20313.30	7.18
17	SLU	4.39	4.89	0.50	$\emptyset 8 / 8$ 2 br.	12.57	0.30	3340.71	2.01	40736.00	40736.00	40736.00	12.19
17	SLU	5.19	5.69	0.50	$\emptyset 8 / 8$ 2 br.	12.57	0.30	4106.19	2.01	40736.00	40736.00	40736.00	9.92
17	SLU	5.69	10.11	4.42	$\emptyset 8 / 20$ 2 br.	5.03	0.30	3378.58	2.50	20313.30	35174.00	20313.30	6.01
17	SLU	10.11	10.61	0.50	$\emptyset 8 / 8$ 2 br.	12.57	0.30	3781.00	2.01	40736.00	40736.00	40736.00	10.77

## Travata n. 108

Nodi: 104 110 -1184 -1202 -1213 -2022

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfeP S <cmq>	AfeP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	1	15.00	6.63	5.09	6.63	5.09	-9393.50	-11245.50	1.197
2.34	17	SLU	1	233.87	5.09	5.09	5.09	5.09	7023.60	8722.72	1.242
4.84	17	SLU	1	484.00	10.18	10.18	10.18	10.18	-7033.56	-17047.60	2.424
5.24	17	SLU	2	20.00	5.09	5.09	5.09	5.09	-5172.32	-8722.72	1.686
6.95	17	SLU	4	0.00	5.09	5.09	5.09	5.09	1897.99	8722.72	4.596
8.91	13	SLV	5	101.00	5.09	5.09	5.09	5.09	-2101.29	-8722.72	4.151

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	My <daNm>	$\sigma_f$ sup <daN/cmq>	$\sigma_f$ inf <daN/cmq>	$\sigma_c$ <daN/cmq>
0.15	18	SLE R	1	15.00	6.63	5.09	-6581.68	2387.38	-655.10	63.57
0.15	20	SLE Q	1	15.00	6.63	5.09	-5833.61	2116.03	-580.64	56.34
2.34	18	SLE R	1	233.87	5.09	5.09	4897.60	-505.87	2293.00	52.03





2.34	20	SLE Q	1	233.87	5.09	5.09	4421.34	-456.67	2070.02	46.97
4.84	18	SLE R	1	484.00	10.18	10.18	-4852.97	1154.53	-385.87	35.80
4.84	20	SLE Q	1	484.00	10.18	10.18	-4503.11	1071.30	-358.05	33.22
5.24	18	SLE R	2	20.00	5.09	5.09	-3708.11	1736.10	-383.00	39.39
5.24	20	SLE Q	2	20.00	5.09	5.09	-3254.44	1523.69	-336.15	34.57
6.95	18	SLE R	4	0.00	5.09	5.09	1359.16	-140.38	636.34	14.44
6.95	20	SLE Q	4	0.00	5.09	5.09	1240.54	-128.13	580.81	13.18
8.91	18	SLE R	5	101.00	5.09	5.09	-1430.86	669.91	-147.79	15.20
8.91	20	SLE Q	5	101.00	5.09	5.09	-1253.67	586.96	-129.49	13.32

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	Crit.	X <cm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>sm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c</sub> eff <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sz</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
20	0.15	20	SLE Q	1	6	1	15.00	-5833.61	32.00	109.00	0.17	169.36	18.00	6.63	464.16	2116.03	1943.19	0.59	0.17
21	0.15	19	SLE F	1	6	1	15.00	-6047.35	32.00	109.00	0.17	169.36	18.00	6.63	464.16	2193.56	1943.19	0.65	0.19
41	2.34	20	SLE Q	1	6	1	233.87	4421.34	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2070.02	2415.87	0.40	0.15
42	2.34	19	SLE F	1	6	1	233.87	4557.33	32.00	218.00	0.17	214.99	18.00	5.09	455.32	2133.69	2415.87	0.41	0.15
62	4.84	20	SLE Q	1	6	1	484.00	-4503.11	32.00	72.67	0.17	136.53	18.00	10.18	491.84	1071.30	1443.49	0.21	0.05
63	4.84	19	SLE F	1	6	1	484.00	-4603.07	32.00	72.67	0.17	136.53	18.00	10.18	491.84	1095.08	1443.49	0.21	0.05
83	5.24	20	SLE Q	2	6	1	20.00	-3254.44	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1523.69	2415.87	0.30	0.11
84	5.24	19	SLE F	2	6	1	20.00	-3384.06	32.00	218.00	0.17	214.99	18.00	5.09	455.32	1584.38	2415.87	0.31	0.11
104	6.95	20	SLE Q	4	6	1	0.00	1240.54	32.00	218.00	0.17	214.99	18.00	5.09	455.32	580.81	2415.87	0.11	0.04
105	6.95	19	SLE F	4	6	1	0.00	1274.43	32.00	218.00	0.17	214.99	18.00	5.09	455.32	596.67	2415.87	0.12	0.04
131	8.91	20	SLE Q	5	6	1	101.00	-1253.67	32.00	218.00	0.17	214.99	18.00	5.09	455.32	586.96	2415.87	0.11	0.04
132	8.91	19	SLE F	5	6	1	101.00	-1304.30	32.00	218.00	0.17	214.99	18.00	5.09	455.32	610.66	2415.87	0.12	0.04

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic. T	
17	SLU	0.15	0.65	0.50	ø10/ 8 2 br.	19.64	0.30	12933.70	1.49	47224.80	47224.80	47224.80	3.65
17	SLU	0.65	4.34	3.69	ø10/32 2 br.	4.91	0.30	10283.20	2.50	19837.20	35174.00	19837.20	1.93
17	SLU	4.34	4.84	0.50	ø10/ 8 2 br.	19.64	0.30	11927.30	1.49	47224.80	47224.80	47224.80	3.96
17	SLU	5.24	5.74	0.50	ø10/ 8 2 br.	19.64	0.30	6230.86	1.49	47224.80	47224.80	47224.80	7.58
17	SLU	5.74	8.41	2.67	ø10/32 2 br.	4.91	0.30	4801.24	2.50	19837.20	35174.00	19837.20	4.13
17	SLU	8.41	8.91	0.50	ø10/ 8 2 br.	19.64	0.30	4163.67	1.49	47224.80	47224.80	47224.80	11.34

Travate n. 208 308 408 508

208 (a) Nodi: 204 210 -1338 -1355 -1368 -2030  
 308 (b) Nodi: 304 310 -1550 -1567 -1580 -2027  
 408 (c) Nodi: 404 410 -1762 -1779 -1792 -2028  
 508 (d) Nodi: 504 510 -1949 -1962 -1973 -2029

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
8R		90.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	17	SLU	a	1	15.00	18.85	10.18	18.85	10.18	-10318.30	-12862.80	1.247
2.36	17	SLU	c	1	236.20	12.57	10.18	12.57	10.18	6561.06	7443.71	1.135
4.89	17	SLU	a	1	489.00	18.85	10.18	18.85	10.18	-9081.96	-12862.80	1.416
5.19	13	SLV	c	2	15.00	18.85	15.27	18.85	15.27	-4839.99	-31162.00	6.438
8.91	17	SLU	b	5	101.00	6.28	5.09	6.28	5.09	-6793.64	-10680.40	1.572

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	In	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ <sub>f</sub> sup <daN/cmq>	σ <sub>f</sub> inf <daN/cmq>	σ <sub>c</sub> <daN/cmq>	
0.15	18	SLE	R	a	1	15.00	18.85	10.18	-7237.96	2256.81	-715.58	99.13



0.15	20	SLE Q	a	1	15.00	18.85	10.18	-6512.19	2030.52	-643.83	89.19
2.36	18	SLE R	c	1	236.20	12.57	10.18	4583.26	-386.98	2577.91	77.09
2.36	20	SLE Q	c	1	236.20	12.57	10.18	4162.01	-351.41	2340.97	70.00
4.89	18	SLE R	a	1	489.00	18.85	10.18	-6334.76	1975.19	-626.29	86.76
4.89	20	SLE Q	a	1	489.00	18.85	10.18	-5809.91	1811.54	-574.40	79.57
5.19	18	SLE R	a	2	15.00	18.85	15.27	-2688.46	350.57	-171.89	14.88
5.19	20	SLE Q	a	2	15.00	18.85	15.27	-2433.70	317.35	-155.60	13.47
8.91	18	SLE R	b	5	101.00	6.28	5.09	-4720.77	1803.07	-473.65	46.46
8.91	20	SLE Q	b	5	101.00	6.28	5.09	-3860.43	1474.47	-387.33	38.00

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	In	El	Sez.	Crit.	X	My	c	s	K3	S <sub>sm</sub>	Φ	A <sub>s</sub>	A <sub>c eff</sub>	σ <sub>s</sub>	σ <sub>sr</sub>	ε <sub>sm</sub>	Wk
	<m>							<cm>	<daNm>	<mm>	<mm>		<mm>		<cmq>	<cmq>	<daN/cmq>	<daN/cmq>		<mm>
77	0.15	20	SLE Q	a	1	8	11	15.00	-6512.19	31.00	163.60	0.13	176.75	20.00	18.85	1546.22	2030.52	1192.44	0.82	0.25
81	0.15	19	SLE F	a	1	8	11	15.00	-6719.55	31.00	163.60	0.13	176.75	20.00	18.85	1546.22	2095.17	1192.44	0.85	0.26
162	2.36	20	SLE Q	b	1	8	11	236.20	4145.91	32.00	252.00	0.13	236.55	18.00	2.54	345.37	2331.91	1644.72	0.85	0.29
167	2.36	19	SLE F	c	1	8	11	236.20	4282.36	32.00	252.00	0.13	236.55	18.00	2.54	345.37	2408.66	1973.67	0.78	0.31
245	4.89	20	SLE Q	a	1	8	11	489.00	-5809.91	31.00	163.60	0.13	176.75	20.00	18.85	1546.22	1811.54	1192.44	0.69	0.21
249	4.89	19	SLE F	a	1	8	11	489.00	-5959.86	31.00	163.60	0.13	176.75	20.00	18.85	1546.22	1858.30	1192.44	0.72	0.22
332	5.19	20	SLE Q	a	2	6	1	15.00	-2433.70	31.00	43.60	0.16	106.61	20.00	18.85	536.28	317.35	971.77	0.06	0.01
336	5.19	19	SLE F	a	2	6	1	15.00	-2506.48	31.00	43.60	0.16	106.61	20.00	18.85	536.28	326.84	971.77	0.06	0.01
420	8.91	20	SLE Q	b	5	6	1	101.00	-3860.43	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1474.47	2029.24	0.29	0.10
424	8.91	19	SLE F	b	5	6	1	101.00	-4106.25	31.00	218.00	0.16	207.29	20.00	6.28	502.57	1568.35	2029.24	0.30	0.11

## Staffe - Verifiche armatura

CC	X0	X1	Lung.	In	Staff.	AfE St.	bw	Vsd	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>			<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
17	SLU	0.15	0.39	0.24	∅10/ 4 2 br.	39.27	0.90	13332.20	1.95	53795.10	53795.10	53795.10	4.03
17	SLU	0.39	4.60	4.21	∅10/ 8 2 br.	19.64	0.90	12008.50	2.50	34401.70	45749.20	34401.70	2.86
17	SLU	4.60	4.84	0.24	∅10/ 4 2 br.	39.27	0.90	12571.50	1.95	53795.10	53795.10	53795.10	4.28
17	SLU	5.24	5.74	0.50	∅10/ 8 2 br.	19.64	0.30	4451.60	1.49	47224.80	47224.80	47224.80	10.61
17	SLU	5.74	8.41	2.67	∅10/32 2 br.	4.91	0.30	4028.38	2.50	19837.20	35174.00	19837.20	4.92
17	SLU	8.41	8.91	0.50	∅10/ 8 2 br.	19.64	0.30	5457.99	1.49	47224.80	47224.80	47224.80	8.65

## Travata n. 507

Nodi: 503 509 -1948 -1959 -1969 -2026

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	TP	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
8R		90.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
6R		30.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.15	17	SLU	1	15.00	10.18	8.04	10.18	8.04	-5891.37	-7435.21	1.262
2.46	17	SLU	1	245.93	10.18	8.04	10.18	8.04	4090.71	6089.06	1.489
4.89	17	SLU	1	489.00	15.27	8.04	15.27	8.04	-3656.60	-10641.00	2.910
5.19	13	SLV	2	15.00	15.27	13.13	15.27	13.13	2269.36	21875.40	9.639
8.91	13	SLV	5	141.40	5.09	5.09	5.09	5.09	-1303.05	-8722.72	6.694

## Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ <sub>f</sub> sup	σ <sub>f</sub> inf	σ <sub>c</sub>
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.15	18	SLE R	1	15.00	10.18	8.04	-4242.78	2377.56	-390.65	73.93
0.15	20	SLE Q	1	15.00	10.18	8.04	-3604.27	2019.75	-331.86	62.81
2.46	18	SLE R	1	245.93	10.18	8.04	2958.65	-235.82	2080.53	55.79
2.46	20	SLE Q	1	245.93	10.18	8.04	2481.61	-197.79	1745.07	46.80
4.89	18	SLE R	1	489.00	15.27	8.04	-2711.88	1032.30	-272.57	40.75
4.89	20	SLE Q	1	489.00	15.27	8.04	-2223.37	846.34	-223.47	33.41
5.19	18	SLE R	2	15.00	15.27	13.13	-96.50	15.46	-6.69	0.59
5.19	20	SLE Q	2	15.00	15.27	13.13	95.91	-6.44	17.71	0.59
8.91	18	SLE R	5	141.40	5.09	5.09	-437.01	204.60	-45.14	4.64
8.91	20	SLE Q	5	141.40	5.09	5.09	-403.36	188.85	-41.66	4.28

## Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	Crit.	X	My	c	s	K3	S <sub>sm</sub>	Φ	A <sub>s</sub>	A <sub>c eff</sub>	σ <sub>s</sub>	σ <sub>sr</sub>	ε <sub>sm</sub>	Wk
	<m>						<cm>	<daNm>	<mm>	<mm>		<mm>		<cmq>	<cmq>	<daN/cmq>	<daN/cmq>		<mm>
20	0.15	20	SLE Q	1	8	11	15.00	-3604.27	32.00	252.00	0.13	236.55	18.00	2.54	345.37	2019.75	1934.47	0.53	0.21
21	0.15	19	SLE F	1	8	11	15.00	-3786.70	32.00	252.00	0.13	236.55	18.00	2.54	345.37	2121.98	1934.47	0.60	0.24
41	2.46	20	SLE Q	1	8	11	245.93	2481.61	33.00	224.00	0.13	223.15	16.00	2.01	282.37	1745.07	2385.78	0.34	0.13
42	2.46	19	SLE F	1	8	11	245.93	2617.87	33.00	224.00	0.13	223.15	16.00	2.01	282.37	1840.89	2385.78	0.36	0.14
62	4.89	20	SLE Q	1	8	11	489.00	-2223.37	32.00	163.60	0.13	179.96	18.00	15.27	1412.07	846.34	1390.76	0.16	0.05
63	4.89	19	SLE F	1	8	11	489.00	-2362.95	32.00	163.60	0.13	179.96	18.00	15.27	1412.07	899.47	1390.76	0.17	0.05
85	5.19	20	SLE Q	2	6	1	15.00	95.91	32.00	43.60	0.17	115.95	18.00	13.13	469.75	17.71	1235.24	0.00	0.00



86	5.19	19	SLE F	2	6	1	15.00	78.11	32.00	43.60	0.17	115.95	18.00	13.13	469.75	14.43	1235.24	0.00	0.00
109	8.91	20	SLE Q	5	6	1	141.40	-403.36	32.00	218.00	0.17	214.99	18.00	5.09	455.32	188.85	2415.87	0.04	0.01
110	8.91	19	SLE F	5	6	1	141.40	-412.98	32.00	218.00	0.17	214.99	18.00	5.09	455.32	193.35	2415.87	0.04	0.01

**Staffe - Verifiche armatura**

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
17 SLU	0.15	0.39	0.24	ø10/ 4 2 br.	39.27	0.90	7607.25	1.95	53795.10	53795.10	53795.10	7.07
17 SLU	0.39	4.65	4.26	ø10/ 8 2 br.	19.64	0.90	6884.63	2.50	34401.70	45749.20	34401.70	5.00
17 SLU	4.65	4.89	0.24	ø10/ 4 2 br.	39.27	0.90	6664.31	1.95	53795.10	53795.10	53795.10	8.07
5 SLV	5.19	5.69	0.50	ø10/ 8 2 br.	19.64	0.30	2292.87	1.49	47224.80	47224.80	47224.80	20.60
13 SLV	5.69	8.41	2.72	ø10/32 2 br.	4.91	0.30	1968.81	2.50	19837.20	35174.00	19837.20	10.08
1 SLV	8.41	8.91	0.50	ø10/ 8 2 br.	19.64	0.30	1164.22	1.49	47224.80	47224.80	47224.80	40.56



# Verifiche e armature pilastri

## Simbologia

Xg	=	Coordinata progressiva (dal primo nodo) in cui viene effettuato il progetto/verifica
CC	=	Combinazione delle condizioni di carico elementari e = eccentricità aggiuntiva in caso di compressione o pressoflessione $\alpha$ = amplificazione per gerarchia delle resistenze TG = taglio da gerarchia delle resistenze
TCC	=	Tipo di combinazione di carico SLU = Stato limite ultimo SLU S = Stato limite ultimo (azione sismica) SLE R = Stato limite d'esercizio, combinazione rara SLE F = Stato limite d'esercizio, combinazione frequente SLE Q = Stato limite d'esercizio, combinazione quasi permanente SLD = Stato limite di danno SLV = Stato limite di salvaguardia della vita SLC = Stato limite di prevenzione del collasso SLO = Stato limite di operatività SLU I = Stato limite di resistenza al fuoco SND = Stato limite di salvaguardia della vita (non dissipativo)
In	=	Identificativo della pilastrata facente parte dell'involuppo
El	=	Elemento (asta) in cui viene effettuato il progetto/verifica (progressivo sul numero di aste)
Sez.	=	Numero della sezione
X	=	Coordinata progressiva rispetto al nodo iniziale
N	=	Sforzo normale
Mz	=	Momento flettente intorno all'asse Z
My	=	Momento flettente intorno all'asse Y
MRdy	=	Momento resistente allo stato limite ultimo intorno all'asse Y
$\mu\Phi_y$	=	Valore di progetto della duttilità di curvatura in dir. Y locale
c	=	Ricoprimento dell'armatura
s	=	Distanza minima tra le barre
K3	=	Coefficiente di forma del diagramma delle tensioni prima della fessurazione
$s_{rm}$	=	Distanza media tra le fessure
$\Phi$	=	Di diametro della barra
$A_s$	=	Area complessiva dei ferri nell'area di calcestruzzo efficace
$A_{c\ eff}$	=	Area di calcestruzzo efficace
$\sigma_s$	=	Tensione nell'acciaio nella sezione fessurata
$\sigma_{sz}$	=	Tensione nell'acciaio corrispondente al raggiungimento della resistenza a trazione nel calcestruzzo
$\epsilon_{sm}$	=	Deformazione unitaria media dell'armatura (*1000)
Wk	=	Apertura delle fessure
MRdz	=	Momento resistente allo stato limite ultimo intorno all'asse Z
$\mu\Phi_z$	=	Valore di progetto della duttilità di curvatura in dir. Z locale
$\alpha_y$	=	Fattore di amplificazione momenti My per gerarchia delle resistenze
My ver.	=	Momento flettente di verifica intorno all'asse Y
$\alpha_z$	=	Fattore di amplificazione momenti Mz per gerarchia delle resistenze
Mz ver.	=	Momento flettente di verifica intorno all'asse Z
Nu	=	Sforzo normale ultimo
M'ydy,sr	=	Momento resistente massimo in campo sostanzialmente elastico (ridotto per stabilità e del 30%) intorno all'asse Y
M'ydy,r	=	Momento resistente massimo in campo sostanzialmente elastico (ridotto del 30%) intorno all'asse Y
M'ydz,sr	=	Momento resistente massimo in campo sostanzialmente elastico (ridotto per stabilità e del 30%) intorno all'asse Z
M'ydz,r	=	Momento resistente massimo in campo sostanzialmente elastico (ridotto del 30%) intorno all'asse Z
MRdy,sr	=	Momento resistente allo stato limite ultimo (ridotto per stabilità e del 30%) intorno all'asse Y
MRdy,r	=	Momento resistente allo stato limite ultimo (ridotto del 30%) intorno all'asse Y
MRdz,sr	=	Momento resistente allo stato limite ultimo (ridotto per stabilità e del 30%) intorno all'asse Z
MRdz,r	=	Momento resistente allo stato limite ultimo (ridotto del 30%) intorno all'asse Z
Sic.	=	Sicurezza a rottura
AfT	=	Area di ferro tesa
AfC	=	Area di ferro compressa
$\sigma_c$	=	Tensione nel calcestruzzo
$\sigma_f$	=	Tensione nel ferro
X0	=	Coordinata progressiva (dal nodo iniziale) dell'inizio del tratto
X1	=	Coordinata progressiva (dal nodo iniziale) della fine del tratto
Staff.	=	Staffatura adottata
Br <sub>y</sub>	=	Numero bracci in dir. Y locale
Br <sub>z</sub>	=	Numero bracci in dir. Z locale
bw <sub>y</sub>	=	Larghezza membratura resistente al taglio in dir. Y
Vsdu <sub>y</sub>	=	Taglio agente in dir. Y
ctg $\theta_{y}$	=	Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo in dir. Y
VRsd <sub>y</sub>	=	Taglio ultimo lato armatura in dir. Y
VRcd <sub>y</sub>	=	Taglio ultimo lato calcestruzzo in dir. Y
bw <sub>z</sub>	=	Larghezza membratura resistente al taglio in dir. Z
Vsdu <sub>z</sub>	=	Taglio agente in dir. Z
ctg $\theta_{z}$	=	Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo in dir. Z
VRsd <sub>z</sub>	=	Taglio ultimo lato armatura in dir. Z
VRcd <sub>z</sub>	=	Taglio ultimo lato calcestruzzo in dir. Z
Sic.T	=	Sicurezza a rottura per taglio
Nodo	=	Numero del nodo
Conf.	=	Nodo confinato S = Sì N = No
F.	=	Identificativo faccia del nodo Y+ = Faccia sul lato positivo Y locale pilastro Z+ = Faccia sul lato positivo Z locale pilastro Y- = Faccia sul lato negativo Y locale pilastro Z- = Faccia sul lato negativo Z locale pilastro
Mod.	=	Modalità di verifica faccia I = Interna E = Esterna
Br.	=	Numero bracci
As1	=	Area di ferro superiore delle travi incidenti sulla faccia
As2	=	Area di ferro inferiore delle travi incidenti sulla faccia
Bj	=	Larghezza effettiva utile del nodo
Hjc	=	Distanza tra armature pilastro
Hjw	=	Distanza tra armature trave
Ash	=	Area totale della sezione della staffa
Vc	=	Taglio nel pilastro al di sopra del nodo
Vjbd	=	Taglio agente nel nucleo di calcestruzzo [7.4.6/7]
vd <sub>s</sub>	=	Sforzo normale normalizzato del pilastro superiore (%)



- vd<sub>i</sub> = Sforzo normale normalizzato del pilastro inferiore (%)
- Vjbr = Resistenza a compressione del nucleo di calcestruzzo [7.4.8]
- Afni = Azione di fessurazione sul nodo integro [7.4.10]
- Rfni = Resistenza a fessurazione nodo integro [7.4.10]
- Vjwd = Azione agente di trazione diagonale [7.4.11/12]
- Vjwr = Resistenza a trazione diagonale [7.4.11/12]
- Tipo = Tipologia
  - 2C = Doppia C lato labbri
  - 2Cdx = Doppia C lato costola
  - 2I = Doppia I
  - 2L = Doppia L lato labbri
  - 2Ldx = Doppia L lato costole
  - C = Sezione a C
  - Cdx = C destra
  - Cir. = Circolare
  - Cir.c = Circolare cava
  - I = Sezione a I
  - L = Sezione a L
  - Ldx = L destra
  - Om. = Omega
  - Pg = Pi greco
  - Pr = Poligono regolare
  - Prc = Poligono regolare cavo
  - Pc = Per coordinate
  - Ia = Inerzie assegnate
  - R = Rettangolare
  - Rc = Rettangolare cava
  - T = Sezione a T
  - U = Sezione a U
  - Ur = U rovescia
  - V = Sezione a V
  - Vr = V rovescia
  - Z = Sezione a Z
  - Zdx = Z destra
  - Ts = T stondata
  - Ls = L stondata
  - Cs = C stondata
  - Is = I stondata
  - Dis. = Disegnata
- B = Base
- H = Altezza
- Cf = Copriferro
- Cls = Tipo di calcestruzzo
- Fck = Resistenza caratteristica cilindrica a compressione del calcestruzzo
- Fctk = Resistenza caratteristica a trazione del calcestruzzo
- Fcd = Resistenza di calcolo a compressione del calcestruzzo
- Fctd = Resistenza di calcolo a trazione del calcestruzzo
- Tp = Tipo di acciaio
- Fyk = Tensione caratteristica di snervamento dell'acciaio
- Fyd = Resistenza di calcolo dell'acciaio
- l<sub>0</sub> = Lunghezza libera di inflessione
- λ = Snellezza massima
- λ\* = Snellezza limite

## Pilastrata n. 1

Nodi: 1 101 201 301 401 501

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
1R		30.00	120.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
9R		25.00	60.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
0.00	17	SLU	1	1	0.00	-108469.00	27324.90			0.00			-108469.00	76444.70	0.00	2.798
0.00	17	SLU	1	1	0.00	-108469.00	27324.90			0.00			-108469.00	76444.70	0.00	2.798
2.20	15 (α)	SLV	1	1	220.00	-62680.40	0.00	1.76	0.00	-1634.58	4.26	-6966.14	-62680.40	0.00	-16239.30	2.331
2.70	11 (α)	SLV	2	1	0.00	-51551.00	9472.57	2.54	24059.30	0.00	6.54	0.00	-51551.00	64696.30	0.00	2.689
2.70	11 (α)	SLV	2	1	0.00	-51551.00	9472.57	2.54	24059.30	0.00	6.54	0.00	-51551.00	64696.30	0.00	2.689
5.38	15 (α)	SLV	2	1	268.00	-48778.40	0.00	1.30	0.00	378.11	30.10	11379.20	-48778.40	0.00	15265.80	1.342
5.88	13 (α)	SLV	3	1	0.00	-31333.50	0.00	1.30	0.00	1749.06	8.00	13998.80	-31333.50	0.00	14012.60	1.001
5.88	13 (α)	SLV	3	1	0.00	-31333.50	0.00	1.30	0.00	1749.06	8.00	13998.80	-31333.50	0.00	14012.60	1.001
8.56	7 (α)	SLV	3	1	268.00	-32106.10	0.00	2.22	0.00	628.61	9.20	5782.93	-32106.10	0.00	14068.60	2.433
9.06	3 (α)	SLV	4	1	0.00	-17533.10	0.00	6.96	0.00	1847.68	6.20	11457.00	-17533.10	0.00	13003.80	1.135
9.06	15 (α)	SLV	4	1	0.00	-16658.50	0.00	2.80	0.00	740.36	18.18	13462.30	-16658.50	0.00	14088.30	1.046
11.74	3 (α)	SLV	4	1	268.00	-15121.10	0.00	18.68	0.00	-1781.17	7.84	-13956.30	-15121.10	0.00	-13976.20	1.001
12.24	15 (α)	SLV	5	9	0.00	-1192.50	1309.60	5.39	7054.58	0.00	21.02	0.00	-1192.50	23319.40	0.00	3.306
12.24	15 (α)	SLV	5	9	0.00	-1192.50	1309.60	5.39	7054.58	0.00	21.02	0.00	-1192.50	11516.20	0.00	1.632

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	M'ydy,r <daNm>	M'yzd,r <daNm>	Sic.
9.06	15	SND	4	1	0.00	-14372.20	0.00			1804.12			-14372.20	0.00	11418.00	6.329
11.74	9	SND	4	1	268.00	-10104.90	0.00			-8651.78			-10104.90	0.00	-12251.40	1.416



## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
0.00	18	SLE R	1	1	0.00	-76701.20	0.00	19139.90	6.03	30.16	41.19	591.61
0.00	20	SLE Q	1	1	0.00	-67988.00	0.00	16885.40	6.03	30.16	36.40	522.89
0.00	18	SLE R	1	1	0.00	-76701.20	0.00	19139.90	6.03	30.16	41.19	591.61
0.00	20	SLE Q	1	1	0.00	-67988.00	0.00	16885.40	6.03	30.16	36.40	522.89
2.20	18	SLE R	1	1	220.00	-74721.20	-1844.54	0.00	0.00	36.19	26.62	359.85
2.20	20	SLE Q	1	1	220.00	-66008.00	-1591.29	0.00	0.00	36.19	23.34	316.04
2.70	18	SLE R	2	1	0.00	-61777.50	0.00	7948.10	0.00	36.19	24.19	352.18
2.70	20	SLE Q	2	1	0.00	-54781.30	0.00	6717.31	0.00	36.19	21.06	306.95
2.70	18	SLE R	2	1	0.00	-61777.50	0.00	7948.10	0.00	36.19	24.19	352.18
2.70	20	SLE Q	2	1	0.00	-54781.30	0.00	6717.31	0.00	36.19	21.06	306.95
5.38	18	SLE R	2	1	268.00	-59365.50	0.00	-6847.86	0.00	36.19	22.32	325.66
5.38	20	SLE Q	2	1	268.00	-52369.30	0.00	-5475.89	0.00	36.19	19.03	278.14
5.88	18	SLE R	3	1	0.00	-41185.30	0.00	-8552.64	0.00	36.19	19.93	287.40
5.88	20	SLE Q	3	1	0.00	-36307.20	0.00	-7077.74	0.00	36.19	17.03	245.89
5.88	18	SLE R	3	1	0.00	-41185.30	0.00	-8552.64	0.00	36.19	19.93	287.40
5.88	20	SLE Q	3	1	0.00	-36307.20	0.00	-7077.74	0.00	36.19	17.03	245.89
8.56	18	SLE R	3	1	268.00	-38773.30	0.00	-2838.93	0.00	36.19	12.67	186.28
8.56	20	SLE Q	3	1	268.00	-33895.20	0.00	-2170.20	0.00	36.19	10.71	157.81
9.06	18	SLE R	4	1	0.00	-20994.40	0.00	-1974.31	0.00	36.19	7.37	107.93
9.06	20	SLE Q	4	1	0.00	-18147.40	0.00	-1599.14	0.00	36.19	6.25	91.56
9.06	18	SLE R	4	1	0.00	-20994.40	0.00	-1974.31	0.00	40.21	7.27	106.48
9.06	20	SLE Q	4	1	0.00	-18147.40	0.00	-1599.14	0.00	40.21	6.16	90.32
11.74	18	SLE R	4	1	268.00	-18582.40	0.00	-290.62	0.00	40.21	4.76	70.96
11.74	20	SLE Q	4	1	268.00	-15735.40	-141.15	0.00	0.00	40.21	4.39	62.85
12.24	18	SLE R	5	9	0.00	-1192.50	0.00	280.95	14.07	26.14	2.13	27.87
12.24	20	SLE Q	5	9	0.00	-1192.50	0.00	232.31	14.07	26.14	1.80	23.92
12.24	18	SLE R	5	9	0.00	-1192.50	0.00	280.95	8.04	8.04	2.68	34.73
12.24	20	SLE Q	5	9	0.00	-1192.50	0.00	232.31	4.02	12.06	2.21	29.23
15.42	18	SLE R	5	9	318.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.42	20	SLE Q	5	9	318.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Stato limite d'esercizio - Verifiche a fessurazione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K3	$s_{xm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_c\text{ eff}$ <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
0.00	20	SLE Q	1	1	10.00	-67988.00	16885.40	0.00	38.00	104.00	0.13	157.70	16.00	6.03	459.20	35.51	366.08	0.01	0.00
0.00	20	SLE Q	1	1	10.00	-67988.00	16885.40	0.00	38.00	104.00	0.13	157.70	16.00	6.03	459.20	35.51	366.08	0.01	0.00
12.24	20	SLE Q	5	9	0.00	-1192.50	232.31	0.00	38.00	79.00	0.13	131.06	16.00	14.07	690.75	9.91	635.23	0.00	0.00
12.24	20	SLE Q	5	9	0.00	-1192.50	232.31	0.00	38.00	158.00	0.13	181.86	16.00	4.02	373.25	14.22	787.55	0.00	0.00

## Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br <sub>y</sub>	Br <sub>z</sub>	CC	TCC	bw <sub>y</sub> <cm>	Vsdu <sub>y</sub> <daN>	ctg $\theta$ <sub>y</sub>	VRsd <sub>y</sub> <daN>	VRcd <sub>y</sub> <daN>	bw <sub>z</sub> <cm>	Vsdu <sub>z</sub> <daN>	ctg $\theta$ <sub>z</sub>	VRsd <sub>z</sub> <daN>	VRcd <sub>z</sub> <daN>	Sic.T
0.00	2.20	ø10/ 5	2	2	17	SLV	1.20	904.65	2.50	69702.30	91383.30	0.30	11646.10	1.17	149525.00	149525.00	12.84
0.00	2.20	ø10/ 5	2	2	5 (TG)	SLV	1.20	0.00	2.50	69702.30	86543.30	0.30	99303.20	1.12	142524.00	142524.00	1.44
0.00	2.20	ø10/ 5	2	2	5 (TG)	SLV	1.20	0.00	2.50	69702.30	86543.20	0.30	99303.20	1.12	142524.00	142524.00	1.44
0.00	2.20	ø10/ 5	2	2	5 (TG)	SLV	1.20	24141.00	2.50	69702.30	86543.20	0.30	0.00	1.12	142524.00	142524.00	2.89
2.70	5.38	ø8/11	2	2	17	SLV	1.20	306.30	2.50	20277.10	88638.80	0.30	7837.73	2.50	92695.10	101301.00	11.83
2.70	5.38	ø8/11	2	2	21	SLV	1.20	294.07	2.50	20277.10	84385.40	0.30	4549.70	2.50	92695.10	96440.50	20.37
2.70	5.38	ø8/11	2	2	5 (TG)	SLV	1.20	0.00	2.50	20277.10	84820.30	0.30	78017.90	2.50	92695.10	96937.50	1.19
2.70	5.38	ø8/11	2	2	5 (TG)	SLV	1.20	18769.40	2.50	20277.10	84820.70	0.30	0.00	2.50	92695.10	96937.50	1.08
5.88	8.56	ø8/11	2	2	17	SLV	1.20	750.54	2.50	20277.10	84831.60	0.30	3043.75	2.50	92695.10	96950.40	27.02
5.88	8.56	ø8/11	2	2	5 (TG)	SLV	1.20	0.00	2.50	20277.10	82311.40	0.30	72631.80	2.50	92695.10	94070.20	1.28
5.88	8.56	ø8/11	2	2	5 (TG)	SLV	1.20	17173.00	2.50	20277.10	82311.40	0.30	0.00	2.50	92695.10	94070.20	1.18
9.06	11.74	ø8/11	2	2	17	SLV	1.20	56.95	2.50	20277.10	81098.40	0.30	890.50	2.50	92688.60	92688.60	>100
9.06	11.74	ø8/11	2	2	21	SLV	1.20	78.13	2.50	20277.10	79610.40	0.30	505.58	2.47	91696.90	91696.90	>100
9.06	11.74	ø8/11	2	2	5 (TG)	SLV	1.20	0.00	2.50	20277.10	79599.90	0.30	71431.60	2.47	91689.90	91689.90	1.28
9.06	11.74	ø8/11	2	2	5 (TG)	SLV	1.20	16745.30	2.50	20277.10	79600.00	0.30	0.00	2.47	91689.90	91689.90	1.21
12.24	12.84	ø8/11	2	2	17	SLV	0.60	2.39	2.50	16253.80	31153.70	0.25	127.69	2.19	38884.10	38884.10	>100
12.24	12.84	ø8/11	2	2	21	SLV	0.60	4.40	2.50	16253.80	31108.80	0.25	73.05	2.19	38850.30	38850.30	>100
12.24	12.84	ø8/11	2	2	1 (TG)	SLV	0.60	0.00	2.50	16253.80	30959.30	0.25	5690.82	2.18	38737.20	38737.20	6.81
12.24	12.84	ø8/11	2	2	1 (TG)	SLV	0.60	2089.37	2.50	16253.80	30959.30	0.25	0.00	2.18	38737.20	38737.20	7.78
12.84	14.82	ø8/19	2	2	17	SLV	0.60	2.39	2.50	9410.11	31117.00	0.25	127.69	2.50	25714.80	35430.20	>100
12.84	14.82	ø8/19	2	2	1 (TG)	SLV	0.60	4.40	2.50	9410.11	31080.60	0.25	73.05	2.50	25714.80	35388.80	>100
12.84	14.82	ø8/19	2	2	1 (TG)	SLV	0.60	0.00	2.50	9410.11	30959.30	0.25	5690.82	2.50	25714.80	35250.70	4.52
12.84	14.82	ø8/19	2	2	1 (TG)	SLV	0.60	2089.37	2.50	9410.11	30959.30	0.25	0.00	2.50	25714.80	35250.70	4.50
14.82	15.42	ø8/11	2	2	17	SLV	0.60	2.39	2.50	16253.80	30996.00	0.25	127.69	2.18	38765.00	38765.00	>100
14.82	15.42	ø8/11	2	2	21	SLV	0.60	4.40	2.50	16253.80	30987.50	0.25	73.05	2.18	38758.60	38758.60	>100
14.82	15.42	ø8/11	2	2	1 (TG)	SLV	0.60	0.00	2.50	16253.80	30959.30	0.25	5690.82	2.18	38737.20	38737.20	6.81
14.82	15.42	ø8/11	2	2	1 (TG)	SLV	0.60	2089.37	2.50	16253.80	30959.30	0.25	0.00	2.18	38737.20	38737.20	7.78



## Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F.	Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
101N		ø10/ 5	Z+	I	4	5.09	5.09	0.30	1.10	0.42	31.42
			Y-	E	4	5.09	5.09	0.45	0.20	0.42	31.42
			Z-	I	4	5.09	5.09	0.30	1.10	0.42	31.42
201N		ø8/10	Y-	E	4	7.10	5.09	0.45	0.21	0.42	10.05
			Z-	E	4	7.82	5.09	0.30	1.11	0.42	10.05
301N		ø8/10	Y-	E	4	7.10	5.09	0.45	0.21	0.42	10.05
			Z-	E	4	9.17	5.09	0.30	1.11	0.42	10.05
401N		ø8/10	Y-	E	4	7.10	5.09	0.45	0.21	0.42	10.05
			Z-	E	4	5.09	5.09	0.30	1.11	0.42	10.05

## Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	VjbR <daN>	Afni <daN/mq>	Rfni <daN/mq>	Vjwd <daN>	VjwR <daN>
101	Z+	1	SLV	-15561.20	28251.80	8.58	10.51	264704.00	0.00	980318.00	---	---
			5SLV	-15561.20	28251.80	10.21	12.04	259783.00	0.00	980318.00	---	---
	Y-	5	SLV	-942.41	20964.10	10.21	12.04	55860.00	41287.90	653545.00	---	---
			13SLV	-942.41	20964.10	8.27	10.24	57517.30	61928.10	653545.00	---	---
201	Z-	1	SLV	-15561.20	28251.80	8.58	10.51	264704.00	0.00	980318.00	---	---
			5SLV	-15561.20	28251.80	10.21	12.04	259783.00	0.00	980318.00	---	---
	Y-	5	SLV	2381.77	28179.10	6.97	9.81	59757.90	234696.00	209135.00	20187.80	39338.20
			13SLV	2381.77	28179.10	5.29	7.87	61156.10	280929.00	209135.00	20527.70	39338.20
301	Z-	1	SLV	11697.50	21973.50	5.55	8.17	216403.00	0.00	313702.00	---	---
			5SLV	11697.50	21973.50	6.97	9.81	212217.00	0.00	313702.00	---	---
	Y-	5	SLV	-2638.64	27922.20	3.46	6.56	62646.30	338099.00	209135.00	20757.00	39338.20
			13SLV	-2638.64	27922.20	2.67	4.88	63275.40	372661.00	209135.00	21051.20	39338.20
401	Z-	1	SLV	5147.88	34337.90	2.80	5.15	224348.00	0.00	313702.00	---	---
			5SLV	5147.88	34337.90	3.46	6.56	222474.00	0.00	313702.00	---	---
	Y-	1	SLV	-134.09	30426.80	0.48	2.39	64991.80	621159.00	209135.00	21487.70	39338.20
			13SLV	-134.09	30426.80	0.48	2.26	64991.80	621159.00	209135.00	21510.10	39338.20
Z-	1	SLV	-579.10	21327.40	0.48	2.39	230804.00	0.00	313702.00	---	---	

## Pilastrate n. 2 5

2 (a) Nodi: 2 102 202 302 402 502

5 (b) Nodi: 5 105 205 305 405 505

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
2R	30.00	70.00	5.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04	
2R	30.00	70.00	4.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04	
11R	30.00	70.00	4.40	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04	

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	In	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
0.00	5(e)	SLV	a	1	2	0.00	-84690.00	-67.24		-1693.80	0.00		0.00	-224702.00	-30887.00	0.00	2.653
0.00	5(e)	SLV	a	1	2	0.00	-84690.00	-67.24		-1693.80	0.00		0.00	-224702.00	-30887.00	0.00	2.653
2.20	7(α)	SLV	a	1	2	220.00	-77003.60	877.54	15.33	13456.50	0.00	4.52	0.00	-77003.60	30155.40	0.00	2.241
2.70	11(α)	SLV	b	2	2	0.00	-63158.20	-3177.78	8.25	-26230.50	0.00	13.41	0.00	-63158.20	-28734.10	0.00	1.095
2.70	11(α)	SLV	b	2	2	0.00	-63158.20	-3177.78	8.25	-26230.50	0.00	13.41	0.00	-63158.20	-28734.10	0.00	1.095
5.38	15(α)	SLV	b	2	2	268.00	-64959.80	1507.29	19.03	28689.10	0.00	3.04	0.00	-64959.80	28925.50	0.00	1.008
5.88	13(α)	SLV	b	3	2	0.00	-49053.70	6292.56	4.30	27080.40	0.00	4.13	0.00	-49053.70	27177.50	0.00	1.004
5.88	13(α)	SLV	b	3	2	0.00	-49053.70	6292.56	4.30	27080.40	0.00	4.13	0.00	-49053.70	27177.50	0.00	1.004
8.56	3(α)	SLV	b	3	2	268.00	-42995.80	0.00	4.01	0.00	1361.67	3.41	4639.27	-42995.80	0.00	10442.70	2.251
9.06	15(α)	SLV	b	4	2	0.00	-26502.10	1201.17	19.39	23285.10	0.00	5.26	0.00	-26502.10	24291.50	0.00	1.043
9.06	15(α)	SLV	b	4	2	0.00	-26502.10	1201.17	19.39	23285.10	0.00	5.26	0.00	-26502.10	24291.50	0.00	1.043
11.74	5(α)	SLV	a	4	2	268.00	-21704.00	3214.84	7.27	23375.00	0.00	3.00	0.00	-21704.00	23504.90	0.00	1.006
12.24	5(α)	SLV	a	5	11	0.00	-6425.19	0.00	8.39	0.00	-3185.77	1.95	-6215.41	-6425.19	0.00	-7983.46	1.284
12.24	5(α)	SLV	a	5	11	0.00	-6425.19	0.00	8.39	0.00	-3185.77	1.95	-6215.41	-6425.19	0.00	-7983.46	1.284
14.92	5	SLV	a	5	11	268.00	-5018.19	0.00			3633.10			-5018.19	0.00	7877.75	2.168

## Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	In	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	M' ydy,r <daNm>	M' ydz,r <daNm>	Sic.
2.70	1	SND	b	2	2	0.00	-55610.60	-4195.26			0.00			-55610.60	-23549.60	0.00	5.613
2.70	1	SND	b	2	2	0.00	-55610.60	-4195.26			0.00			-55610.60	-23549.60	0.00	5.613
5.38	15	SND	b	2	2	268.00	-54731.70	-2729.51			0.00			-345695.00	-23424.40	0.00	6.316
5.88	15	SND	a	3	2	0.00	-38251.90	-5487.80			0.00			-38251.90	-21031.50	0.00	3.832
5.88	15	SND	a	3	2	0.00	-38251.90	-5487.80			0.00			-38251.90	-21031.50	0.00	3.832
9.06	7	SND	a	4	2	0.00	-22154.00	2544.26			0.00			-22154.00	18563.90	0.00	7.296
9.06	7	SND	a	4	2	0.00	-22154.00	2544.26			0.00			-22154.00	18563.90	0.00	7.296
11.74	15	SND	b	4	2	268.00	-22695.00	3691.60			0.00			-22695.00	18648.30	0.00	5.052
12.24	7	SND	a	5	11	0.00	-6186.36	-364.02			0.00			-6186.36	-16090.70	0.00	44.202
12.24	7	SND	a	5	11	0.00	-6186.36	-364.02			0.00			-6186.36	-16090.70	0.00	44.202





Stato limite d'esercizio - Verifiche tensionali

Table with 13 columns: Xg, CC, TCC, In, El, Sez., X, N, Mz, My, AfT, AfC, sigma\_c, sigma\_f. It lists structural parameters and stress values for various elements.

Stato limite d'esercizio - Verifiche a fessurazione

Table with 19 columns: Xg, CC, TCC, In, El, Sez., X, N, My, Mz, c, s, K3, s\_sm, phi, A\_s, A\_s\_eff, G\_s, G\_s\_r, epsilon\_sm, Wk. It lists parameters for crack width verification.

Staffe - Verifiche armatura

Table with 16 columns: X0, X1, Staff., Br\_y, Br\_z, CC, TCC, In, bw\_fy, Vsdu\_fy, ctgtheta\_fy, VRsd\_fy, VRcd\_fy, bw\_fz, Vsdu\_fz, ctgtheta\_fz, VRsd\_fz, VRcd\_fz, Sic\_T. It lists reinforcement verification parameters.



6.58	7.86	ø8/18	2	2	17	SLU	b	0.70	1684.18	2.50	12391.50	54066.80	0.30	674.74	2.50	32060.60	59951.60	7.36
6.58	7.86	ø8/18	2	2	13(TG)	SLV		0.70	0.00	2.50	12391.50	51270.30	0.30	31777.50	2.50	32060.60	56850.70	1.01
6.58	7.86	ø8/18	2	2	9(TG)	SLV		0.70	12372.40	2.50	12391.50	50780.20	0.30	0.00	2.50	32060.60	56307.30	1.00
7.86	8.56	ø8/12	2	2	17	SLU	a	0.70	1649.05	2.50	18587.30	53699.70	0.30	1347.90	2.50	48091.00	59544.60	11.27
7.86	8.56	ø8/12	2	2	17	SLU	b	0.70	1684.18	2.50	18587.30	53952.90	0.30	674.74	2.50	48091.00	59825.30	11.04
7.86	8.56	ø8/12	2	2	15(TG)	SLV		0.70	0.00	2.50	18587.30	51205.00	0.30	32074.60	2.50	48091.00	56778.30	1.50
7.86	8.56	ø8/12	2	2	13(TG)	SLV		0.70	12670.70	2.50	18587.30	51270.60	0.30	0.00	2.50	48091.00	56851.00	1.47
9.06	9.76	ø8/12	2	2	17	SLU	a	0.70	1639.84	2.50	18587.30	50274.10	0.30	1057.08	2.50	48091.00	55746.10	11.33
9.06	9.76	ø8/12	2	2	17	SLU	b	0.70	1648.77	2.50	18587.30	50707.50	0.30	837.25	2.50	48091.00	56226.60	11.27
9.06	9.76	ø8/12	2	2	15(TG)	SLV		0.70	0.00	2.50	18587.30	49289.90	0.30	29382.10	2.50	48091.00	54654.80	1.64
9.06	9.76	ø8/12	2	2	13(TG)	SLV		0.70	11181.10	2.50	18587.30	48866.70	0.30	0.00	2.50	48091.00	54185.60	1.66
9.76	11.04	ø8/18	2	2	17	SLU	a	0.70	1639.84	2.50	12391.50	50211.80	0.30	1057.08	2.50	32060.60	55677.00	7.56
9.76	11.04	ø8/18	2	2	17	SLU	b	0.70	1648.77	2.50	12391.50	50645.20	0.30	837.25	2.50	32060.60	56157.60	7.52
9.76	11.04	ø8/18	2	2	15(TG)	SLV		0.70	0.00	2.50	12391.50	49289.90	0.30	29382.10	2.50	32060.60	54654.80	1.09
9.76	11.04	ø8/18	2	2	13(TG)	SLV		0.70	11181.10	2.50	12391.50	48866.70	0.30	0.00	2.50	32060.60	54185.60	1.11
11.04	11.74	ø8/12	2	2	17	SLU	a	0.70	1639.84	2.50	18587.30	50098.00	0.30	1057.08	2.50	48091.00	55550.80	11.33
11.04	11.74	ø8/12	2	2	17	SLU	b	0.70	1648.77	2.50	18587.30	50531.30	0.30	837.25	2.50	48091.00	56031.30	11.27
11.04	11.74	ø8/12	2	2	15(TG)	SLV		0.70	0.00	2.50	18587.30	49289.90	0.30	29382.10	2.50	48091.00	54654.80	1.64
11.04	11.74	ø8/12	2	2	13(TG)	SLV		0.70	11181.10	2.50	18587.30	48866.70	0.30	0.00	2.50	48091.00	54185.60	1.66
12.24	12.94	ø8/12	2	2	17	SLU	a	0.70	2003.83	2.50	18882.30	47382.80	0.30	2669.84	2.50	48386.00	52036.50	9.42
12.24	12.94	ø8/12	2	2	17	SLU	b	0.70	2052.17	2.50	18882.30	48057.00	0.30	1736.23	2.50	48386.00	52776.90	9.20
12.24	12.94	ø8/12	2	2	15(TG)	SLV		0.70	0.00	2.50	18882.30	47177.40	0.30	25778.60	2.50	48386.00	51810.90	1.88
12.24	12.94	ø8/12	2	2	13(TG)	SLV		0.70	9802.26	2.50	18882.30	47196.00	0.30	0.00	2.50	48386.00	51831.30	1.93
12.94	14.22	ø8/18	2	2	17	SLU	a	0.70	2003.83	2.50	12588.20	47319.50	0.30	2669.83	2.50	32257.30	51967.00	6.28
12.94	14.22	ø8/18	2	2	17	SLU	b	0.70	2052.17	2.50	12588.20	47993.80	0.30	1736.23	2.50	32257.30	52707.40	6.13
12.94	14.22	ø8/18	2	2	15(TG)	SLV		0.70	0.00	2.50	12588.20	47177.40	0.30	25778.60	2.50	32257.30	51810.90	1.25
12.94	14.22	ø8/18	2	2	13(TG)	SLV		0.70	9802.26	2.50	12588.20	47196.00	0.30	0.00	2.50	32257.30	51831.30	1.28
14.22	14.92	ø8/12	2	2	17	SLU	a	0.70	2003.83	2.50	18882.30	47203.90	0.30	2669.83	2.50	48386.00	51839.90	9.42
14.22	14.92	ø8/12	2	2	17	SLU	b	0.70	2052.17	2.50	18882.30	47878.10	0.30	1736.23	2.50	48386.00	52580.40	9.20
14.22	14.92	ø8/12	2	2	15(TG)	SLV		0.70	0.00	2.50	18882.30	47177.40	0.30	25778.60	2.50	48386.00	51810.90	1.88
14.22	14.92	ø8/12	2	2	13(TG)	SLV		0.70	9802.26	2.50	18882.30	47196.00	0.30	0.00	2.50	48386.00	51831.30	1.93

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F. Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
102N	ø8/ 7	Y+E	Z+I	2	5.09	5.09	0.45	0.20	0.42	7.04
		Z-I	Z+I	2	5.09	5.09	0.30	0.60	0.42	7.04
		Z-I	Z-I	2	5.09	5.09	0.30	0.60	0.42	7.04
202N	ø8/ 7	Y+E	Z+I	2	10.05	8.04	0.85	0.20	0.16	3.02
		Z-I	Z+I	2	7.10	5.09	0.30	0.60	0.42	7.04
		Z-I	Z-I	2	7.10	5.09	0.30	0.60	0.42	7.04
302N	ø10/ 7	Y+E	Z+I	2	10.05	8.04	0.85	0.20	0.16	4.71
		Z-I	Z+I	2	7.10	5.09	0.30	0.60	0.42	11.00
		Z-I	Z-I	2	7.10	5.09	0.30	0.60	0.42	11.00
402N	ø12/ 6	Y+E	Z+I	2	10.05	8.04	0.85	0.19	0.16	9.05
		Z-I	Z+I	2	7.10	5.09	0.30	0.59	0.42	18.10
		Z-I	Z-I	2	7.10	5.09	0.30	0.59	0.42	18.10
502N	ø12/ 6	Y+E	Z+I	2	5.09	5.09	0.45	0.20	0.42	18.10
		Z-I	Z+I	2	6.63	5.09	0.30	0.60	0.42	18.10
105N	ø8/ 7	Y+E	Z+I	2	5.09	5.09	0.45	0.20	0.42	7.04
		Z-I	Z+I	2	5.09	9.42	0.30	0.60	0.42	7.04
		Z-I	Z-I	2	5.09	9.42	0.30	0.60	0.42	7.04
205N	ø8/ 7	Y+E	Z+I	2	10.05	8.04	0.85	0.20	0.16	3.02
		Z-I	Z+I	2	7.63	5.09	0.30	0.60	0.42	7.04
		Z-I	Z-I	2	7.63	5.09	0.30	0.60	0.42	7.04
305N	ø10/ 7	Y+E	Z+I	2	10.05	8.04	0.85	0.20	0.16	4.71
		Z-I	Z+I	2	7.63	5.09	0.30	0.60	0.42	11.00
		Z-I	Z-I	2	7.63	5.09	0.30	0.60	0.42	11.00
405N	ø12/ 6	Y+E	Z+I	2	10.05	8.04	0.85	0.19	0.16	9.05
		Z-I	Z+I	2	7.63	5.09	0.30	0.59	0.42	18.10
		Z-I	Z-I	2	7.63	5.09	0.30	0.59	0.42	18.10
505N	ø12/ 6	Y+E	Z+I	2	10.05	8.04	0.85	0.20	0.16	9.05
		Z-I	Z+I	2	5.09	5.09	0.30	0.60	0.42	18.10
		Z-I	Z-I	2	5.09	5.09	0.30	0.60	0.42	18.10

Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	Vjbr <daN>	Afni <daN/mq>	Rfni <daN/mq>	Vjwd <daN>	Vjwr <daN>
102	Y+	1	SLV	1943.03	19963.40	17.11	22.29	49032.50	0.00	146394.00	---	---
		5	SLV	1943.03	19963.40	18.62	24.16	47551.00	0.00	146394.00	---	---
	Z+	1	SLV	2524.25	41288.70	17.11	22.29	129744.00	0.00	219591.00	---	---
		5	SLV	2524.25	41288.70	18.62	24.16	126994.00	0.00	219591.00	---	---
	Z-	1	SLV	2524.25	41288.70	17.11	22.29	129744.00	0.00	219591.00	---	---
		5	SLV	2524.25	41288.70	18.62	24.16	126994.00	0.00	219591.00	---	---
202	Y+	5	SLV	1808.87	41463.20	13.33	18.21	99293.20	33483.00	87873.90	---	---
		13	SLV	1808.87	41463.20	11.68	16.40	102075.00	47381.10	87873.90	---	---
	Z+	5	SLV	-6106.96	46360.40	13.33	18.21	136402.00	55032.90	219591.00	---	---
		13	SLV	-6106.96	46360.40	11.68	16.40	139212.00	70737.60	219591.00	---	---
	Z-	5	SLV	-6106.96	46360.40	13.33	18.21	136402.00	55032.90	219591.00	---	---
		13	SLV	-6106.96	46360.40	11.68	16.40	139212.00	70737.60	219591.00	---	---
302	Y+	5	SLV	1508.16	41763.90	6.69	11.36	107873.00	121790.00	137303.00	---	---
		13	SLV	1508.16	41763.90	7.93	12.84	105976.00	101958.00	137303.00	---	---
	Z+	5	SLV	-5736.25	46731.10	6.69	11.36	146399.00	147677.00	343111.00	---	---



Table with columns for node ID, direction, section type, and various numerical values representing structural parameters and results.

Pilastrate n. 3 4

3 (a) Nodi: 3 103 203 303 403 503
4 (b) Nodi: 4 104 204 304 404 504

Caratteristiche delle sezioni e dei materiali utilizzati

Table with columns: Sez., Tipo, B, H, Cf, Cls, Fck, Fctk, Fcd, Fctd, Tp, Fyk, Fyd. It lists characteristics for sections 2R, 11R and materials B450C.

Stato limite ultimo - Verifiche a flessione/pressoflessione

Table with columns: Xg, CC, FCC, In, El, Sez., X, N, My, My ver., Mz, Mz ver., Nu, MRdy,r, MRdz,r, Sic. It provides ultimate limit state verification data for various sections.

Stato limite elastico - Verifiche a flessione/pressoflessione

Table with columns: Xg, CC, FCC, In, El, Sez., X, N, My, My ver., Mz, Mz ver., Nu, M'ydy,r, M'yzd,r, Sic. It provides elastic limit state verification data for various sections.



Stato limite d'esercizio - Verifiche tensionali

Table with 13 columns: Xg, CC, TCC, In, El, Sez., X, N, Mz, My, AfT, AfC, sigma\_c, sigma\_f. It lists structural parameters and stress values for various elements.

Stato limite d'esercizio - Verifiche a fessurazione

Table with 17 columns: Xg, CC, TCC, In, El, Sez., X, N, My, Mz, c, s, K3, s\_sm, phi, A\_s, A\_c\_eff, sigma\_s, sigma\_sz, epsilon\_sm, Wk. It details crack-related parameters and limits.

Staffe - Verifiche armatura

Table with 14 columns: X0, X1, Staff., Br\_y, Br\_z, CC, TCC, In, bw\_y, V\_sdu\_y, ctg\_theta\_y, V\_Rsd\_y, V\_Rcd\_y, bw\_z, V\_sdu\_z, ctg\_theta\_z, V\_Rsd\_z, V\_Rcd\_z, Sic\_T. It provides reinforcement verification data for beams.



7.86	8.56	ø8/11	2	2	17	SLU	a	0.70	3888.84	2.50	20277.10	54071.50	0.30	231.04	2.50	52462.90	59956.80	5.21
7.86	8.56	ø8/11	2	2	13(TG)	SLV		0.70	0.00	2.50	20277.10	52183.30	0.30	34245.00	2.50	52462.90	57863.10	1.53
7.86	8.56	ø8/11	2	2	1(TG)	SLV		0.70	0.00	2.50	20277.10	52375.90	0.30	34306.60	2.50	52462.90	58076.70	1.53
7.86	8.56	ø8/11	2	2	1(TG)	SLV		0.70	13690.60	2.50	20277.10	52376.20	0.30	0.00	2.50	52462.90	58077.00	1.48
9.06	9.76	ø8/11	2	2	17	SLU	b	0.70	3655.10	2.50	20277.10	51696.10	0.30	1027.70	2.50	52462.90	57322.90	5.55
9.06	9.76	ø8/11	2	2	1(TG)	SLV		0.70	0.00	2.50	20277.10	49499.40	0.30	31344.90	2.50	52462.90	54887.10	1.67
9.06	9.76	ø8/11	2	2	1(TG)	SLV		0.70	12137.60	2.50	20277.10	49499.70	0.30	0.00	2.50	52462.90	54887.40	1.67
9.76	11.04	ø8/19	2	2	17	SLU	b	0.70	3655.10	2.50	11739.30	51633.80	0.30	1027.70	2.50	30373.20	57253.80	3.21
9.76	11.04	ø8/19	2	2	1(TG)	SLV		0.70	6041.69	2.50	11739.30	49499.50	0.30	15623.90	2.50	30373.20	54887.20	1.94
9.76	11.04	ø8/19	2	2	3(TG)	SLV		0.70	11725.70	2.50	11739.30	49003.60	0.30	0.00	2.50	30373.20	54337.30	1.00
11.04	11.74	ø8/11	2	2	17	SLU	b	0.70	3655.10	2.50	20277.10	51519.90	0.30	1027.70	2.50	52462.90	57127.50	5.55
11.04	11.74	ø8/11	2	2	1(TG)	SLV		0.70	0.00	2.50	20277.10	49499.40	0.30	31344.90	2.50	52462.90	54887.10	1.67
11.04	11.74	ø8/11	2	2	1(TG)	SLV		0.70	12137.60	2.50	20277.10	49499.70	0.30	0.00	2.50	52462.90	54887.40	1.67
12.24	12.94	ø8/12	2	2	17	SLU	b	0.70	3780.81	2.50	18882.30	48254.50	0.30	744.07	2.50	48386.00	52993.80	4.99
12.24	12.94	ø8/12	2	2	17	SLU	a	0.70	3856.08	2.50	18882.30	48423.90	0.30	564.80	2.50	48386.00	53179.80	4.90
12.24	12.94	ø8/12	2	2	1(TG)	SLV		0.70	0.00	2.50	18882.30	47386.60	0.30	27390.70	2.50	48386.00	52040.60	1.77
12.24	12.94	ø8/12	2	2	1(TG)	SLV		0.70	10489.90	2.50	18882.30	47386.50	0.30	0.00	2.50	48386.00	52040.50	1.80
12.94	14.22	ø8/18	2	2	17	SLU	b	0.70	3780.81	2.50	12588.20	48191.20	0.30	744.07	2.50	32257.30	52924.30	3.33
12.94	14.22	ø8/18	2	2	17	SLU	a	0.70	3856.08	2.50	12588.20	48360.60	0.30	564.80	2.50	32257.30	53110.30	3.26
12.94	14.22	ø8/18	2	2	1(TG)	SLV		0.70	0.00	2.50	12588.20	47386.60	0.30	27390.70	2.50	32257.30	52040.60	1.18
12.94	14.22	ø8/18	2	2	1(TG)	SLV		0.70	10489.90	2.50	12588.20	47386.50	0.30	0.00	2.50	32257.30	52040.50	1.20
14.22	14.92	ø8/12	2	2	17	SLU	b	0.70	3780.81	2.50	18882.30	48075.60	0.30	744.07	2.50	48386.00	52797.30	4.99
14.22	14.92	ø8/12	2	2	17	SLU	a	0.70	3856.08	2.50	18882.30	48244.90	0.30	564.80	2.50	48386.00	52983.30	4.90
14.22	14.92	ø8/12	2	2	1(TG)	SLV		0.70	0.00	2.50	18882.30	47386.60	0.30	27390.70	2.50	48386.00	52040.60	1.77
14.22	14.92	ø8/12	2	2	1(TG)	SLV		0.70	10489.90	2.50	18882.30	47386.50	0.30	0.00	2.50	48386.00	52040.50	1.80

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F. Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
103N		ø10/ 7	Y+E	4	6.63	5.09	0.45	0.20	0.42	21.99
			Z+I	4	5.09	5.09	0.30	0.60	0.42	21.99
			Z-I	4	5.09	5.09	0.30	0.60	0.42	21.99
203N		ø12/ 7	Y+E	4	22.87	12.57	0.85	0.20	0.16	13.57
			Z+I	4	10.18	5.09	0.30	0.60	0.42	31.67
			Z-I	4	10.18	5.09	0.30	0.60	0.42	31.67
303N		ø12/ 7	Y+E	4	22.87	12.57	0.85	0.20	0.16	13.57
			Z+I	4	10.18	5.09	0.30	0.60	0.42	31.67
			Z-I	4	10.18	5.09	0.30	0.60	0.42	31.67
403N		ø12/ 6	Y+E	4	22.87	12.57	0.85	0.20	0.16	18.10
			Z+I	4	10.18	5.09	0.30	0.60	0.42	36.19
			Z-I	4	10.18	5.09	0.30	0.60	0.42	36.19
503N		ø12/ 6	Y+E	4	10.18	8.04	0.85	0.21	0.16	18.10
			Z+I	4	5.09	5.09	0.30	0.61	0.42	36.19
			Z-I	4	5.09	5.09	0.30	0.61	0.42	36.19
104N		ø10/ 7	Y+E	4	6.63	5.09	0.45	0.20	0.42	21.99
			Z+I	4	5.09	5.09	0.30	0.60	0.42	21.99
			Z-I	4	5.09	5.09	0.30	0.60	0.42	21.99
204N		ø12/ 7	Y+E	4	18.85	10.18	0.85	0.20	0.16	13.57
			Z+I	4	7.10	5.09	0.30	0.60	0.42	31.67
			Z-I	4	7.10	5.09	0.30	0.60	0.42	31.67
304N		ø12/ 7	Y+E	4	18.85	10.18	0.85	0.20	0.16	13.57
			Z+I	4	7.10	5.09	0.30	0.60	0.42	31.67
			Z-I	4	7.10	5.09	0.30	0.60	0.42	31.67
404N		ø12/ 6	Y+E	4	18.85	10.18	0.85	0.20	0.16	18.10
			Z+I	4	7.10	5.09	0.30	0.60	0.42	36.19
			Z-I	4	7.10	5.09	0.30	0.60	0.42	36.19
504N		ø12/ 6	Y+E	4	18.85	10.18	0.85	0.21	0.16	18.10
			Z+I	4	5.09	5.09	0.30	0.61	0.42	36.19
			Z-I	4	5.09	5.09	0.30	0.61	0.42	36.19

Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	Vjbr <daN>	Afni <daN/mq>	Rfni <daN/mq>	Vjwd <daN>	Vjwr <daN>
103	Y+	1	SLV	3394.50	25138.00	23.56	25.51	41908.60	17685.50	457482.00	---	---
		9	SLV	3394.50	25138.00	21.80	24.00	43826.20	26562.10	457482.00	---	---
	Z+	1	SLV	3664.12	40148.80	22.10	24.24	119996.00	0.00	686223.00	---	---
		1	SLV	3664.12	40148.80	23.56	25.51	117130.00	0.00	686223.00	---	---
	Z-	1	SLV	3664.12	40148.80	22.10	24.24	119996.00	0.00	686223.00	---	---
		1	SLV	3664.12	40148.80	23.56	25.51	117130.00	0.00	686223.00	---	---
203	Y+	1	SLV	3123.56	95320.30	16.64	23.15	97693.90	673442.00	395433.00	44070.90	53106.60
		9	SLV	3123.56	95320.30	15.04	21.39	99474.70	729487.00	395433.00	44834.90	53106.60
	Z+	1	SLV	5234.10	60485.30	16.64	23.15	129286.00	149370.00	988160.00	---	---
		9	SLV	5234.10	60485.30	15.04	21.39	132107.00	168962.00	988160.00	---	---
	Z-	1	SLV	5234.10	60485.30	16.64	23.15	129286.00	149370.00	988160.00	---	---
		9	SLV	5234.10	60485.30	15.04	21.39	132107.00	168962.00	988160.00	---	---
303	Y+	1	SLV	2650.25	95793.60	10.26	16.24	101303.00	965404.00	395433.00	47064.20	53106.60
		9	SLV	2650.25	95793.60	9.24	14.63	102901.00	1030370.00	395433.00	47758.70	53106.60
	Z+	1	SLV	4718.61	61000.80	10.26	16.24	140170.00	254154.00	988160.00	---	---
		9	SLV	4718.61	61000.80	9.24	14.63	141836.00	277025.00	988160.00	---	---
	Z-	1	SLV	4718.61	61000.80	10.26	16.24	140170.00	254154.00	988160.00	---	---
		9	SLV	4718.61	61000.80	9.24	14.63	141836.00	277025.00	988160.00	---	---



403	Y+	1	SLV	3049.25	95394.60	3.93	9.85	110829.00	1532490.00	527243.00	49826.60	70808.80
		9	SLV	3049.25	95394.60	3.43	8.83	111542.00	1604650.00	527243.00	50269.00	70808.80
	Z+	1	SLV	4244.42	61475.00	3.93	9.85	150190.00	467940.00	1129330.00	---	---
		9	SLV	4244.42	61475.00	3.43	8.83	150948.00	493957.00	1129330.00	---	---
	Z-	1	SLV	4244.42	61475.00	3.93	9.85	150190.00	467940.00	1129330.00	---	---
		9	SLV	4244.42	61475.00	3.43	8.83	150948.00	493957.00	1129330.00	---	---
503	Y+	1	SLV	0.00	43812.90	0.00	3.11	122280.00	340933.00	527243.00	---	---
	Z+	1	SLV	0.00	43812.90	0.00	3.11	158699.00	306695.00	1129330.00	---	---
	Z-	1	SLV	0.00	43812.90	0.00	3.11	158699.00	306695.00	1129330.00	---	---
104	Y+	1	SLV	3075.06	25457.40	20.53	25.73	45151.20	37846.10	457482.00	---	---
		9	SLV	3075.06	25457.40	22.71	27.75	42840.20	25762.70	457482.00	---	---
	Z+	1	SLV	-2371.24	41441.70	20.53	25.73	123008.00	0.00	686223.00	---	---
		9	SLV	-2371.24	41441.70	22.71	27.75	118803.00	0.00	686223.00	---	---
	Z-	1	SLV	-2371.24	41441.70	20.53	25.73	123008.00	0.00	686223.00	---	---
		9	SLV	-2371.24	41441.70	22.71	27.75	118803.00	0.00	686223.00	---	---
204	Y+	1	SLV	2990.21	78144.80	14.58	20.12	94248.50	458558.00	395433.00	36760.00	53106.60
		9	SLV	2990.21	78144.80	16.54	22.31	90875.40	411509.00	395433.00	35994.60	53106.60
	Z+	1	SLV	-5793.80	46673.50	14.58	20.12	132896.00	50695.40	988160.00	---	---
		9	SLV	-5793.80	46673.50	16.54	22.31	129469.00	36123.80	988160.00	---	---
	Z-	1	SLV	-5793.80	46673.50	14.58	20.12	132896.00	50695.40	988160.00	---	---
		9	SLV	-5793.80	46673.50	16.54	22.31	129469.00	36123.80	988160.00	---	---
304	Y+	1	SLV	2921.97	78213.10	8.93	14.18	103380.00	656931.00	395433.00	38844.10	53106.60
		13	SLV	2921.97	78213.10	10.09	16.12	101563.00	606129.00	395433.00	38164.10	53106.60
	Z+	5	SLV	-5301.36	47166.00	8.92	14.19	142356.00	117057.00	988160.00	---	---
		13	SLV	-5301.36	47166.00	10.09	16.12	140441.00	100844.00	988160.00	---	---
	Z-	5	SLV	-5301.36	47166.00	8.92	14.19	142356.00	117057.00	988160.00	---	---
		13	SLV	-5301.36	47166.00	10.09	16.12	140441.00	100844.00	988160.00	---	---
404	Y+	5	SLV	2981.12	78153.90	3.24	8.51	111815.00	1053350.00	527243.00	40830.70	70808.80
		13	SLV	2981.12	78153.90	3.68	9.69	111187.00	1008880.00	527243.00	40417.50	70808.80
	Z+	5	SLV	-4304.42	48162.90	3.24	8.51	151239.00	258627.00	1129330.00	---	---
		13	SLV	-4304.42	48162.90	3.68	9.69	150570.00	243965.00	1129330.00	---	---
	Z-	5	SLV	-4304.42	48162.90	3.24	8.51	151239.00	258627.00	1129330.00	---	---
		13	SLV	-4304.42	48162.90	3.68	9.69	150570.00	243965.00	1129330.00	---	---
504	Y+	1	SLV	0.00	81135.00	0.00	2.84	122280.00	1490580.00	527243.00	42816.80	70808.80
		5	SLV	0.00	81135.00	0.00	2.83	122280.00	1490580.00	527243.00	42820.50	70808.80
	Z+	1	SLV	0.00	43812.90	0.00	2.84	158699.00	306695.00	1129330.00	---	---
	Z-	1	SLV	0.00	43812.90	0.00	2.84	158699.00	306695.00	1129330.00	---	---

**Pilastrata n. 6**

Nodi: 6 -1032 106 206 306 406 506

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
1R		30.00	120.00	5.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	MR <sub>dy,r</sub> <daNm>	MR <sub>dz,r</sub> <daNm>	Sic.
0.00	13	SLV	1	1	0.00	-46417.10	21983.00			0.00			-46417.10	86118.30	0.00	3.917
0.00	13	SLV	1	1	0.00	-46417.10	21983.00			0.00			-46417.10	86118.30	0.00	3.917
1.99	5	SLV	1	1	199.00	-41596.20	39117.50			0.00			-41596.20	85055.50	0.00	2.174
2.17	5	SLV	2	1	0.00	-42714.20	44062.50			0.00			-42714.20	85302.50	0.00	1.936
2.17	5	SLV	2	1	0.00	-42714.20	44062.50			0.00			-42714.20	66825.30	0.00	1.517
2.20	13 (α)	SLV	2	1	3.00	-45682.70	0.00	1.33	0.00	-559.10	27.80	-15544.90	-45682.70	0.00	-16184.50	1.041
2.70	7 (α)	SLV	3	1	0.00	-56415.20	0.00	1.30	0.00	-579.30	29.06	-16833.30	-56415.20	0.00	-16937.00	1.006
2.70	15 (α)	SLV	3	1	0.00	-42137.10	0.00	1.30	0.00	-1001.84	17.76	-17794.90	-42137.10	0.00	-20297.70	1.141
5.38	5 (α)	SLV	3	1	268.00	-32062.10	-39295.60	1.30	-51084.20	0.00	3.84	0.00	-32062.10	-82918.70	0.00	1.623
5.88	5 (α)	SLV	4	1	0.00	-21560.60	-48389.40	1.30	-62906.30	0.00	8.63	0.00	-21560.60	-80519.90	0.00	1.280
5.88	5 (α)	SLV	4	1	0.00	-21560.60	-48389.40	1.30	-62906.30	0.00	8.63	0.00	-21560.60	-80519.90	0.00	1.280
8.56	15 (α)	SLV	4	1	268.00	-26154.00	0.00	2.06	0.00	1447.71	5.58	8073.31	-26154.00	0.00	19193.40	2.377
9.06	5 (α)	SLV	5	1	0.00	-12954.00	0.00	2.37	0.00	-4138.64	2.22	-9202.85	-12954.00	0.00	-18267.50	1.985
9.06	5 (α)	SLV	5	1	0.00	-12954.00	0.00	2.37	0.00	-4138.64	2.22	-9202.85	-12954.00	0.00	-12664.60	1.376
11.74	1 (α)	SLV	5	1	268.00	-12858.40	0.00	3.80	0.00	4675.78	1.85	8662.17	-12858.40	0.00	12657.60	1.461
12.24	15 (α)	SLV	6	1	0.00	-6622.21	0.00	2.49	0.00	-1968.28	4.87	-9586.54	-6622.21	0.00	-12195.10	1.272
12.24	15 (α)	SLV	6	1	0.00	-6622.21	0.00	2.49	0.00	-1968.28	4.87	-9586.54	-6622.21	0.00	-12195.10	1.272
14.92	1	SLV	6	1	268.00	-3320.19	0.00			4864.52			-3320.19	0.00	11949.70	2.457

**Stato limite elastico - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	M'y <sub>dy,r</sub> <daNm>	M'y <sub>dz,r</sub> <daNm>	Sic.
2.20	5	SND	2	1	3.00	-21981.80	0.00			-3154.48			-21981.80	0.00	-13091.80	4.150
2.70	7	SND	3	1	0.00	-20376.00	0.00			-1930.54			-20376.00	0.00	-12979.00	6.723
2.70	7	SND	3	1	0.00	-20376.00	0.00			-1930.54			-20376.00	0.00	-16949.00	8.779





Stato limite d'esercizio - Verifiche tensionali

Table with 13 columns: Xg, CC, TCC, El, Sez., X, N, Mz, My, AfT, AfC, sigma\_c, sigma\_f. It lists structural parameters for various elements across different sections.

Stato limite d'esercizio - Verifiche a fessurazione

Table with 18 columns: Xg, CC, TCC, El, Sez., X, N, My, Mz, c, s, K3, s\_sm, phi, A\_s, A\_c\_eff, sigma\_s, sigma\_sr, epsilon\_sm, Wk. It details crack-related verification parameters.

Staffe - Verifiche armatura

Table with 14 columns: X0, X1, Staff, Br\_y, Br\_z, CC, TCC, bw\_r,y, Vsdu\_r,y, ctgtheta\_r,y, VRsd\_r,y, VRcd\_r,y, bw\_r,z, Vsdu\_r,z, ctgtheta\_r,z, VRsd\_r,z, VRcd\_r,z, Sic.T. It provides reinforcement verification data.

Caratteristiche nodi trave-pilastro

Table with 10 columns: Nodo, Conf, Staff, F, Mod, Br, As1, As2, Bj, Hj\_c, Hj\_w, Ash. It lists characteristics for beam-column nodes.





			Z-E	4	5.09	5.09	0.30	1.10	0.42	15.71
206N		ø8/10	Y+E	4	7.63	5.09	0.45	0.20	0.42	10.05
			Z-E	4	12.19	9.05	0.30	1.10	0.42	10.05
306N		ø8/10	Y+E	4	7.63	5.09	0.45	0.20	0.42	10.05
			Z-E	4	12.19	9.05	0.30	1.10	0.42	10.05
406N		ø8/10	Y+E	4	7.63	5.09	0.45	0.21	0.42	10.05
			Z-E	4	12.19	9.05	0.30	1.11	0.42	10.05
506N		ø8/10	Y+E	4	5.09	5.09	0.45	0.21	0.42	10.05
			Z-E	4	12.19	9.05	0.30	1.11	0.42	10.05

## Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	Vjbr <daN>	Afni <daN/cmq>	Rfni <daN/cmq>	Vjwd <daN>	Vjwr <daN>
106	Y+	5	SLV	1340.71	61133.30	5.82	7.20	75611.50	1812270.00	326773.00	59566.60	61465.90
		13	SLV	1340.71	61133.30	10.81	11.58	71499.40	1296920.00	326773.00	57069.90	61465.90
	Y-	5	SLV	1340.71	61133.30	5.82	7.20	75611.50	1812270.00	326773.00	59566.60	61465.90
		13	SLV	1340.71	61133.30	10.81	11.58	71499.40	1296920.00	326773.00	57069.90	61465.90
	Z-	1	SLV	-16662.80	5243.70	6.40	7.60	213144.00	0.00	490160.00	---	---
		13	SLV	-16662.80	5243.70	10.81	11.58	199651.00	0.00	490160.00	---	---
206	Y+	5	SLV	3612.85	29246.80	3.64	5.41	61297.10	395838.00	209135.00	20958.30	39338.20
		13	SLV	3612.85	29246.80	8.31	10.41	57486.10	244880.00	209135.00	20082.80	39338.20
	Z-	1	SLV	15222.90	37244.50	4.21	5.99	219516.00	0.00	313703.00	---	---
		13	SLV	15222.90	37244.50	8.31	10.41	207401.00	0.00	313703.00	---	---
306	Y+	5	SLV	3591.70	29268.00	2.19	3.23	62434.20	471740.00	209135.00	21340.20	39338.20
		13	SLV	3591.70	29268.00	5.28	7.90	59987.50	331474.00	209135.00	20521.30	39338.20
	Z-	1	SLV	10356.40	42111.00	2.58	3.80	224156.00	0.00	313703.00	---	---
		13	SLV	10356.40	42111.00	5.28	7.90	216426.00	0.00	313703.00	---	---
406	Y+	5	SLV	3443.84	29415.90	0.77	1.78	64765.60	548663.00	209135.00	21594.70	39338.20
		13	SLV	3443.84	29415.90	2.20	4.87	63645.80	453702.00	209135.00	21052.90	39338.20
	Z-	5	SLV	-4570.63	47896.70	0.77	1.78	230001.00	10853.30	313703.00	---	---
		13	SLV	-4570.63	47896.70	2.20	4.87	226024.00	0.00	313703.00	---	---
506	Y+	5	SLV	0.00	21906.50	0.00	0.56	65364.70	281738.00	209135.00	21808.30	39338.20
		5	SLV	0.00	21906.50	0.00	0.37	65364.70	281738.00	209135.00	21842.10	39338.20
	Z-	1	SLV	0.00	52467.30	0.00	0.56	232129.00	56022.50	313703.00	---	---

## Pilastrata n. 7

Nodi: 7 107 207 307 407 507

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm <sup>2</sup> >	Fctk <daN/cm <sup>2</sup> >	Fcd <daN/cm <sup>2</sup> >	Fctd <daN/cm <sup>2</sup> >	TP	Fyk <daN/cm <sup>2</sup> >	Fyd <daN/cm <sup>2</sup> >
1R		30.00	120.00	5.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
9R		25.00	60.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
0.00	17(e)	SLV	1	1	0.00	-195800.00	-350.54		-3916.01	0.00		0.00	-592620.00	-87765.10	0.00	3.027
0.00	17(e)	SLV	1	1	0.00	-195800.00	-350.54		-3916.01	0.00		0.00	-592620.00	-87765.10	0.00	3.027
2.20	15(α)	SLV	1	1	220.00	-117861.00	0.00	1.59	0.00	-2252.46	3.17	-7148.89	-117861.00	0.00	-19808.60	2.771
2.70	11(α)	SLV	2	1	0.00	-94990.30	10735.80	2.53	27176.90	0.00	4.95	0.00	-94990.30	74031.90	0.00	2.724
2.70	11(α)	SLV	2	1	0.00	-94990.30	10735.80	2.53	27176.90	0.00	4.95	0.00	-94990.30	74031.90	0.00	2.724
5.28	9(α)	SLV	2	1	258.00	-92004.20	-25651.30	1.30	-33346.60	0.00	4.23	0.00	-92004.20	-73487.30	0.00	2.204
5.88	1(α)	SLV	3	1	0.00	-59328.80	0.00	1.68	0.00	-4329.26	3.06	-13254.50	-59328.80	0.00	-16005.80	1.208
5.88	1(α)	SLV	3	1	0.00	-59328.80	0.00	1.68	0.00	-4329.26	3.06	-13254.50	-59328.80	0.00	-16005.80	1.208
8.46	15(α)	SLV	3	1	258.00	-62528.30	0.00	2.54	0.00	730.35	9.78	7143.38	-62528.30	0.00	16228.50	2.272
9.06	9(α)	SLV	4	1	0.00	-27449.50	0.00	4.37	0.00	-3715.64	2.97	-11037.70	-27449.50	0.00	-13729.30	1.244
9.06	9(α)	SLV	4	1	0.00	-27449.50	0.00	4.37	0.00	-3715.64	2.97	-11037.70	-27449.50	0.00	-13729.30	1.244
11.64	5(α)	SLV	4	1	258.00	-25885.50	0.00	16.87	0.00	-271.46	49.60	-13464.00	-25885.50	0.00	-13615.20	1.011
12.24	15(α)	SLV	5	9	0.00	-1192.50	0.00	5.46	0.00	-213.79	15.31	-3272.73	-1192.50	0.00	-8598.28	2.627
12.24	15(α)	SLV	5	9	0.00	-1192.50	0.00	5.46	0.00	-213.79	15.31	-3272.73	-1192.50	0.00	-4228.13	1.292

## Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	M'ydy,r <daNm>	M'ydz,r <daNm>	Sic.
5.88	11	SND	3	1	0.00	-54552.10	0.00			5829.29			-54552.10	0.00	14194.00	2.435
5.88	11	SND	3	1	0.00	-54552.10	0.00			5829.29			-54552.10	0.00	14194.00	2.435
9.06	3	SND	4	1	0.00	-23831.80	0.00			5840.53			-23831.80	0.00	12090.80	2.070
9.06	3	SND	4	1	0.00	-23831.80	0.00			5840.53			-23831.80	0.00	12090.80	2.070
11.64	13	SND	4	1	258.00	-24971.70	0.00			-2422.13			-24971.70	0.00	-12171.10	5.025

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ <sub>c</sub> <daN/cm <sup>2</sup> >	σ <sub>f</sub> <daN/cm <sup>2</sup> >
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Table with 12 columns: X, Y, Z, I, J, K, L, M, N, O, P, Q. Contains structural data for various elements.

Stato limite d'esercizio - Verifiche a fessurazione

Table with 15 columns: Xg, CC, TCC, EI, Sez., X, N, My, Mz, s, K3, Sxm, phi, As, Ac, eff, sigma\_s, sigma\_sr, epsilon\_sm, Wk. Contains stress and strain verification data.

Staffe - Verifiche armatura

Table with 15 columns: X0, X1, Staff., Br\_y, Br\_z, CC, TCC, bw\_y, Vsdu\_y, ctgtheta\_y, VRsd\_y, VRcd\_y, bw\_z, Vsdu\_z, ctgtheta\_z, VRsd\_z, VRcd\_z, Sic.T. Contains reinforcement verification data.

Caratteristiche nodi trave-pilastro

Table with 10 columns: Nodo, Conf., Staff., F. Mod., Br., As1, As2, Bj, Hj\_c, Hj\_w, Ash. Contains node characteristics for beam-column joints.



## Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	Vjbr <daN>	Afni <daN/cm>	Rfni <daN/cm>	Vjwd <daN>	VjwR <daN>	
107	Z+	1	SLV	-16095.70	27717.20	15.72	18.85	241630.00	0.00	1129330.00	---	---	
		9	SLV	-16095.70	27717.20	17.92	20.95	234382.00	0.00	1129330.00	---	---	
	Y-	1	SLV	-796.44	21110.00	15.72	18.85	49865.80	8389.94	752884.00	---	---	
		9	SLV	-796.44	21110.00	17.92	20.95	47763.10	0.00	752884.00	---	---	
	Z-	1	SLV	-16095.70	27717.20	15.72	18.85	241630.00	0.00	1129330.00	---	---	
		9	SLV	-16095.70	27717.20	17.92	20.95	234382.00	0.00	1129330.00	---	---	
	207	Z+	1	SLV	13360.20	35591.30	10.01	15.33	261340.00	0.00	313702.00	---	---
		9	SLV	13360.20	35591.30	11.87	17.53	255634.00	0.00	313702.00	---	---	
	Y-	1	SLV	2525.29	33174.10	10.01	15.33	57134.00	290508.00	202513.00	23729.00	47205.90	
		9	SLV	2525.29	33174.10	11.87	17.53	55472.10	251042.00	202513.00	23252.00	47205.90	
	Z-	1	SLV	13360.20	35591.30	10.01	15.33	261340.00	0.00	313702.00	---	---	
		9	SLV	13360.20	35591.30	11.87	17.53	255634.00	0.00	313702.00	---	---	
307	Z+	1	SLV	9186.00	48149.40	4.56	9.62	277398.00	0.00	313702.00	---	---	
		9	SLV	9186.00	48149.40	5.38	11.48	275057.00	0.00	313702.00	---	---	
	Y-	1	SLV	2804.69	32894.70	4.56	9.62	61749.90	463190.00	202513.00	24963.80	47205.90	
		9	SLV	2804.69	32894.70	5.38	11.48	61082.10	427032.00	202513.00	24561.70	47205.90	
	Z-	1	SLV	9186.00	48149.40	4.56	9.62	277398.00	0.00	313702.00	---	---	
		9	SLV	9186.00	48149.40	5.38	11.48	275057.00	0.00	313702.00	---	---	
	407	Z+	1	SLV	-563.17	56772.30	0.48	4.17	288837.00	75694.20	313702.00	---	---
		Y-	1	SLV	175.32	35524.10	0.48	4.17	64991.90	894755.00	202513.00	26142.60	47205.90
	Z-	1	SLV	-563.17	56772.30	0.48	4.17	288837.00	75694.20	313702.00	---	---	

## Pilastrata n. 8

Nodi: 8 108 208 308 408 508

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm>	Fctk <daN/cm>	Fcd <daN/cm>	Fctd <daN/cm>	Tp	Fyk <daN/cm>	Fyd <daN/cm>
2R		30.00	70.00	5.20	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
2R		30.00	70.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
11R		30.00	70.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	$\alpha_y$	My ver. <daNm>	Mz <daNm>	$\alpha_z$	Mz ver. <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
0.00	17 (e)	SLV	1	2	0.00	-215134.00	1264.22		4302.67	0.00		0.00	-345695.00	32723.80	0.00	1.607
0.00	17 (e)	SLV	1	2	0.00	-215134.00	1264.22		4302.67	0.00		0.00	-345695.00	32723.80	0.00	1.607
2.20	7 (a)	SLV	1	2	220.00	-133703.00	0.00	27.87	0.00	612.17	14.72	9011.64	-133703.00	0.00	14282.40	1.585
5.88	9 (a)	SLV	3	2	0.00	-68433.90	11008.60	2.76	30379.10	0.00	20.42	0.00	-68433.90	30499.60	0.00	1.004
5.88	9 (a)	SLV	3	2	0.00	-68433.90	11008.60	2.76	30379.10	0.00	20.42	0.00	-68433.90	30499.60	0.00	1.004
8.46	3 (a)	SLV	3	2	258.00	-67184.80	0.00	4.59	0.00	521.95	18.85	9838.68	-67184.80	0.00	12287.70	1.249
9.06	9 (a)	SLV	4	2	0.00	-35816.30	-3788.66	7.03	-26620.40	0.00	38.52	0.00	-35816.30	-26852.50	0.00	1.009
9.06	9 (a)	SLV	4	2	0.00	-35816.30	-3788.66	7.03	-26620.40	0.00	38.52	0.00	-35816.30	-26852.50	0.00	1.009
11.64	9 (a)	SLV	4	2	258.00	-34461.80	-7612.56	2.48	-18853.70	0.00	13.80	0.00	-34461.80	-26693.00	0.00	1.416
12.24	3 (a)	SLV	5	11	0.00	-14704.90	0.00	6.02	0.00	-293.76	30.62	-8994.18	-14704.90	0.00	-9030.23	1.004
12.24	3 (a)	SLV	5	11	0.00	-14704.90	0.00	6.02	0.00	-293.76	30.62	-8994.18	-14704.90	0.00	-9030.23	1.004
14.92	5	SLV	5	11	268.00	-11185.40	0.00			3428.61			-11185.40	0.00	8770.29	2.558

## Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	$\alpha_y$	My ver. <daNm>	Mz <daNm>	$\alpha_z$	Mz ver. <daNm>	Nu <daN>	M'ydy,r <daNm>	M'yzd,r <daNm>	Sic.
5.88	11	SND	3	2	0.00	-65102.20	0.00			2137.80			-65102.20	0.00	10841.70	5.071
5.88	11	SND	3	2	0.00	-65102.20	0.00			2137.80			-65102.20	0.00	10841.70	5.071
9.06	11	SND	4	2	0.00	-32896.20	0.00			1528.01			-32896.20	0.00	8896.27	5.822
9.06	11	SND	4	2	0.00	-32896.20	0.00			1528.01			-32896.20	0.00	8896.27	5.822
11.64	11	SND	4	2	258.00	-31541.70	0.00			-1102.80			-31541.70	0.00	-8810.16	7.989
12.24	15	SND	5	11	0.00	-12986.40	0.00			-3000.48			-12986.40	0.00	-7712.50	2.570
12.24	15	SND	5	11	0.00	-12986.40	0.00			-3000.48			-12986.40	0.00	-7712.50	2.570

## Dati per verifiche di stabilità

Xg <m>	El	$l_0$ <m>	$\lambda$	$\lambda^*$
2.70	2	3.18	36.72	36.27
2.70	2	3.18	36.72	36.27
5.28	2	3.18	36.72	36.27

## Stato limite ultimo - Verifiche a flessione/pressoflessione - Controlli di stabilità

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	$\alpha_y$	My ver. <daNm>	Mz <daNm>	$\alpha_z$	Mz ver. <daNm>	Nu <daN>	MRdy,sr <daNm>	MRdz,sr <daNm>	Sic.
2.70	5 (a)	SLV	2	2	0.00	-102201.00	0.00	16.36	0.00	-438.43	25.10	-11005.30	-102201.00	0.00	-11654.70	1.059
2.70	5 (a)	SLV	2	2	0.00	-102201.00	0.00	16.36	0.00	-438.43	25.10	-11005.30	-102201.00	0.00	-11654.70	1.059
5.28	13 (a)	SLV	2	2	258.00	-100996.00	0.00	5.87	0.00	1175.35	9.30	10925.40	-100996.00	0.00	11621.50	1.064



## Stato limite elastico - Verifiche a flessione/pressoflessione - Controlli di stabilità

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	$\alpha_y$ My ver. <daNm>	Mz <daNm>	$\alpha_z$ Mz ver. <daNm>	Nu <daN>	M'ydy,sr <daNm>	M'ydz,sr <daNm>	Sic.
2.70	9	SND	2	2	0.00	-96433.40	0.00		-1713.91		-345695.00	0.00	-11488.00	3.585
2.70	9	SND	2	2	0.00	-96433.40	0.00		-1713.91		-345695.00	0.00	-11488.00	3.585
5.28	11	SND	2	2	258.00	-95953.60	0.00		1122.15		-345695.00	0.00	11474.30	3.603

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
0.00	18	SLE R	1	2	0.00	-152690.00	0.00	916.94	0.00	24.63	64.76	965.58
0.00	20	SLE Q	1	2	0.00	-135147.00	0.00	904.65	0.00	24.63	57.61	858.51
0.00	18	SLE R	1	2	0.00	-152690.00	0.00	916.94	0.00	24.63	64.76	965.58
0.00	20	SLE Q	1	2	0.00	-135147.00	0.00	904.65	0.00	24.63	57.61	858.51
2.20	18	SLE R	1	2	220.00	-151535.00	0.00	-1367.92	0.00	24.63	65.73	977.31
2.20	20	SLE Q	1	2	220.00	-133992.00	0.00	-1279.48	0.00	24.63	58.34	867.07
2.70	18	SLE R	2	2	0.00	-117330.00	-1092.22	0.00	0.00	24.63	56.13	802.29
2.70	20	SLE Q	2	2	0.00	-103650.00	-921.88	0.00	0.00	24.63	49.24	705.22
2.70	18	SLE R	2	2	0.00	-117330.00	-1092.22	0.00	0.00	24.63	56.13	802.29
2.70	20	SLE Q	2	2	0.00	-103650.00	-921.88	0.00	0.00	24.63	49.24	705.22
5.28	18	SLE R	2	2	258.00	-115976.00	599.46	0.00	0.00	24.63	51.69	753.64
5.28	20	SLE Q	2	2	258.00	-102295.00	507.69	0.00	0.00	24.63	45.43	663.01
5.88	18	SLE R	3	2	0.00	-81360.20	0.00	3099.74	0.00	24.63	42.83	623.02
5.88	20	SLE Q	3	2	0.00	-70985.50	0.00	2588.09	0.00	24.63	37.00	538.74
5.88	18	SLE R	3	2	0.00	-81360.20	0.00	3099.74	0.00	24.63	42.83	623.02
5.88	20	SLE Q	3	2	0.00	-70985.50	0.00	2588.09	0.00	24.63	37.00	538.74
8.46	18	SLE R	3	2	258.00	-80005.70	0.00	-2046.11	0.00	24.63	38.92	571.01
8.46	20	SLE Q	3	2	258.00	-69631.00	0.00	-1698.47	0.00	24.63	33.61	493.54
9.06	18	SLE R	4	2	0.00	-45045.00	0.00	3077.65	0.00	24.63	28.06	401.52
9.06	20	SLE Q	4	2	0.00	-38034.80	0.00	2798.37	0.00	24.63	24.33	347.33
9.06	18	SLE R	4	2	0.00	-45045.00	0.00	3077.65	0.00	24.63	28.06	401.52
9.06	20	SLE Q	4	2	0.00	-38034.80	0.00	2798.37	0.00	24.63	24.33	347.33
11.64	18	SLE R	4	2	258.00	-43690.50	0.00	-2137.61	0.00	24.63	24.51	354.22
11.64	20	SLE Q	4	2	258.00	-36680.30	0.00	-2209.65	0.00	24.63	21.90	314.64
12.24	18	SLE R	5	11	0.00	-15254.50	0.00	4744.20	12.31	12.31	24.73	330.69
12.24	20	SLE Q	5	11	0.00	-13348.30	0.00	4380.32	12.31	12.31	22.79	303.50
12.24	18	SLE R	5	11	0.00	-15254.50	0.00	4744.20	12.31	12.31	24.73	330.69
12.24	20	SLE Q	5	11	0.00	-13348.30	0.00	4380.32	12.31	12.31	22.79	303.50
14.92	18	SLE R	5	11	268.00	-13847.50	0.00	-5936.86	12.31	12.31	30.66	479.11
14.92	20	SLE Q	5	11	268.00	-11941.30	0.00	-4960.53	12.31	12.31	25.64	388.28

## Stato limite d'esercizio - Verifiche a fessurazione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K3	$s_{em}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_{s\text{ eff}}$ <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
12.24	20	SLE Q	5	11	0.00	-13348.30	4380.32	0.00	34.00	106.02	0.13	170.96	20.00	12.31	1006.77	257.09	1030.60	0.05	0.01
12.24	20	SLE Q	5	11	0.00	-13348.30	4380.32	0.00	34.00	106.02	0.13	170.96	20.00	12.31	1006.77	257.09	1030.60	0.05	0.01
14.92	20	SLE Q	5	11	268.00	-11941.30	-4960.53	0.00	34.00	106.02	0.13	170.96	20.00	12.31	1006.77	385.93	1204.94	0.07	0.02

## Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br <sub>y</sub>	Br <sub>z</sub>	CC	TCC	bw <sub>y</sub> <m>	Vsdu <sub>y</sub> <daN>	ctg $\theta_{y}$	VRsd <sub>y</sub> <daN>	VRcd <sub>y</sub> <daN>	bw <sub>z</sub> <m>	Vsdu <sub>z</sub> <daN>	ctg $\theta_{z}$	VRsd <sub>z</sub> <daN>	VRcd <sub>z</sub> <daN>	Sic. T
0.00	0.70	ø12/ 4	2	2	17	SLU	0.70	308.11	1.46	73149.70	73149.70	0.30	1463.73	1.00	129846.00	86937.40	59.39
0.00	0.70	ø12/ 4	2	2	9 (TG)	SLV	0.70	0.00	1.46	73149.70	73149.70	0.30	49812.80	1.00	129846.00	86937.40	1.75
0.00	0.70	ø12/ 4	2	2	9 (TG)	SLV	0.70	20496.70	1.46	73149.70	73149.70	0.30	0.00	1.00	129846.00	86937.40	3.57
0.70	1.50	ø8/16	2	2	17	SLU	0.70	308.11	2.50	13940.50	54071.50	0.30	1463.73	2.50	36068.20	59956.80	24.64
0.70	1.50	ø8/16	2	2	9 (TG)	SLV	0.70	10254.50	2.50	13940.50	54071.50	0.30	24896.20	2.50	36068.20	59956.80	1.36
1.50	2.20	ø8/ 8	2	2	17	SLU	0.70	308.11	2.50	27881.00	54071.50	0.30	1463.73	2.24	64687.70	64687.70	44.19
1.50	2.20	ø8/ 8	2	2	9 (TG)	SLV	0.70	0.00	2.50	27881.00	54071.50	0.30	49812.80	2.24	64687.70	64687.70	1.30
1.50	2.20	ø8/ 8	2	2	9 (TG)	SLV	0.70	20496.70	2.50	27881.00	54071.50	0.30	0.00	2.24	64687.70	64687.70	1.36
2.70	3.40	ø8/11	2	2	17	SLU	0.70	915.99	2.50	20277.10	54071.50	0.30	1009.74	2.50	52462.90	59956.80	22.14
2.70	3.40	ø8/11	2	2	9 (TG)	SLV	0.70	0.00	2.50	20277.10	54071.50	0.30	41215.60	2.50	52462.90	59956.80	1.27
2.70	3.40	ø8/11	2	2	11 (TG)	SLV	0.70	16776.90	2.50	20277.10	54071.50	0.30	0.00	2.50	52462.90	59956.80	1.21
3.40	4.58	ø8/19	2	2	17	SLU	0.70	915.99	2.50	11739.30	54071.50	0.30	1009.74	2.50	30373.20	59956.80	12.82
3.40	4.58	ø8/19	2	2	9 (TG)	SLV	0.70	8412.01	2.50	11739.30	54071.50	0.30	20591.60	2.50	30373.20	59956.80	1.40
4.58	5.28	ø8/11	2	2	17	SLU	0.70	915.99	2.50	20277.10	54071.50	0.30	1009.74	2.50	52462.90	59956.80	22.14
4.58	5.28	ø8/11	2	2	9 (TG)	SLV	0.70	0.00	2.50	20277.10	54071.50	0.30	41215.60	2.50	52462.90	59956.80	1.27
4.58	5.28	ø8/11	2	2	11 (TG)	SLV	0.70	16776.90	2.50	20277.10	54071.50	0.30	0.00	2.50	52462.90	59956.80	1.21
5.88	6.58	ø8/11	2	2	17	SLU	0.70	10.22	2.50	20277.10	54071.50	0.30	2774.76	2.50	52462.90	59956.80	18.91
5.88	6.58	ø8/11	2	2	21	SLU	0.70	37.16	2.50	20277.10	54071.50	0.30	1661.46	2.50	52462.90	59956.80	31.58
5.88	6.58	ø8/11	2	2	1 (TG)	SLV	0.70	0.00	2.50	20277.10	54071.50	0.30	37951.50	2.50	52462.90	59956.80	1.38
5.88	6.58	ø8/11	2	2	1 (TG)	SLV	0.70	15449.50	2.50	20277.10	54071.50	0.30	0.00	2.50	52462.90	59956.80	1.31
6.58	7.76	ø8/19	2	2	17	SLU	0.70	10.22	2.50	11739.30	54071.50	0.30	2774.76	2.50	30373.20	59956.80	10.95
6.58	7.76	ø8/19	2	2	21	SLU	0.70	37.16	2.50	11739.30	54071.50	0.30	1661.46	2.50	30373.20	59956.80	18.28
6.58	7.76	ø8/19	2	2	9 (TG)	SLV	0.70	7804.90	2.50	11739.30	54071.50	0.30	18822.20	2.50	30373.20	59956.80	1.50
7.76	8.46	ø8/11	2	2	17	SLU	0.70	10.22	2.50	20277.10	54071.50	0.30	2774.76	2.50	52462.90	59956.80	18.91
7.76	8.46	ø8/11	2	2	21	SLU	0.70	37.16	2.50	20277.10	54071.50	0.30	1661.46	2.50	52462.90	59956.80	31.58
7.76	8.46	ø8/11	2	2	1 (TG)	SLV	0.70	0.00	2.50	20277.10	54071.50	0.30	37951.50	2.50	52462.90	59956.80	1.38
7.76	8.46	ø8/11	2	2	1 (TG)	SLV	0.70	15449.50	2.50	20277.10	54071.50	0.30	0.00	2.50	52462.90	59956.80	1.31



9.06	9.76	ø8/11	2	2	17	SLU	0.70	56.87	2.50	20277.10	53232.80	0.30	2837.63	2.50	52462.90	59026.80	18.49
9.06	9.76	ø8/11	2	2	9 (TG)	SLV	0.70	0.00	2.50	20277.10	50149.50	0.30	33266.60	2.50	52462.90	55607.90	1.58
9.06	9.76	ø8/11	2	2	9 (TG)	SLV	0.70	13046.40	2.50	20277.10	50149.50	0.30	0.00	2.50	52462.90	55608.00	1.55
9.76	10.94	ø8/19	2	2	17	SLU	0.70	56.87	2.50	11739.30	53170.50	0.30	2837.63	2.50	30373.20	58957.80	10.70
9.76	10.94	ø8/19	2	2	9 (TG)	SLV	0.70	6625.23	2.50	11739.30	50149.50	0.30	16585.30	2.50	30373.20	55607.90	1.77
10.94	11.64	ø8/11	2	2	17	SLU	0.70	56.87	2.50	20277.10	53065.60	0.30	2837.63	2.50	52462.90	58841.40	18.49
10.94	11.64	ø8/11	2	2	9 (TG)	SLV	0.70	0.00	2.50	20277.10	50149.50	0.30	33266.60	2.50	52462.90	55607.90	1.58
10.94	11.64	ø8/11	2	2	9 (TG)	SLV	0.70	13046.40	2.50	20277.10	50149.50	0.30	0.00	2.50	52462.90	55608.00	1.55
12.24	12.94	ø8/12	2	2	17	SLU	0.70	230.77	2.50	18882.30	48556.30	0.30	5554.99	2.50	48386.00	53325.20	8.71
12.24	12.94	ø8/12	2	2	9 (TG)	SLV	0.70	0.00	2.50	18882.30	47570.50	0.30	27683.30	2.50	48386.00	52242.60	1.75
12.24	12.94	ø8/12	2	2	9 (TG)	SLV	0.70	10661.20	2.50	18882.30	47570.80	0.30	0.00	2.50	48386.00	52242.90	1.77
12.94	14.22	ø8/18	2	2	17	SLU	0.70	230.77	2.50	12588.20	48493.00	0.30	5554.99	2.50	32257.30	53255.70	5.81
12.94	14.22	ø8/18	2	2	9 (TG)	SLV	0.70	0.00	2.50	12588.20	47570.50	0.30	27683.30	2.50	32257.30	52242.60	1.17
12.94	14.22	ø8/18	2	2	9 (TG)	SLV	0.70	10661.20	2.50	12588.20	47570.80	0.30	0.00	2.50	32257.30	52242.90	1.18
14.22	14.92	ø8/12	2	2	17	SLU	0.70	230.77	2.50	18882.30	48377.40	0.30	5554.99	2.50	48386.00	53128.70	8.71
14.22	14.92	ø8/12	2	2	9 (TG)	SLV	0.70	0.00	2.50	18882.30	47570.50	0.30	27683.30	2.50	48386.00	52242.60	1.75
14.22	14.92	ø8/12	2	2	9 (TG)	SLV	0.70	10661.20	2.50	18882.30	47570.80	0.30	0.00	2.50	48386.00	52242.90	1.77

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F. Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
108N		ø8/ 8	Y+I	4	7.10	5.09	0.45	0.20	0.42	12.06
			Z+I	4	8.23	5.09	0.30	0.60	0.42	12.06
			Y-I	4	7.10	5.09	0.45	0.20	0.42	12.06
			Z-I	4	8.23	5.09	0.30	0.60	0.42	12.06
208S		ø12/ 5	Y+I	4	14.33	8.04	0.85	0.20	0.16	22.62
			Z+I	4	8.29	6.28	0.30	0.60	0.52	54.29
			Y-I	4	14.33	8.04	0.85	0.20	0.16	22.62
			Z-I	4	8.29	6.28	0.30	0.60	0.52	54.29
308S		ø12/ 4	Y+I	4	14.33	8.04	0.85	0.20	0.16	27.14
			Z+I	4	8.29	6.28	0.30	0.60	0.52	67.86
			Y-I	4	14.33	8.04	0.85	0.20	0.16	27.14
			Z-I	4	8.29	6.28	0.30	0.60	0.52	67.86
408S		ø12/ 4	Y+I	4	14.33	8.04	0.85	0.20	0.16	27.14
			Z+I	4	8.29	6.28	0.30	0.60	0.52	67.86
			Y-I	4	14.33	8.04	0.85	0.20	0.16	27.14
			Z-I	4	8.29	6.28	0.30	0.60	0.52	67.86
508N		ø8/ 8	Y+I	4	5.09	5.09	0.45	0.21	0.42	12.06
			Y-I	4	5.09	5.09	0.45	0.21	0.42	12.06
			Z-E	4	6.63	5.09	0.30	0.61	0.42	12.06

Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	Vjbr <daN>	Afni <daN/mq>	Rfni <daN/mq>	Vjwd <daN>	Vjwr <daN>
108Y+	1	SLV	998.33	51469.00	29.13	37.86	53794.80	381463.00	250961.00	40239.90	47205.90	
	9	SLV	998.33	51469.00	30.83	39.66	51841.80	358946.00	250961.00	39524.80	47205.90	
	Z+	1	SLV	-2269.54	55065.90	29.13	37.86	106183.00	18641.50	376442.00	---	---
		9	SLV	-2269.54	55065.90	30.83	39.66	102328.00	12026.00	376442.00	---	---
	Y-	1	SLV	998.33	51469.00	29.13	37.86	53794.80	381463.00	250961.00	40239.90	47205.90
		9	SLV	998.33	51469.00	30.83	39.66	51841.80	358946.00	250961.00	39524.80	47205.90
	Z-	1	SLV	-2269.54	55065.90	29.13	37.86	106183.00	18641.50	376442.00	---	---
		9	SLV	-2269.54	55065.90	30.83	39.66	102328.00	12026.00	376442.00	---	---
208Y+	1	SLV	1082.30	95198.00	19.75	28.74	115214.00	581621.00	659054.00	---	---	---
		9	SLV	1082.30	95198.00	21.32	30.44	112453.00	543306.00	659054.00	---	---
	Z+	1	SLV	-6417.60	56326.80	19.75	28.74	123651.00	84691.00	1366960.00	---	---
		9	SLV	-6417.60	56326.80	21.32	30.44	120688.00	73045.60	1366960.00	---	---
	Y-	1	SLV	1082.30	95198.00	19.75	28.74	115214.00	581621.00	659054.00	---	---
		9	SLV	1082.30	95198.00	21.32	30.44	112453.00	543306.00	659054.00	---	---
	Z-	1	SLV	-6417.60	56326.80	19.75	28.74	123651.00	84691.00	1366960.00	---	---
		9	SLV	-6417.60	56326.80	21.32	30.44	120688.00	73045.60	1366960.00	---	---
308Y+	1	SLV	-923.04	95357.20	10.32	19.35	130517.00	951953.00	790865.00	88332.80	106213.00	
		9	SLV	-923.04	95357.20	11.69	20.93	128408.00	876716.00	790865.00	87278.70	106213.00
	Z+	1	SLV	-6779.35	55965.10	10.32	19.35	140074.00	191945.00	1708700.00	---	---
		9	SLV	-6779.35	55965.10	11.69	20.93	137812.00	169446.00	1708700.00	---	---
	Y-	1	SLV	-923.04	95357.20	10.32	19.35	130517.00	951953.00	790865.00	88332.80	106213.00
		9	SLV	-923.04	95357.20	11.69	20.93	128408.00	876716.00	790865.00	87278.70	106213.00
	Z-	1	SLV	-6779.35	55965.10	10.32	19.35	140074.00	191945.00	1708700.00	---	---
		9	SLV	-6779.35	55965.10	11.69	20.93	137812.00	169446.00	1708700.00	---	---
408Y+	1	SLV	2237.06	94043.20	3.39	9.93	140700.00	1561180.00	790865.00	93666.60	106213.00	
		9	SLV	2237.06	94043.20	4.33	11.29	139367.00	1432990.00	790865.00	92945.60	106213.00
	Z+	1	SLV	-5992.18	56752.30	3.39	9.93	151003.00	403137.00	1708700.00	---	---
		9	SLV	-5992.18	56752.30	4.33	11.29	149573.00	362607.00	1708700.00	---	---
	Y-	1	SLV	2237.06	94043.20	3.39	9.93	140700.00	1561180.00	790865.00	93666.60	106213.00
		9	SLV	2237.06	94043.20	4.33	11.29	139367.00	1432990.00	790865.00	92945.60	106213.00
	Z-	1	SLV	-5992.18	56752.30	3.39	9.93	151003.00	403137.00	1708700.00	---	---
		9	SLV	-5992.18	56752.30	4.33	11.29	149573.00	362607.00	1708700.00	---	---
508Y+	1	SLV	0.00	43812.90	0.00	2.99	84063.10	1432270.00	250962.00	43812.90	47205.90	



Y-	1	SLV	0.00	43812.90	0.00	2.99	84063.10	1432270.00	250962.00	43812.90	47205.90
Z-	1	SLV	0.00	28532.50	0.00	2.99	128635.00	49061.00	376442.00	---	---

**Pilastrate n. 9 10**

9 (a) Nodi: 9 109 209 309 409 509

10 (b) Nodi: 10 110 210 310 410 510

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Typo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
3R		40.00	70.00	5.20	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
3R		40.00	70.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
2R		30.00	70.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
11R		30.00	70.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <cm>	CC	TCC	In	El	Sez.	X <cm>	N <daN>	My <daNm>	$\alpha_y$	My ver. <daNm>	Mz <daNm>	$\alpha_z$	Mz ver. <daNm>	Nu <daN>	MRdy, r <daNm>	MRdz, r <daNm>	Sic.	
0.00	5	SLV	a	1	3	0.00	-142391.00	7760.24			0.00			-299603.00	46034.70	0.00	2.104	
0.00	5	SLV	a	1	3	0.00	-142391.00	7760.24			0.00			-299603.00	46034.70	0.00	2.104	
2.20	11	(a)	SLV	a	1	3	220.00	-134852.00	0.00	4.32	0.00	338.99	72.77	24667.30	-134852.00	0.00	29072.30	1.179
2.70	3	(a)	SLV	b	2	3	0.00	-93587.20	0.00	14.38	0.00	1165.30	21.33	24851.30	-93587.20	0.00	26983.80	1.086
2.70	3	(a)	SLV	b	2	3	0.00	-93587.20	0.00	14.38	0.00	1165.30	21.33	24851.30	-93587.20	0.00	26983.80	1.086
5.28	3	(a)	SLV	a	2	3	258.00	-104441.00	0.00	4.27	0.00	-922.51	23.77	-21926.30	-104441.00	0.00	-27724.90	1.264
5.88	15	(a)	SLV	b	3	2	0.00	-59991.20	1311.38	26.82	35167.20	0.00	25.35	0.00	-59991.20	37050.10	0.00	1.054
5.88	15	(a)	SLV	b	3	2	0.00	-59991.20	1311.38	26.82	35167.20	0.00	25.35	0.00	-59991.20	37050.10	0.00	1.054
8.46	7	(a)	SLV	b	3	2	258.00	-70322.70	0.00	44.99	0.00	-2849.99	5.95	-16947.50	-70322.70	0.00	-17026.50	1.005
9.06	9	(a)	SLV	b	4	2	0.00	-36456.70	0.00	8.03	0.00	891.77	16.20	14449.80	-36456.70	0.00	14896.60	1.031
9.06	9	(a)	SLV	b	4	2	0.00	-36456.70	0.00	8.03	0.00	891.77	16.20	14449.80	-36456.70	0.00	14896.60	1.031
11.64	7	(a)	SLV	b	4	2	258.00	-34072.60	602.10	46.51	28005.90	0.00	8.96	0.00	-34072.60	34620.80	0.00	1.236
12.24	1	(a)	SLV	a	5	11	0.00	-11716.20	0.00	6.48	0.00	537.36	23.91	12847.70	-11716.20	0.00	13533.40	1.053
12.24	1	(a)	SLV	a	5	11	0.00	-11716.20	0.00	6.48	0.00	537.36	23.91	12847.70	-11716.20	0.00	13533.40	1.053
14.92	5		SLV	b	5	11	268.00	-10017.30	0.00			-4993.38		-10017.30	0.00	-13408.80	2.685	

**Stato limite elastico - Verifiche a flessione/pressoflessione**

Xg <cm>	CC	TCC	In	El	Sez.	X <cm>	N <daN>	My <daNm>	$\alpha_y$	My ver. <daNm>	Mz <daNm>	$\alpha_z$	Mz ver. <daNm>	Nu <daN>	M'ydy, r <daNm>	M'yzd, r <daNm>	Sic.
2.70	11	SND	a	2	3	0.00	-104288.00	0.00			257.77			-460927.00	0.00	25215.60	4.420
2.70	11	SND	a	2	3	0.00	-104288.00	0.00			257.77			-460927.00	0.00	25215.60	4.420
5.88	15	SND	a	3	2	0.00	-56929.10	0.00			6696.01			-56929.10	0.00	14752.00	2.203
5.88	15	SND	a	3	2	0.00	-56929.10	0.00			6696.01			-56929.10	0.00	14752.00	2.203
8.46	9	SND	a	3	2	258.00	-61246.10	0.00			-2700.82			-61246.10	0.00	-15000.30	5.554
9.06	13	SND	a	4	2	0.00	-28693.30	0.00			8252.25			-28693.30	0.00	13041.50	1.580
9.06	13	SND	a	4	2	0.00	-28693.30	0.00			8252.25			-28693.30	0.00	13041.50	1.580
11.64	3	SND	b	4	2	258.00	-37001.90	0.00			-2485.23			-37001.90	0.00	-13557.80	5.455
12.24	3	SND	a	5	11	0.00	-13080.90	0.00			1966.52			-13080.90	0.00	12310.50	6.260
12.24	3	SND	a	5	11	0.00	-13080.90	0.00			1966.52			-13080.90	0.00	12310.50	6.260

**Stato limite d'esercizio - Verifiche tensionali**

Xg <cm>	CC	TCC	In	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	$\sigma_c$ <daN/cm²>	$\sigma_f$ <daN/cm²>	
0.00	18	SLE	R	a	1	3	0.00	-154212.00	0.00	8022.67	0.00	40.72	64.60	930.76
0.00	20	SLE	Q	a	1	3	0.00	-136952.00	0.00	7021.41	0.00	40.72	57.12	823.33
0.00	18	SLE	R	a	1	3	0.00	-154212.00	0.00	8022.67	0.00	40.72	64.60	930.76
0.00	20	SLE	Q	a	1	3	0.00	-136952.00	0.00	7021.41	0.00	40.72	57.12	823.33
2.20	18	SLE	R	a	1	3	220.00	-152672.00	503.02	0.00	0.00	40.72	46.76	694.55
2.20	18	SLE	R	b	1	3	220.00	-135596.00	0.00	-1112.72	0.00	40.72	42.44	631.36
2.20	20	SLE	Q	a	1	3	220.00	-135412.00	0.00	862.03	0.00	40.72	41.78	622.66
2.70	18	SLE	R	a	2	3	0.00	-119612.00	0.00	-4401.09	0.00	40.72	45.70	664.59
2.70	20	SLE	Q	a	2	3	0.00	-106259.00	0.00	-3956.80	0.00	40.72	40.71	591.87
2.70	18	SLE	R	a	2	3	0.00	-119612.00	0.00	-4401.09	0.00	40.72	45.70	664.59
2.70	20	SLE	Q	a	2	3	0.00	-106259.00	0.00	-3956.80	0.00	40.72	40.71	591.87
5.28	18	SLE	R	a	2	3	258.00	-117806.00	0.00	1609.74	0.00	40.72	38.43	568.77
5.28	18	SLE	R	b	2	3	258.00	-103983.00	-1150.00	0.00	0.00	40.72	35.06	510.15
5.28	20	SLE	Q	a	2	3	258.00	-104453.00	-853.52	0.00	0.00	40.72	34.02	498.59
5.88	18	SLE	R	b	3	2	0.00	-74169.80	2133.79	0.00	0.00	40.72	42.16	564.35
5.88	20	SLE	Q	b	3	2	0.00	-65834.20	1906.23	0.00	0.00	40.72	37.51	501.81
5.88	18	SLE	R	b	3	2	0.00	-74169.80	2133.79	0.00	0.00	40.72	42.16	564.35
5.88	20	SLE	Q	b	3	2	0.00	-65834.20	1906.23	0.00	0.00	40.72	37.51	501.81
8.46	18	SLE	R	b	3	2	258.00	-72815.30	-1629.60	0.00	0.00	40.72	38.17	520.48
8.46	20	SLE	Q	b	3	2	258.00	-64479.70	-1466.13	0.00	0.00	40.72	33.96	462.56
9.06	18	SLE	R	b	4	2	0.00	-45016.10	3010.86	0.00	0.00	40.72	37.87	469.14
9.06	20	SLE	Q	b	4	2	0.00	-39585.50	2677.07	0.00	0.00	40.72	33.54	414.93
9.06	18	SLE	R	b	4	2	0.00	-45016.10	3010.86	0.00	0.00	40.72	37.87	469.14
9.06	20	SLE	Q	b	4	2	0.00	-39585.50	2677.07	0.00	0.00	40.72	33.54	414.93
11.64	18	SLE	R	b	4	2	258.00	-43661.60	-2117.18	0.00	0.00	40.72	30.79	394.33





Table with 12 columns: Xg, CC, TCC, In, El, Sez., X, N, My, Mz, c, s, K3, Sxm, Ø, As, Aeff, Gs, Gsr, sm, Wk. Rows include data for various structural elements like SLE Q b, SLE R b, SLE Q a, SLE R a.

Stato limite d'esercizio - Verifiche a fessurazione

Table with 19 columns: Xg, CC, TCC, In, El, Sez., X, N, My, Mz, c, s, K3, Sxm, Ø, As, Aeff, Gs, Gsr, sm, Wk. Rows show stress and strain values for different sections.

Staffe - Verifiche armatura

Large table with 17 columns: X0, X1, Staff., Br, Brz, CC, TCC, In, bw, Vsd, ctg, VRd, VRc, bw, Vsd, ctg, VRd, VRc, Sic. It details reinforcement verification for numerous structural members.

Caratteristiche nodi trave-pilastro

Table with 11 columns: Nodo, Conf., Staff., F, Mod., Br., As1, As2, Bj, Hj, Hjw, Ash. It lists characteristics for beam-column nodes, including node 109N and 209N.





			Y-I	4	18.85	17.66	0.90	0.30	0.16	22.62
			Z-I	4	6.28	6.28	0.40	0.60	0.52	54.29
309N		ø12/ 4	Y+I	4	18.85	12.57	0.45	0.20	0.42	58.81
			Z+I	4	6.28	6.28	0.30	0.60	0.52	67.86
			Y-I	4	18.85	17.66	0.85	0.20	0.16	27.14
			Z-I	4	6.28	6.28	0.30	0.60	0.52	67.86
409N		ø12/ 4	Y+I	4	18.85	12.57	0.45	0.20	0.42	58.81
			Z+I	4	6.28	6.28	0.30	0.60	0.52	67.86
			Y-I	4	18.85	17.66	0.85	0.20	0.16	27.14
			Z-I	4	6.28	6.28	0.30	0.60	0.52	67.86
509N		ø12/ 4	Y+I	4	15.27	8.04	0.45	0.21	0.42	54.29
			Z+I	4	5.09	5.09	0.30	0.61	0.42	54.29
			Y-I	4	15.27	13.13	0.85	0.21	0.16	27.14
			Z-I	4	5.09	5.09	0.30	0.61	0.42	54.29
110N		ø10/10	Y+I	4	5.09	10.18	0.50	0.30	0.42	15.71
			Z+I	4	5.09	5.09	0.40	0.60	0.42	15.71
			Y-I	4	10.18	5.09	0.50	0.30	0.42	15.71
			Z-I	4	5.09	5.09	0.40	0.60	0.42	15.71
210N		ø12/ 5	Y+I	4	18.85	10.18	0.50	0.30	0.42	45.24
			Z+I	4	6.28	6.28	0.40	0.60	0.52	54.29
			Y-I	4	18.85	15.27	0.90	0.30	0.16	22.62
			Z-I	4	6.28	6.28	0.40	0.60	0.52	54.29
310N		ø12/ 4	Y+I	4	18.85	10.18	0.45	0.20	0.42	58.81
			Z+I	4	6.28	6.28	0.30	0.60	0.52	67.86
			Y-I	4	18.85	15.27	0.85	0.20	0.16	27.14
			Z-I	4	6.28	6.28	0.30	0.60	0.52	67.86
410N		ø12/ 4	Y+I	4	18.85	10.18	0.45	0.20	0.42	58.81
			Z+I	4	6.28	6.28	0.30	0.60	0.52	67.86
			Y-I	4	18.85	15.27	0.85	0.20	0.16	27.14
			Z-I	4	6.28	6.28	0.30	0.60	0.52	67.86
510N		ø12/ 4	Y+I	4	18.85	10.18	0.45	0.21	0.42	54.29
			Z+I	4	5.09	5.09	0.30	0.61	0.42	54.29
			Y-I	4	18.85	15.27	0.85	0.21	0.16	27.14
			Z-I	4	5.09	5.09	0.30	0.61	0.42	54.29

**Pilastrata n. 11**

Nodi: 11 111 211 311 411 511

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
2R		30.00	70.00	5.20	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
2R		30.00	70.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
11R		30.00	70.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
0.00	17 (e)	SLV	1	2	0.00	-192225.00	-2785.12		-3844.51	0.00		0.00	-345695.00	-34402.90	0.00	1.798
0.00	17 (e)	SLV	1	2	0.00	-192225.00	-2785.12		-3844.51	0.00		0.00	-345695.00	-34402.90	0.00	1.798
2.20	17 (e)	SLV	1	2	220.00	-190724.00	1567.40		3814.48	0.00		0.00	-345695.00	34507.60	0.00	1.813
2.70	15 (α)	SLV	2	2	0.00	-92462.50	0.00	27.50	0.00	-419.54	30.36	-12738.70	-92462.50	0.00	-13300.00	1.044
2.70	15 (α)	SLV	2	2	0.00	-92462.50	0.00	27.50	0.00	-419.54	30.36	-12738.70	-92462.50	0.00	-13300.00	1.044
5.28	1 (α)	SLV	2	2	258.00	-89817.60	0.00	3.66	0.00	1053.04	12.27	12919.00	-89817.60	0.00	13221.30	1.023
5.88	3 (α)	SLV	3	2	0.00	-66630.20	-9986.06	2.80	-27991.10	0.00	29.00	0.00	-66630.20	-30311.10	0.00	1.083
5.88	3 (α)	SLV	3	2	0.00	-66630.20	-9986.06	2.80	-27991.10	0.00	29.00	0.00	-66630.20	-30311.10	0.00	1.083
8.46	11 (α)	SLV	3	2	258.00	-65093.90	0.00	4.58	0.00	370.99	26.79	9938.87	-65093.90	0.00	12166.50	1.224
9.06	3 (α)	SLV	4	2	0.00	-42080.60	3498.58	7.85	27466.80	0.00	290.09	0.00	-42080.60	27582.90	0.00	1.004
9.06	3 (α)	SLV	4	2	0.00	-42080.60	3498.58	7.85	27466.80	0.00	290.09	0.00	-42080.60	27582.90	0.00	1.004
11.64	1 (α)	SLV	4	2	258.00	-42057.90	0.00	4.79	0.00	-820.99	13.05	-10711.60	-42057.90	0.00	-10739.90	1.003
12.24	15 (α)	SLV	5	11	0.00	-18284.90	-3483.69	6.85	-23857.10	0.00	17.10	0.00	-18284.90	-24311.90	0.00	1.019
12.24	15 (α)	SLV	5	11	0.00	-18284.90	-3483.69	6.85	-23857.10	0.00	17.10	0.00	-18284.90	-24311.90	0.00	1.019
14.92	1	SLV	5	11	268.00	-16680.70	7298.29			0.00			-16680.70	24033.60	0.00	3.293

**Stato limite elastico - Verifiche a flessione/pressoflessione**

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	M'ydy,r <daNm>	M'ydz,r <daNm>	Sic.
2.70	3	SND	2	2	0.00	-89320.80	0.00			-1493.43			-345695.00	0.00	-11877.30	3.870
2.70	3	SND	2	2	0.00	-89320.80	0.00			-1493.43			-345695.00	0.00	-11877.30	3.870
5.28	3	SND	2	2	258.00	-87966.30	0.00			1005.36			-345695.00	0.00	11884.10	3.930
5.88	1	SND	3	2	0.00	-64863.40	0.00			3660.31			-64863.40	0.00	10828.30	2.958
5.88	1	SND	3	2	0.00	-64863.40	0.00			3660.31			-64863.40	0.00	10828.30	2.958
9.06	3	SND	4	2	0.00	-41202.30	0.00			439.04			-345695.00	0.00	9419.82	8.390
9.06	3	SND	4	2	0.00	-41202.30	0.00			439.04			-345695.00	0.00	9419.82	8.390
11.64	3	SND	4	2	258.00	-39847.80	0.00			-616.10			-345695.00	0.00	-9335.84	8.675
12.24	11	SND	5	11	0.00	-17757.00	0.00			-1088.53			-17757.00	0.00	-8037.37	7.384
12.24	11	SND	5	11	0.00	-17757.00	0.00			-1088.53			-17757.00	0.00	-8037.37	7.384



## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
0.00	18	SLE R	1	2	0.00	-137281.00	0.00	-1984.34	0.00	24.63	61.92	916.34
0.00	20	SLE Q	1	2	0.00	-121786.00	0.00	-1668.91	0.00	24.63	54.64	809.11
0.00	18	SLE R	1	2	0.00	-137281.00	0.00	-1984.34	0.00	24.63	61.92	916.34
0.00	20	SLE Q	1	2	0.00	-121786.00	0.00	-1668.91	0.00	24.63	54.64	809.11
2.20	18	SLE R	1	2	220.00	-136126.00	0.00	1121.10	0.00	24.63	58.70	873.45
2.20	20	SLE Q	1	2	220.00	-120631.00	0.00	949.59	0.00	24.63	51.88	772.20
2.70	18	SLE R	2	2	0.00	-104838.00	-1243.67	0.00	0.00	24.63	52.26	738.84
2.70	20	SLE Q	2	2	0.00	-92693.60	-1056.10	0.00	0.00	24.63	45.87	649.68
2.70	18	SLE R	2	2	0.00	-104838.00	-1243.67	0.00	0.00	24.63	52.26	738.84
2.70	20	SLE Q	2	2	0.00	-92693.60	-1056.10	0.00	0.00	24.63	45.87	649.68
5.28	18	SLE R	2	2	258.00	-103484.00	0.00	2427.44	0.00	24.63	49.65	729.47
5.28	20	SLE Q	2	2	258.00	-91339.10	0.00	2038.74	0.00	24.63	43.49	639.54
5.88	18	SLE R	3	2	0.00	-76663.50	0.00	-2647.31	0.00	24.63	39.49	575.69
5.88	20	SLE Q	3	2	0.00	-67562.70	0.00	-2292.18	0.00	24.63	34.67	505.65
5.88	18	SLE R	3	2	0.00	-76663.50	0.00	-2647.31	0.00	24.63	39.49	575.69
5.88	20	SLE Q	3	2	0.00	-67562.70	0.00	-2292.18	0.00	24.63	34.67	505.65
8.46	18	SLE R	3	2	258.00	-75309.00	0.00	2283.02	0.00	24.63	37.78	552.33
8.46	20	SLE Q	3	2	258.00	-66208.20	0.00	1958.05	0.00	24.63	33.06	483.54
9.06	18	SLE R	4	2	0.00	-48753.90	0.00	-2937.20	0.00	24.63	29.11	418.21
9.06	20	SLE Q	4	2	0.00	-42650.40	0.00	-2559.94	0.00	24.63	25.44	365.46
9.06	18	SLE R	4	2	0.00	-48753.90	0.00	-2937.20	0.00	24.63	29.11	418.21
9.06	20	SLE Q	4	2	0.00	-42650.40	0.00	-2559.94	0.00	24.63	25.44	365.46
11.64	18	SLE R	4	2	258.00	-47399.40	0.00	2190.56	0.00	24.63	26.18	378.95
11.64	20	SLE Q	4	2	258.00	-41295.90	0.00	1905.51	0.00	24.63	22.80	330.03
12.24	18	SLE R	5	11	0.00	-21537.50	0.00	-3607.47	8.29	16.34	20.48	285.60
12.24	20	SLE Q	5	11	0.00	-18305.40	0.00	-3108.64	8.29	16.34	17.57	244.90
12.24	18	SLE R	5	11	0.00	-21537.50	0.00	-3607.47	8.29	16.34	20.48	285.60
12.24	20	SLE Q	5	11	0.00	-18305.40	0.00	-3108.64	8.29	16.34	17.57	244.90
14.92	18	SLE R	5	11	268.00	-20130.50	0.00	3093.50	8.29	16.34	18.09	253.29
14.92	20	SLE Q	5	11	268.00	-16898.40	0.00	2658.80	8.29	16.34	15.41	215.60

## Stato limite d'esercizio - Verifiche a fessurazione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sz</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
12.24	20	SLE Q	5	11	0.00	-18305.40	-3108.64	0.00	34.00	106.02	0.13	151.62	20.00	8.29	517.67	27.74	385.85	0.01	0.00
12.24	20	SLE Q	5	11	0.00	-18305.40	-3108.64	0.00	34.00	106.02	0.13	151.62	20.00	8.29	517.67	27.74	385.85	0.01	0.00
14.92	20	SLE Q	5	11	268.00	-16898.40	2658.80	0.00	34.00	106.02	0.13	151.62	20.00	8.29	517.67	12.24	262.01	0.00	0.00

## Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br <sub>y</sub>	Br <sub>z</sub>	CC	TCC	b <sub>w,y</sub> <cm>	Vsdu <sub>y</sub> <daN>	ctgθ <sub>y</sub>	VRsd <sub>y</sub> <daN>	VRcd <sub>y</sub> <daN>	b <sub>w,z</sub> <cm>	Vsdu <sub>z</sub> <daN>	ctgθ <sub>z</sub>	VRsd <sub>z</sub> <daN>	VRcd <sub>z</sub> <daN>	Sic.T
0.00	0.70	ø12/ 4	2	2	17	SLU	0.70	74.22	1.46	73149.70	73149.70	0.30	1978.42	1.00	129846.00	86937.40	43.94
0.00	0.70	ø12/ 4	2	2	21	SLU	0.70	94.94	1.46	73149.70	73149.70	0.30	1190.23	1.00	129846.00	86937.40	73.04
0.00	0.70	ø12/ 4	2	2	1(TG)	SLV	0.70	0.00	1.46	73149.70	73149.70	0.30	49225.10	1.00	129846.00	86937.40	1.77
0.00	0.70	ø12/ 4	2	2	1(TG)	SLV	0.70	20120.60	1.46	73149.70	73149.70	0.30	0.00	1.00	129846.00	86937.40	3.64
0.70	1.50	ø8/16	2	2	17	SLU	0.70	74.22	2.50	13940.50	54071.50	0.30	1978.42	2.50	36068.20	59956.80	18.23
0.70	1.50	ø8/16	2	2	21	SLU	0.70	94.94	2.50	13940.50	54071.50	0.30	1190.23	2.50	36068.20	59956.80	30.30
0.70	1.50	ø8/16	2	2	1(TG)	SLV	0.70	10068.90	2.50	13940.50	54071.50	0.30	24599.20	2.50	36068.20	59956.80	1.38
1.50	2.20	ø8/ 8	2	2	17	SLU	0.70	74.22	2.50	27881.00	54071.50	0.30	1978.42	2.24	64687.70	64687.70	32.70
1.50	2.20	ø8/ 8	2	2	21	SLU	0.70	94.94	2.50	27881.00	54071.50	0.30	1190.23	2.24	64687.70	64687.70	54.35
1.50	2.20	ø8/ 8	2	2	1(TG)	SLV	0.70	0.00	2.50	27881.00	54071.50	0.30	49225.10	2.24	64687.70	64687.70	1.31
1.50	2.20	ø8/ 8	2	2	1(TG)	SLV	0.70	20120.60	2.50	27881.00	54071.50	0.30	0.00	2.24	64687.70	64687.70	1.39
2.70	3.40	ø8/11	2	2	17	SLU	0.70	1022.13	2.50	20277.10	54071.50	0.30	2652.20	2.50	52462.90	59956.80	19.78
2.70	3.40	ø8/11	2	2	1(TG)	SLV	0.70	0.00	2.50	20277.10	54071.50	0.30	40081.10	2.50	52462.90	59956.80	1.31
2.70	3.40	ø8/11	2	2	3(TG)	SLV	0.70	16324.70	2.50	20277.10	54071.50	0.30	0.00	2.50	52462.90	59956.80	1.24
3.40	4.58	ø8/19	2	2	17	SLU	0.70	1022.13	2.50	11739.30	54071.50	0.30	2652.20	2.50	30373.20	59956.80	11.45
3.40	4.58	ø8/19	2	2	1(TG)	SLV	0.70	8181.88	2.50	11739.30	54071.50	0.30	20005.70	2.50	30373.20	59956.80	1.43
4.58	5.28	ø8/11	2	2	17	SLU	0.70	1022.13	2.50	20277.10	54071.50	0.30	2652.20	2.50	52462.90	59956.80	19.78
4.58	5.28	ø8/11	2	2	1(TG)	SLV	0.70	0.00	2.50	20277.10	54071.50	0.30	40081.10	2.50	52462.90	59956.80	1.31
4.58	5.28	ø8/11	2	2	3(TG)	SLV	0.70	16324.70	2.50	20277.10	54071.50	0.30	0.00	2.50	52462.90	59956.80	1.24
5.88	6.58	ø8/11	2	2	17	SLU	0.70	93.69	2.50	20277.10	54071.50	0.30	2695.06	2.50	52462.90	59956.80	19.47
5.88	6.58	ø8/11	2	2	1(TG)	SLV	0.70	0.00	2.50	20277.10	53853.40	0.30	37236.20	2.50	52462.90	59715.00	1.41
5.88	6.58	ø8/11	2	2	3(TG)	SLV	0.70	15083.60	2.50	20277.10	53834.90	0.30	0.00	2.50	52462.90	59694.50	1.34
6.58	7.76	ø8/19	2	2	17	SLU	0.70	93.69	2.50	11739.30	54071.50	0.30	2695.06	2.50	30373.20	59956.80	11.27
6.58	7.76	ø8/19	2	2	1(TG)	SLV	0.70	7605.84	2.50	11739.30	53853.40	0.30	18515.00	2.50	30373.20	59715.00	1.54
7.76	8.46	ø8/11	2	2	17	SLU	0.70	93.69	2.50	20277.10	54071.50	0.30	2695.06	2.50	52462.90	59956.80	19.47
7.76	8.46	ø8/11	2	2	1(TG)	SLV	0.70	0.00	2.50	20277.10	53853.40	0.30	37236.20	2.50	52462.90	59715.00	1.41
7.76	8.46	ø8/11	2	2	3(TG)	SLV	0.70	15083.60	2.50	20277.10	53834.90	0.30	0.00	2.50	52462.90	59694.50	1.34
9.06	9.76	ø8/11	2	2	17	SLU	0.70	3.81	2.50	20277.10	53884.30	0.30	2794.74	2.50	52462.90	59749.30	18.77
9.06	9.76	ø8/11	2	2	21	SLU	0.70	23.66	2.50	20277.10	50618.80	0.30	1730.80	2.50	52462.90	56128.30	30.31
9.06	9.76	ø8/11	2	2	1(TG)	SLV	0.70	0.00	2.50	20277.10	50541.90	0.30	33774.30	2.50	52462.90	56042.90	1.55
9.06	9.76	ø8/11	2	2	1(TG)	SLV	0.70	13183.80	2.50	20277.10	50541.90	0.30	0.00	2.50	52462.90	56043.00	1.54
9.06	9.76	ø8/11	2	2	3(TG)	SLV	0.70	13214.90	2.50	20277.10	50668.80	0.30	0.00	2.50	52462.90	56183.80	1.53
9.76	10.94	ø8/19	2	2	17	SLU	0.70	3.81	2.50	11739.30	53822.00	0.30	2794.74	2.50	30373.20	59680.20	10.87
9.76	10.94	ø8/19	2	2	21	SLU	0.70	23.66	2.50	11739.30	50570.90	0.30	1730.80	2.50	30373.20	56075.20	17.55



9.76	10.94	ø8/19	2	2	1(TG)	SLV	0.70	6642.39	2.50	11739.30	50541.80	0.30	16798.40	2.50	30373.20	56042.90	1.77
10.94	11.64	ø8/11	2	2	17	SLU	0.70	3.81	2.50	20277.10	53717.10	0.30	2794.74	2.50	52462.90	59563.80	18.77
10.94	11.64	ø8/11	2	2	21	SLU	0.70	23.66	2.50	20277.10	50490.20	0.30	1730.80	2.50	52462.90	55985.70	30.31
10.94	11.64	ø8/11	2	2	1(TG)	SLV	0.70	0.00	2.50	20277.10	50541.80	0.30	33774.30	2.50	52462.90	56042.90	1.55
10.94	11.64	ø8/11	2	2	1(TG)	SLV	0.70	13183.80	2.50	20277.10	50541.90	0.30	0.00	2.50	52462.90	56043.00	1.54
10.94	11.64	ø8/11	2	2	3(TG)	SLV	0.70	13214.90	2.50	20277.10	50668.80	0.30	0.00	2.50	52462.90	56183.80	1.53
12.24	12.94	ø8/12	2	2	17	SLU	0.70	266.75	2.50	18882.30	49688.00	0.30	3516.13	2.50	48386.00	54568.00	13.76
12.24	12.94	ø8/12	2	2	1(TG)	SLV	0.70	0.00	2.50	18882.30	48047.00	0.30	28424.60	2.50	48386.00	52765.90	1.70
12.24	12.94	ø8/12	2	2	1(TG)	SLV	0.70	10876.20	2.50	18882.30	48046.80	0.30	0.00	2.50	48386.00	52765.70	1.74
12.94	14.22	ø8/18	2	2	17	SLU	0.70	266.75	2.50	12588.20	49624.70	0.30	3516.13	2.50	32257.30	54498.60	9.17
12.94	14.22	ø8/18	2	2	1(TG)	SLV	0.70	0.00	2.50	12588.20	48047.00	0.30	28424.60	2.50	32257.30	52765.90	1.13
12.94	14.22	ø8/18	2	2	1(TG)	SLV	0.70	10876.20	2.50	12588.20	48046.80	0.30	0.00	2.50	32257.30	52765.70	1.16
14.22	14.92	ø8/12	2	2	17	SLU	0.70	266.75	2.50	18882.30	49509.00	0.30	3516.13	2.50	48386.00	54371.50	13.76
14.22	14.92	ø8/12	2	2	1(TG)	SLV	0.70	0.00	2.50	18882.30	48047.00	0.30	28424.60	2.50	48386.00	52765.90	1.70
14.22	14.92	ø8/12	2	2	1(TG)	SLV	0.70	10876.20	2.50	18882.30	48046.80	0.30	0.00	2.50	48386.00	52765.70	1.74

## Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F.	Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
111N		ø12/ 8	Y+	I	4	7.10	5.09	0.45	0.20	0.42	27.14
			Z+	I	4	8.29	5.09	0.30	0.60	0.42	27.14
			Y-	I	4	7.10	5.09	0.45	0.20	0.42	27.14
			Z-	I	4	8.29	5.09	0.30	0.60	0.42	27.14
211S		ø12/ 5	Y+	I	4	14.33	8.04	0.85	0.20	0.16	22.62
			Z+	I	4	8.29	6.28	0.30	0.60	0.52	54.29
			Y-	I	4	14.33	8.04	0.85	0.20	0.16	22.62
			Z-	I	4	8.29	6.28	0.30	0.60	0.52	54.29
311S		ø12/ 5	Y+	I	4	14.33	8.04	0.85	0.20	0.16	22.62
			Z+	I	4	8.29	6.28	0.30	0.60	0.52	54.29
			Y-	I	4	14.33	8.04	0.85	0.20	0.16	22.62
			Z-	I	4	8.29	6.28	0.30	0.60	0.52	54.29
411S		ø12/ 4	Y+	I	4	14.33	8.04	0.85	0.20	0.16	27.14
			Z+	I	4	8.29	6.28	0.30	0.60	0.52	63.33
			Y-	I	4	14.33	8.04	0.85	0.20	0.16	27.14
			Z-	I	4	8.29	6.28	0.30	0.60	0.52	63.33
511S		ø12/ 4	Y+	I	4	14.33	8.04	0.85	0.21	0.16	27.14
			Z+	I	4	5.09	5.09	0.30	0.61	0.42	54.29
			Y-	I	4	14.33	8.04	0.85	0.21	0.16	27.14
			Z-	I	4	5.09	5.09	0.30	0.61	0.42	54.29

## Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	Vjbr <daN>	Afni <daN/mq>	Rfni <daN/mq>	Vjwd <daN>	Vjwr <daN>
111Y+	1	SLV		1226.22	51241.10	27.32	35.49	53613.10	447683.00	564664.00	---	---
	9	SLV		1226.22	51241.10	26.31	34.30	54648.40	464613.00	564664.00	---	---
	Z+	1	SLV	3217.96	54387.90	27.32	35.49	108685.00	26695.20	846994.00	---	---
		9	SLV	3217.96	54387.90	26.31	34.30	110784.00	31336.40	846994.00	---	---
	Y-	1	SLV	1226.22	51241.10	27.32	35.49	53613.10	447683.00	564664.00	---	---
		9	SLV	1226.22	51241.10	26.31	34.30	54648.40	464613.00	564664.00	---	---
	Z-	1	SLV	3217.96	54387.90	27.32	35.49	108685.00	26695.20	846994.00	---	---
		9	SLV	3217.96	54387.90	26.31	34.30	110784.00	31336.40	846994.00	---	---
211Y+	1	SLV		1339.43	94940.80	19.91	26.92	114935.00	573678.00	659054.00	---	---
	9	SLV		1339.43	94940.80	19.18	25.92	116189.00	592522.00	659054.00	---	---
	Z+	1	SLV	6509.64	56234.80	19.91	26.92	123352.00	82736.10	1366960.00	---	---
		9	SLV	6509.64	56234.80	19.18	25.92	124697.00	88475.80	1366960.00	---	---
	Y-	1	SLV	1339.43	94940.80	19.91	26.92	114935.00	573678.00	659054.00	---	---
		9	SLV	1339.43	94940.80	19.18	25.92	116189.00	592522.00	659054.00	---	---
	Z-	1	SLV	6509.64	56234.80	19.91	26.92	123352.00	82736.10	1366960.00	---	---
		9	SLV	6509.64	56234.80	19.18	25.92	124697.00	88475.80	1366960.00	---	---
311Y+	1	SLV		1351.89	94928.40	12.56	19.52	127048.00	825354.00	659054.00	86607.60	88511.00
	9	SLV		1351.89	94928.40	12.12	18.79	127738.00	846302.00	659054.00	86947.10	88511.00
	Z+	1	SLV	6684.38	56060.10	12.56	19.52	136352.00	157661.00	1366960.00	---	---
		9	SLV	6684.38	56060.10	12.12	18.79	137093.00	164004.00	1366960.00	---	---
	Y-	1	SLV	1351.89	94928.40	12.56	19.52	127048.00	825354.00	659054.00	86607.60	88511.00
		9	SLV	1351.89	94928.40	12.12	18.79	127738.00	846302.00	659054.00	86947.10	88511.00
	Z-	1	SLV	6684.38	56060.10	12.56	19.52	136352.00	157661.00	1366960.00	---	---
		9	SLV	6684.38	56060.10	12.12	18.79	137093.00	164004.00	1366960.00	---	---
411Y+	1	SLV		1533.61	94746.70	5.37	12.17	137870.00	1333180.00	790864.00	92144.20	106213.00
	9	SLV		1533.61	94746.70	5.22	11.73	138086.00	1349680.00	790864.00	92259.10	106213.00
	Z+	1	SLV	5792.19	56952.30	5.37	12.17	147966.00	327417.00	1594790.00	---	---
		9	SLV	5792.19	56952.30	5.22	11.73	148198.00	332593.00	1594790.00	---	---
	Y-	1	SLV	1533.61	94746.70	5.37	12.17	137870.00	1333180.00	790864.00	92144.20	106213.00
		9	SLV	1533.61	94746.70	5.22	11.73	138086.00	1349680.00	790864.00	92259.10	106213.00
	Z-	1	SLV	5792.19	56952.30	5.37	12.17	147966.00	327417.00	1594790.00	---	---
		9	SLV	5792.19	56952.30	5.22	11.73	148198.00	332593.00	1594790.00	---	---



511	Y+	1	SLV	0.00	96280.30	0.00	4.83	152850.00	2153000.00	790864.00	96280.30	106213.00
	Z+	1	SLV	0.00	43812.90	0.00	4.83	158699.00	306694.00	1693990.00	---	---
	Y-	1	SLV	0.00	96280.30	0.00	4.83	152850.00	2153000.00	790864.00	96280.30	106213.00
	Z-	1	SLV	0.00	43812.90	0.00	4.83	158699.00	306694.00	1693990.00	---	---

**Pilastrata n. 12**

Nodi: 12 112 212 312 412 512

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Typo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
1R		30.00	120.00	5.20	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Xg <cm>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.	
0.00	1(e)	SLV	1	1	0.00	-98683.50	-827.40	-1973.67	0.00	0.00	-385203.00	-100583.00	0.00	3.903	
0.00	1(e)	SLV	1	1	0.00	-98683.50	-827.40	-1973.67	0.00	0.00	-385203.00	-100583.00	0.00	3.903	
2.20	1(α)	SLV	1	1	220.00	-96703.50	8415.03	1.98	16640.90	0.00	3.72	-385203.00	100323.00	0.00	3.983
2.70	9(α)	SLV	2	1	0.00	-58879.70	0.00	3.41	0.00	-3799.39	2.47	-9370.27	-58879.70	0.00	2.472
2.70	9(α)	SLV	2	1	0.00	-58879.70	0.00	3.41	0.00	-3799.39	2.47	-9370.27	-58879.70	0.00	2.472
5.28	3(α)	SLV	2	1	258.00	-60964.30	-14619.00	3.39	-49529.10	0.00	3.20	-60964.30	-94431.80	0.00	1.907
5.88	5(α)	SLV	3	1	0.00	-45874.80	-54648.50	1.30	-71043.00	0.00	5.94	-45874.80	-91538.70	0.00	1.288
5.88	5(α)	SLV	3	1	0.00	-45874.80	-54648.50	1.30	-71043.00	0.00	5.94	-45874.80	-91538.70	0.00	1.288
8.46	3(α)	SLV	3	1	258.00	-43217.60	-4361.75	8.39	-36594.50	0.00	3.17	-43217.60	-91021.30	0.00	2.487
9.06	3(α)	SLV	4	1	0.00	-28823.50	-6284.75	7.77	-48823.30	0.00	4.20	-28823.50	-88192.00	0.00	1.806
9.06	3(α)	SLV	4	1	0.00	-28823.50	-6284.75	7.77	-48823.30	0.00	4.20	-28823.50	-88192.00	0.00	1.298
11.64	1(α)	SLV	4	1	258.00	-25208.50	0.00	6.09	0.00	4929.00	1.70	8378.09	-25208.50	0.00	1.756
12.24	15(α)	SLV	5	1	0.00	-11569.20	0.00	3.63	0.00	-3356.90	2.85	-9569.92	-11569.20	0.00	1.433
12.24	15(α)	SLV	5	1	0.00	-11569.20	0.00	3.63	0.00	-3356.90	2.85	-9569.92	-11569.20	0.00	1.433
14.92	1	SLV	5	1	268.00	-8645.64	0.00		5058.96			-8645.64	0.00	13499.10	2.668

**Stato limite d'esercizio - Verifiche tensionali**

Xg <cm>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σc <daN/cm²>	σf <daN/cm²>	
0.00	18	SLE	R	1	1	0.00	-98813.50	452.52	0.00	62.83	23.65	345.62	
0.00	18	SLE	R	1	1	0.00	-98813.50	0.00	-1617.31	0.00	62.83	23.46	349.86
0.00	20	SLE	Q	1	1	0.00	-89714.80	456.11	0.00	0.00	62.83	21.66	315.73
0.00	18	SLE	R	1	1	0.00	-98813.50	452.52	0.00	0.00	62.83	23.65	345.62
0.00	18	SLE	R	1	1	0.00	-98813.50	0.00	-1617.31	0.00	62.83	23.46	349.86
0.00	20	SLE	Q	1	1	0.00	-89714.80	456.11	0.00	0.00	62.83	21.66	315.73
2.20	18	SLE	R	1	1	220.00	-96833.50	1925.54	0.00	0.00	62.83	29.38	402.00
2.20	20	SLE	Q	1	1	220.00	-87734.80	1677.98	0.00	0.00	62.83	26.34	361.38
2.70	18	SLE	R	2	1	0.00	-75333.30	-3552.26	0.00	0.00	62.83	31.46	400.47
2.70	18	SLE	R	2	1	0.00	-75333.30	0.00	11769.80	0.00	62.83	29.01	420.21
2.70	20	SLE	Q	2	1	0.00	-68641.50	-3044.38	0.00	0.00	62.83	27.86	356.68
2.70	18	SLE	R	2	1	0.00	-75333.30	-3552.26	0.00	0.00	62.83	31.46	400.47
2.70	18	SLE	R	2	1	0.00	-75333.30	0.00	11769.80	0.00	62.83	29.01	420.21
2.70	20	SLE	Q	2	1	0.00	-68641.50	-3044.38	0.00	0.00	62.83	27.86	356.68
5.28	18	SLE	R	2	1	258.00	-73011.30	2799.48	0.00	0.00	62.83	27.79	360.65
5.28	20	SLE	Q	2	1	258.00	-66319.50	2353.40	0.00	0.00	62.83	24.45	319.51
5.88	18	SLE	R	3	1	0.00	-55281.90	-2835.63	0.00	0.00	62.83	24.04	303.65
5.88	20	SLE	Q	3	1	0.00	-50226.10	-2373.89	0.00	0.00	62.83	21.00	267.24
5.88	18	SLE	R	3	1	0.00	-55281.90	-2835.63	0.00	0.00	62.83	24.04	303.65
5.88	20	SLE	Q	3	1	0.00	-50226.10	-2373.89	0.00	0.00	62.83	21.00	267.24
8.46	18	SLE	R	3	1	258.00	-52959.90	2724.28	0.00	0.00	62.83	23.07	291.23
8.46	20	SLE	Q	3	1	258.00	-47904.10	2287.36	0.00	0.00	62.83	20.12	255.87
9.06	18	SLE	R	4	1	0.00	-34804.30	-3315.27	0.00	28.27	34.56	23.15	266.81
9.06	20	SLE	Q	4	1	0.00	-31444.70	-2815.72	0.00	28.27	34.56	19.84	231.49
9.06	18	SLE	R	4	1	0.00	-34804.30	-3315.27	0.00	18.10	22.12	25.64	296.46
9.06	20	SLE	Q	4	1	0.00	-31444.70	-2815.72	0.00	18.10	22.12	21.88	256.48
11.64	18	SLE	R	4	1	258.00	-32482.30	2883.31	0.00	18.10	22.12	22.42	263.35
11.64	20	SLE	Q	4	1	258.00	-29122.70	2453.79	0.00	18.10	22.12	19.20	227.92
12.24	18	SLE	R	5	1	0.00	-13907.90	-3809.97	0.00	22.12	18.10	29.73	565.19
12.24	20	SLE	Q	5	1	0.00	-12308.20	-3180.26	0.00	22.12	18.10	24.82	455.99
12.24	18	SLE	R	5	1	0.00	-13907.90	-3809.97	0.00	22.12	18.10	29.73	565.19
12.24	20	SLE	Q	5	1	0.00	-12308.20	-3180.26	0.00	22.12	18.10	24.82	455.99
14.92	18	SLE	R	5	1	268.00	-11495.90	3730.38	0.00	22.12	18.10	29.08	602.18
14.92	20	SLE	Q	5	1	268.00	-9896.23	3073.44	0.00	22.12	18.10	23.97	486.27

**Stato limite d'esercizio - Verifiche a fessurazione**

Xg <cm>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K3	s <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cm²>	A <sub>c</sub> eff <cm²>	σ <sub>s</sub> <daN/cm²>	σ <sub>sr</sub> <daN/cm²>	ε <sub>sm</sub>	Wk <mm>	
9.06	20	SLE	Q	4	1	0.00	-31444.70	0.00	-2815.72	38.00	138.00	0.13	180.45	20.00	28.27	2172.76	49.42	345.43	0.01	0.00



9.06	20	SLE	Q	4	1	0.00	-31444.70	0.00	-2815.72	38.00	138.50	0.13	183.07	16.00	18.10	1795.30	67.56	428.22	0.01	0.00
11.64	20	SLE	Q	4	1	258.00	-29122.70	0.00	2453.79	38.00	138.50	0.13	182.95	16.00	18.10	1792.61	43.52	346.85	0.01	0.00
12.24	20	SLE	Q	5	1	0.00	-12308.20	0.00	-3180.26	38.00	138.50	0.13	179.29	16.00	22.12	2089.81	455.99	1339.18	0.09	0.03
12.24	20	SLE	Q	5	1	0.00	-12308.20	0.00	-3180.26	38.00	138.50	0.13	179.29	16.00	22.12	2089.81	455.99	1339.18	0.09	0.03
14.92	20	SLE	Q	5	1	268.00	-9896.23	0.00	3073.44	38.00	138.50	0.13	179.21	16.00	22.12	2087.51	486.27	1417.52	0.09	0.03

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br <sub>y</sub>	Br <sub>z</sub>	CC	TCC	bw <sub>y</sub> <m>	Vsdu <sub>y</sub> <daN>	ctgθ <sub>y</sub>	VRsd <sub>y</sub> <daN>	VRcd <sub>y</sub> <daN>	bw <sub>z</sub> <m>	Vsdu <sub>z</sub> <daN>	ctgθ <sub>z</sub>	VRsd <sub>z</sub> <daN>	VRcd <sub>z</sub> <daN>	Sic.T
0.00	2.20	ø12/ 5	2	2	17	SLV	1.20	1043.64	2.39	95815.00	95815.00	0.30	4382.50	1.00	183536.00	153607.00	35.05
0.00	2.20	ø12/ 5	2	2	11(TG)	SLV	1.20	0.00	2.31	92751.30	92751.30	0.30	140236.00	1.00	183536.00	145384.00	1.04
0.00	2.20	ø12/ 5	2	2	1(TG)	SLV	1.20	0.00	2.34	94071.30	94071.30	0.30	143504.00	1.00	183536.00	148894.00	1.04
0.00	2.20	ø12/ 5	2	2	1(TG)	SLV	1.20	36653.30	2.34	94071.40	94071.40	0.30	0.00	1.00	183536.00	148895.00	2.57
2.70	5.28	ø8/11	2	2	17	SLV	1.20	3498.57	2.50	20277.10	90994.30	0.30	10520.60	2.50	92695.10	103993.00	5.80
2.70	5.28	ø8/11	2	2	1(TG)	SLV	1.20	14886.50	2.50	20277.10	87161.90	0.30	59232.70	2.50	92695.10	99613.60	1.36
5.88	8.46	ø8/15	2	2	17	SLV	1.20	3042.03	2.50	14869.80	87314.10	0.30	1735.91	2.50	67976.40	99787.50	4.89
5.88	8.46	ø8/15	2	2	1(TG)	SLV	1.20	14116.20	2.50	14869.80	84643.70	0.30	57030.00	2.50	67976.40	96735.70	1.05
9.06	11.64	ø8/11	2	2	17	SLV	1.20	3390.75	2.50	20277.10	83557.50	0.30	424.74	2.50	92695.10	95494.30	5.98
9.06	11.64	ø8/11	2	2	1(TG)	SLV	1.20	0.00	2.50	20277.10	81710.70	0.30	79201.50	2.50	92695.10	93383.70	1.17
9.06	11.64	ø8/11	2	2	1(TG)	SLV	1.20	18821.00	2.50	20277.10	81710.50	0.30	0.00	2.50	92695.10	93383.40	1.08
12.24	14.92	ø8/11	2	2	17	SLV	1.20	3934.48	2.50	20277.10	79725.70	0.30	295.67	2.48	91774.10	91774.10	5.15
12.24	14.92	ø8/11	2	2	1(TG)	SLV	1.20	0.00	2.50	20277.10	78754.60	0.30	69458.50	2.46	91121.70	91121.70	1.31
12.24	14.92	ø8/11	2	2	1(TG)	SLV	1.20	16189.40	2.50	20277.10	78754.60	0.30	0.00	2.46	91121.60	91121.60	1.25

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F.	Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
112N		ø10/ 6	Y+E		4	6.28	5.09	0.45	0.20	0.42	25.13
			Z+I		4	5.09	5.09	0.30	1.10	0.42	25.13
			Z-I		4	5.09	5.09	0.30	1.10	0.42	25.13
212N		ø10/10	Y+E		4	6.28	6.28	0.45	0.20	0.52	18.85
			Z+I		4	11.06	10.59	0.30	1.10	0.42	15.71
			Z-I		4	11.06	10.59	0.30	1.10	0.42	15.71
312N		ø10/10	Y+E		4	6.28	6.28	0.45	0.20	0.52	18.85
			Z+I		4	11.06	10.59	0.30	1.10	0.42	15.71
			Z-I		4	11.06	10.59	0.30	1.10	0.42	15.71
412N		ø10/10	Y+E		4	6.28	6.28	0.45	0.20	0.52	18.85
			Z+I		4	11.06	10.59	0.30	1.10	0.42	15.71
			Z-I		4	11.06	10.59	0.30	1.10	0.42	15.71
512N		ø10/ 6	Y+E		4	5.09	5.09	0.45	0.20	0.42	25.13
			Z+I		4	11.06	10.59	0.30	1.10	0.42	25.13
			Z-I		4	11.06	10.59	0.30	1.10	0.42	25.13

Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	VjbR <daN>	Afni <daN/mq>	Rfni <daN/mq>	Vjwd <daN>	Vjwr <daN>
112	Y+	1	SLV	2838.40	24206.60	13.23	16.32	52137.20	74339.40	522837.00	---	---
		9	SLV	2838.40	24206.60	9.94	13.29	55000.40	112218.00	522837.00	---	---
	Z+	1	SLV	-23550.60	20262.30	10.33	13.62	258486.00	0.00	784256.00	---	---
		1	SLV	-23550.60	20262.30	13.23	16.32	249557.00	0.00	784256.00	---	---
	Z-	1	SLV	-23550.60	20262.30	10.33	13.62	258486.00	0.00	784256.00	---	---
		1	SLV	-23550.60	20262.30	13.23	16.32	249557.00	0.00	784256.00	---	---
212	Y+	1	SLV	3832.10	23212.90	9.97	12.84	54971.50	92128.00	316427.00	---	---
		9	SLV	3832.10	23212.90	6.98	9.54	57447.10	136793.00	316427.00	---	---
	Z+	1	SLV	19459.50	73710.60	9.97	12.84	259578.00	36019.10	490160.00	---	---
		9	SLV	19459.50	73710.60	6.98	9.54	268436.00	69517.60	490160.00	---	---
	Z-	1	SLV	19459.50	73710.60	9.97	12.84	259578.00	36019.10	490160.00	---	---
		9	SLV	19459.50	73710.60	6.98	9.54	268436.00	69517.60	490160.00	---	---
312	Y+	1	SLV	4100.75	22944.30	6.17	9.58	58098.70	145560.00	316427.00	---	---
		9	SLV	4100.75	22944.30	4.44	6.59	59470.90	184146.00	316427.00	---	---
	Z+	1	SLV	14073.40	79096.70	6.17	9.58	270782.00	113312.00	490160.00	---	---
		9	SLV	14073.40	79096.70	4.44	6.59	275743.00	147420.00	490160.00	---	---
	Z-	1	SLV	14073.40	79096.70	6.17	9.58	270782.00	113312.00	490160.00	---	---
		9	SLV	14073.40	79096.70	4.44	6.59	275743.00	147420.00	490160.00	---	---
412	Y+	1	SLV	3796.83	23248.20	2.36	5.78	62298.10	242393.00	316427.00	---	---
		9	SLV	3796.83	23248.20	1.79	4.05	62738.50	264062.00	316427.00	---	---
	Z+	1	SLV	9403.82	83766.30	2.36	5.78	282604.00	241414.00	490160.00	---	---
		9	SLV	9403.82	83766.30	1.79	4.05	284184.00	263026.00	490160.00	---	---
	Z-	1	SLV	9403.82	83766.30	2.36	5.78	282604.00	241414.00	490160.00	---	---
		9	SLV	9403.82	83766.30	1.79	4.05	284184.00	263026.00	490160.00	---	---
512	Y+	1	SLV	0.00	21906.50	0.00	1.46	64107.70	298133.00	522837.00	---	---
	Z+	1	SLV	0.00	93170.10	0.00	1.46	289113.00	465860.00	784256.00	---	---
	Z-	1	SLV	0.00	93170.10	0.00	1.46	289113.00	465860.00	784256.00	---	---



## Pilastrata n. 13

Nodi: 13 113 213 313 413 513

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
1R		30.00	120.00	5.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
9R		25.00	60.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	$\alpha_y$	My ver. <daNm>	Mz <daNm>	$\alpha_z$	Mz ver. <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
0.00	17	SLU	1	1	0.00	-151084.00	-42753.90			0.00			-151084.00	-83192.20	0.00	1.946
0.00	17	SLU	1	1	0.00	-151084.00	-42753.90			0.00			-151084.00	-83192.20	0.00	1.946
2.20	11	(a) SLV	1	1	220.00	-86374.10	14085.60	2.75	38805.70	0.00	7.23	0.00	-86374.10	72450.70	0.00	1.867
2.70	13	(a) SLV	2	1	0.00	-78753.20	15356.10	2.63	40461.20	0.00	5.56	0.00	-78753.20	70946.70	0.00	1.753
2.70	13	(a) SLV	2	1	0.00	-78753.20	15356.10	2.63	40461.20	0.00	5.56	0.00	-78753.20	70946.70	0.00	1.753
5.38	13	(a) SLV	2	1	268.00	-76341.20	-31470.50	1.30	-40911.60	0.00	4.96	0.00	-76341.20	-70412.10	0.00	1.721
5.88	5	(a) SLV	3	1	0.00	-50856.30	0.00	1.30	0.00	1055.53	11.12	11742.30	-50856.30	0.00	15413.90	1.313
5.88	5	(a) SLV	3	1	0.00	-50856.30	0.00	1.30	0.00	1055.53	11.12	11742.30	-50856.30	0.00	15413.90	1.313
8.56	15	(a) SLV	3	1	268.00	-52018.40	0.00	1.56	0.00	654.75	8.19	5361.69	-52018.40	0.00	15496.30	2.890
9.06	11	(a) SLV	4	1	0.00	-26240.20	0.00	1.33	0.00	1395.25	7.60	10608.40	-26240.20	0.00	13641.20	1.286
9.06	11	(a) SLV	4	1	0.00	-26240.20	0.00	1.33	0.00	1395.25	7.60	10608.40	-26240.20	0.00	13641.20	1.286
11.74	9	(a) SLV	4	1	268.00	-23102.20	0.00	5.13	0.00	-1665.53	7.14	-11885.60	-23102.20	0.00	-13412.20	1.128
12.24	7	(a) SLV	5	9	0.00	-1192.50	0.00	1.30	0.00	100.63	21.70	2184.10	-1192.50	0.00	2411.63	1.104
12.24	7	(a) SLV	5	9	0.00	-1192.50	0.00	1.30	0.00	100.63	21.70	2184.10	-1192.50	0.00	4228.13	1.936

## Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	$\alpha_y$	My ver. <daNm>	Mz <daNm>	$\alpha_z$	Mz ver. <daNm>	Nu <daN>	M'ydy,r <daNm>	M'ydz,r <daNm>	Sic.
9.06	7	SND	4	1	0.00	-25262.30	0.00			1262.58			-25262.30	0.00	12191.50	9.656
9.06	7	SND	4	1	0.00	-25262.30	0.00			1262.58			-25262.30	0.00	12191.50	9.656

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
0.00	18	SLE	R	1	1	0.00	-106652.00	0.00	-29947.90	6.03	30.16	889.04
0.00	20	SLE	Q	1	1	0.00	-91271.20	0.00	-25198.80	6.03	30.16	751.89
0.00	18	SLE	R	1	1	0.00	-106652.00	0.00	-29947.90	6.03	30.16	889.04
0.00	20	SLE	Q	1	1	0.00	-91271.20	0.00	-25198.80	6.03	30.16	751.89
2.20	18	SLE	R	1	1	220.00	-104672.00	0.00	14320.30	0.00	36.19	610.51
2.20	20	SLE	Q	1	1	220.00	-89291.20	0.00	12056.60	0.00	36.19	518.22
2.70	18	SLE	R	2	1	0.00	-97526.70	0.00	8619.29	0.00	36.19	492.47
2.70	20	SLE	Q	2	1	0.00	-82476.30	0.00	7278.42	0.00	36.19	416.30
2.70	18	SLE	R	2	1	0.00	-97526.70	0.00	8619.29	0.00	36.19	492.47
2.70	20	SLE	Q	2	1	0.00	-82476.30	0.00	7278.42	0.00	36.19	416.30
5.38	18	SLE	R	2	1	268.00	-95114.70	0.00	-11972.50	0.00	36.19	537.95
5.38	20	SLE	Q	2	1	268.00	-80064.30	0.00	-9724.82	0.00	36.19	447.12
5.88	18	SLE	R	3	1	0.00	-65609.10	-942.31	0.00	0.00	36.19	283.18
5.88	20	SLE	Q	3	1	0.00	-55178.50	-616.10	0.00	0.00	36.19	229.61
5.88	18	SLE	R	3	1	0.00	-65609.10	-942.31	0.00	0.00	36.19	283.18
5.88	20	SLE	Q	3	1	0.00	-55178.50	-616.10	0.00	0.00	36.19	229.61
8.56	18	SLE	R	3	1	268.00	-63197.10	0.00	-7131.62	0.00	36.19	344.12
8.56	20	SLE	Q	3	1	268.00	-52766.50	0.00	-5783.53	0.00	36.19	284.56
9.06	18	SLE	R	4	1	0.00	-33196.50	0.00	4663.33	0.00	36.19	195.59
9.06	20	SLE	Q	4	1	0.00	-27504.70	0.00	3756.91	0.00	36.19	160.33
9.06	18	SLE	R	4	1	0.00	-33196.50	0.00	4663.33	0.00	36.19	195.59
9.06	20	SLE	Q	4	1	0.00	-27504.70	0.00	3756.91	0.00	36.19	160.33
11.74	18	SLE	R	4	1	268.00	-30784.50	0.00	-7709.46	6.03	30.16	237.97
11.74	20	SLE	Q	4	1	268.00	-25092.70	0.00	-5970.27	6.03	30.16	188.15
12.24	18	SLE	R	5	9	0.00	-1192.50	0.00	986.82	4.02	4.02	345.63
12.24	20	SLE	Q	5	9	0.00	-1192.50	0.00	771.72	4.02	4.02	242.61
12.24	18	SLE	R	5	9	0.00	-1192.50	0.00	986.82	12.06	4.02	262.26
12.24	20	SLE	Q	5	9	0.00	-1192.50	0.00	771.72	12.06	4.02	187.80
15.42	18	SLE	R	5	9	318.00	0.00	0.00	-0.00	0.00	0.00	0.00
15.42	20	SLE	Q	5	9	318.00	0.00	0.00	-0.00	0.00	0.00	0.00

## Stato limite d'esercizio - Verifiche a fessurazione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K3	$s_{zm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_c\text{ eff}$ <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>	
0.00	20	SLE	Q	1	1	0.00	-91271.20	-25198.80	0.00	38.00	104.00	0.13	157.70	16.00	6.03	459.19	111.01	511.40	0.02	0.01
0.00	20	SLE	Q	1	1	0.00	-91271.20	-25198.80	0.00	38.00	104.00	0.13	157.70	16.00	6.03	459.19	111.01	511.40	0.02	0.01
11.74	20	SLE	Q	4	1	268.00	-25092.70	-5970.27	0.00	38.00	104.00	0.13	157.70	16.00	6.03	459.19	7.43	277.15	0.00	0.00
12.24	20	SLE	Q	5	9	0.00	-1192.50	771.72	0.00	38.00	158.00	0.17	209.24	16.00	4.02	373.25	242.61	2261.07	0.05	0.02
12.24	20	SLE	Q	5	9	0.00	-1192.50	771.72	0.00	38.00	158.00	0.13	186.59	16.00	8.04	794.06	187.80	1759.74	0.04	0.01



## Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br <sub>y</sub>	Br <sub>z</sub>	CC	TCC	bw <sub>y</sub> <m>	Vsdu <sub>y</sub> <daN>	ctgθ <sub>y</sub>	VRsd <sub>y</sub> <daN>	VRcd <sub>y</sub> <daN>	bw <sub>z</sub> <m>	Vsdu <sub>z</sub> <daN>	ctgθ <sub>z</sub>	VRsd <sub>z</sub> <daN>	VRcd <sub>z</sub> <daN>	Sic.T
0.00	2.20	ø12/ 5	2	2	17	SLV	1.20	1640.68	2.39	95815.00	95815.00	0.30	28753.80	1.00	183536.00	153607.00	5.34
0.00	2.20	ø12/ 5	2	2	9(TG)	SLV	1.20	0.00	2.34	93956.50	93956.50	0.30	106092.00	1.00	183536.00	148587.00	1.40
0.00	2.20	ø12/ 5	2	2	9(TG)	SLV	1.20	26394.60	2.34	93956.20	93956.20	0.30	0.00	1.00	183536.00	148587.00	3.56
2.70	5.38	ø8/11	2	2	17	SLV	1.20	386.40	2.50	20277.10	92693.90	0.30	10882.30	2.50	92695.10	105936.00	8.52
2.70	5.38	ø8/11	2	2	9(TG)	SLV	1.20	0.00	2.50	20277.10	88524.30	0.30	85258.40	2.50	92695.10	101171.00	1.09
2.70	5.38	ø8/11	2	2	9(TG)	SLV	1.20	0.00	2.50	20277.10	88524.30	0.30	85258.40	2.50	92695.10	101171.00	1.09
2.70	5.38	ø8/11	2	2	11(TG)	SLV	1.20	20258.60	2.50	20277.10	87238.70	0.30	0.00	2.50	92695.10	99701.40	1.01
5.88	8.56	ø8/11	2	2	17	SLV	1.20	834.05	2.50	20277.10	89367.70	0.30	3397.80	2.50	92695.10	102134.00	24.31
5.88	8.56	ø8/11	2	2	9(TG)	SLV	1.20	0.00	2.50	20277.10	84835.00	0.30	78048.80	2.50	92695.10	96954.40	1.19
5.88	8.56	ø8/11	2	2	9(TG)	SLV	1.20	18778.50	2.50	20277.10	84835.20	0.30	0.00	2.50	92695.10	96954.50	1.08
9.06	11.74	ø8/11	2	2	17	SLV	1.20	245.05	2.50	20277.10	83363.10	0.30	6594.05	2.50	92695.10	95272.20	14.06
9.06	11.74	ø8/11	2	2	9(TG)	SLV	1.20	0.00	2.50	20277.10	80838.00	0.30	69377.70	2.50	92515.80	92515.80	1.33
9.06	11.74	ø8/11	2	2	9(TG)	SLV	1.20	16213.30	2.50	20277.10	80838.20	0.30	0.00	2.50	92515.90	92515.90	1.25
12.24	12.84	ø8/11	2	2	17	SLV	0.60	3.43	2.50	16253.80	31153.70	0.25	443.02	2.19	38884.10	38884.10	87.77
12.24	12.84	ø8/11	2	2	1(TG)	SLV	0.60	0.00	2.50	16253.80	30959.30	0.25	5690.83	2.18	38737.20	38737.20	6.81
12.24	12.84	ø8/11	2	2	1(TG)	SLV	0.60	2089.37	2.50	16253.80	30959.30	0.25	0.00	2.18	38737.20	38737.20	7.78
12.84	14.82	ø8/19	2	2	17	SLV	0.60	3.43	2.50	9410.11	31117.00	0.25	443.02	2.50	25714.80	35430.20	58.04
12.84	14.82	ø8/19	2	2	1(TG)	SLV	0.60	0.00	2.50	9410.11	30959.30	0.25	5690.83	2.50	25714.80	35250.70	4.52
12.84	14.82	ø8/19	2	2	1(TG)	SLV	0.60	2089.37	2.50	9410.11	30959.30	0.25	0.00	2.50	25714.80	35250.70	4.50
14.82	15.42	ø8/11	2	2	17	SLV	0.60	3.43	2.50	16253.80	30996.00	0.25	443.02	2.18	38765.00	38765.00	87.50
14.82	15.42	ø8/11	2	2	1(TG)	SLV	0.60	0.00	2.50	16253.80	30959.30	0.25	5690.83	2.18	38737.20	38737.20	6.81
14.82	15.42	ø8/11	2	2	1(TG)	SLV	0.60	2089.37	2.50	16253.80	30959.30	0.25	0.00	2.18	38737.20	38737.20	7.78

## Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F.	Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
113N		ø10/ 6	Z+	I	4	5.09	8.23	0.30	1.10	0.42	25.13
			Y-E		4	5.09	5.09	0.45	0.20	0.42	25.13
			Z-I		4	5.09	8.23	0.30	1.10	0.42	25.13
213N		ø10/ 8	Z+	E	4	6.28	5.09	0.30	1.10	0.42	18.85
			Y-E		4	6.28	5.09	0.45	0.20	0.42	18.85
313N		ø10/ 8	Z+	E	4	9.17	5.09	0.30	1.10	0.42	18.85
			Y-E		4	6.28	5.09	0.45	0.20	0.42	18.85
413N		ø10/ 8	Z+	E	4	6.63	5.09	0.30	1.10	0.42	18.85
			Y-E		4	6.28	5.09	0.45	0.20	0.42	18.85

## Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	VjbR <daN>	Afni <daN/mq>	Rfni <daN/mq>	Vjwd <daN>	VjwR <daN>
113Z+	1	SLV	-17351.90	39983.50	12.83	14.06	251734.00	0.00	784254.00	---	---	
	9	SLV	-17351.90	39983.50	15.01	16.08	244804.00	0.00	784254.00	---	---	
	Y-	1	SLV	-884.55	21021.90	12.83	14.06	53546.80	20392.80	522837.00	---	---
	9	SLV	-884.55	21021.90	15.01	16.08	51534.50	5930.66	522837.00	---	---	
	Z-	1	SLV	-17351.90	39983.50	12.83	14.06	251734.00	0.00	784254.00	---	---
	9	SLV	-17351.90	39983.50	15.01	16.08	244804.00	0.00	784254.00	---	---	
213Z+	1	SLV	-11706.20	15338.80	8.39	12.42	207163.00	0.00	588191.00	---	---	
	9	SLV	-11706.20	15338.80	10.23	14.60	201475.00	0.00	588191.00	---	---	
	Y-	1	SLV	1985.46	25059.60	8.39	12.42	57420.00	143281.00	392128.00	---	---
	9	SLV	1985.46	25059.60	10.23	14.60	55843.70	115482.00	392128.00	---	---	
313Z+	1	SLV	-8203.13	31282.60	4.22	7.98	219473.00	0.00	588191.00	---	---	
	9	SLV	-8203.13	31282.60	5.06	9.83	217065.00	0.00	588191.00	---	---	
	Y-	1	SLV	2166.36	24878.70	4.22	7.98	60832.20	231584.00	392128.00	---	---
	9	SLV	2166.36	24878.70	5.06	9.83	60164.80	208420.00	392128.00	---	---	
413Z+	1	SLV	-751.38	27781.10	0.48	3.82	229971.00	0.00	588191.00	---	---	
	Y-	1	SLV	-145.73	26899.30	0.48	3.82	63741.90	479906.00	392128.00	21237.50	73759.10

## Pilastrate n. 14 17

14 (a) Nodi: 14 114 214 314 414 514

17 (b) Nodi: 17 117 217 317 417 517

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cl <sub>s</sub>	F <sub>ck</sub> <daN/cm <sup>2</sup> >	F <sub>ctk</sub> <daN/cm <sup>2</sup> >	F <sub>cd</sub> <daN/cm <sup>2</sup> >	F <sub>ctd</sub> <daN/cm <sup>2</sup> >	Tp	F <sub>yk</sub> <daN/cm <sup>2</sup> >	F <sub>yd</sub> <daN/cm <sup>2</sup> >
2R		30.00	70.00	5.20	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
2R		30.00	70.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
11R		30.00	70.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	In	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	MR <sub>dy,r</sub> <daNm>	MR <sub>dz,r</sub> <daNm>	Sic.
0.00	17(e)	SLV	a	1	2	0.00	-182271.00	1518.21		3645.42	0.00		0.00	-345695.00	35087.30	0.00	1.897
0.00	17(e)	SLV	a	1	2	0.00	-182271.00	1518.21		3645.42	0.00		0.00	-345695.00	35087.30	0.00	1.897
2.20	11(α)	SLV	a	1	2	220.00	-110229.00	0.00	14.71	0.00	-1566.44	7.38	-11559.80	-110229.00	0.00	-13785.50	1.193
2.70	7(α)	SLV	b	2	2	0.00	-85542.30	-2253.46	8.01	-18046.20	0.00	6.01	0.00	-85542.30	-32178.50	0.00	1.783
2.70	7(α)	SLV	b	2	2	0.00	-85542.30	-2253.46	8.01	-18046.20	0.00	6.01	0.00	-85542.30	-32178.50	0.00	1.783
5.38	7(α)	SLV	b	2	2	268.00	-84135.30	1934.95	11.43	22124.10	0.00	2.72	0.00	-84135.30	32048.40	0.00	1.449





Table with 14 columns: Xg, CC, TCC, In, El, Sez., X, N, Mz, My, AfT, AfC, sigma\_c, sigma\_f. Contains structural analysis data for various points.

Stato limite d'esercizio - Verifiche tensionali

Table with 14 columns: Xg, CC, TCC, In, El, Sez., X, N, Mz, My, AfT, AfC, sigma\_c, sigma\_f. Contains tension verification data for various points.

Stato limite d'esercizio - Verifiche a fessurazione

Table with 18 columns: Xg, CC, TCC, In, El, Sez., X, N, My, Mz, c, s, K3, s\_fm, phi, A\_s, A\_c\_off, sigma\_s, sigma\_r, epsilon\_sm, Wk. Contains crack verification data for various points.

Staffe - Verifiche armatura

Table with 16 columns: X0, X1, Staff, Br\_y, Br\_z, CC, TCC, In, bw\_y, Vsdu\_y, ctgtheta\_y, VRsd\_y, VRcd\_y, bw\_z, Vsdu\_z, ctgtheta\_z, VRsd\_z, VRcd\_z, Sic.T. Contains reinforcement verification data for various points.



6.58	7.86	ø8/19	2	2	5(TG)	SLV	0.70	7257.65	2.50	11739.30	53842.00	0.30	17818.80	2.50	30373.20	59702.30	1.62
7.86	8.56	ø8/11	2	2	17	SLUa	0.70	3451.18	2.50	20277.10	54071.50	0.30	2142.51	2.50	52462.90	59956.80	5.88
7.86	8.56	ø8/11	2	2	5(TG)	SLV	0.70	0.00	2.50	20277.10	53842.00	0.30	35723.40	2.50	52462.90	59702.30	1.47
7.86	8.56	ø8/11	2	2	5(TG)	SLV	0.70	14469.00	2.50	20277.10	53842.20	0.30	0.00	2.50	52462.90	59702.60	1.40
9.06	9.76	ø8/11	2	2	17	SLUa	0.70	3368.33	2.50	20277.10	52560.00	0.30	1767.03	2.50	52462.90	58280.80	6.02
9.06	9.76	ø8/11	2	2	5(TG)	SLV	0.70	0.00	2.50	20277.10	50212.50	0.30	32095.00	2.50	52462.90	55677.80	1.63
9.06	9.76	ø8/11	2	2	5(TG)	SLV	0.70	12454.40	2.50	20277.10	50212.40	0.30	0.00	2.50	52462.90	55677.70	1.63
9.76	11.04	ø8/19	2	2	17	SLUa	0.70	3368.33	2.50	11739.30	52497.80	0.30	1767.03	2.50	30373.20	58211.80	3.49
9.76	11.04	ø8/19	2	2	5(TG)	SLV	0.70	6254.24	2.50	11739.30	50212.50	0.30	15999.50	2.50	30373.20	55677.80	1.88
9.76	11.04	ø8/19	2	2	5(TG)	SLV	0.70	6254.25	2.50	11739.30	50212.50	0.30	15999.50	2.50	30373.20	55677.80	1.88
11.04	11.74	ø8/11	2	2	17	SLUa	0.70	3368.33	2.50	20277.10	52383.90	0.30	1767.03	2.50	52462.90	58085.50	6.02
11.04	11.74	ø8/11	2	2	5(TG)	SLV	0.70	0.00	2.50	20277.10	50212.50	0.30	32095.00	2.50	52462.90	55677.80	1.63
11.04	11.74	ø8/11	2	2	5(TG)	SLV	0.70	12454.40	2.50	20277.10	50212.40	0.30	0.00	2.50	52462.90	55677.70	1.63
12.24	12.94	ø8/12	2	2	17	SLUa	0.70	117.92	2.50	18882.30	47468.40	0.30	2940.51	2.50	48386.00	52130.40	16.45
12.24	12.94	ø8/12	2	2	17	SLUb	0.70	710.82	2.50	18882.30	48136.20	0.30	2408.63	2.50	48386.00	52863.90	20.09
12.24	12.94	ø8/12	2	2	5(TG)	SLV	0.70	0.00	2.50	18882.30	47307.10	0.30	27263.70	2.50	48386.00	51953.30	1.77
12.24	12.94	ø8/12	2	2	5(TG)	SLV	0.70	10378.90	2.50	18882.30	47306.70	0.30	0.00	2.50	48386.00	51952.80	1.82
12.94	14.22	ø8/18	2	2	17	SLUa	0.70	117.92	2.50	12588.20	47405.10	0.30	2940.51	2.50	32257.30	52061.00	10.97
12.94	14.22	ø8/18	2	2	17	SLUb	0.70	710.82	2.50	12588.20	48073.00	0.30	2408.63	2.50	32257.30	52794.40	13.39
12.94	14.22	ø8/18	2	2	5(TG)	SLV	0.70	0.00	2.50	12588.20	47307.10	0.30	27263.70	2.50	32257.30	51953.30	1.18
12.94	14.22	ø8/18	2	2	5(TG)	SLV	0.70	10378.90	2.50	12588.20	47306.70	0.30	0.00	2.50	32257.30	51952.80	1.21
14.22	14.92	ø8/12	2	2	17	SLUa	0.70	117.92	2.50	18882.30	47289.40	0.30	2940.51	2.50	48386.00	51933.90	16.45
14.22	14.92	ø8/12	2	2	17	SLUb	0.70	710.82	2.50	18882.30	47957.30	0.30	2408.63	2.50	48386.00	52667.40	20.09
14.22	14.92	ø8/12	2	2	5(TG)	SLV	0.70	0.00	2.50	18882.30	47307.10	0.30	27263.70	2.50	48386.00	51953.30	1.77
14.22	14.92	ø8/12	2	2	5(TG)	SLV	0.70	10378.90	2.50	18882.30	47306.70	0.30	0.00	2.50	48386.00	51952.80	1.82

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F. Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
114N		ø10/ 7	Z+I	4	6.63	5.09	0.30	0.60	0.42	21.99
			Y-E	4	5.09	5.09	0.45	0.20	0.42	21.99
			Z-I	4	6.63	5.09	0.30	0.60	0.42	21.99
214N		ø10/ 7	Z+I	4	6.28	5.09	0.30	0.60	0.42	21.99
			Y-E	4	15.68	8.04	0.85	0.20	0.16	9.42
			Z-I	4	6.28	5.09	0.30	0.60	0.42	21.99
314N		ø10/ 7	Z+I	4	6.28	5.09	0.30	0.60	0.42	21.99
			Y-E	4	15.68	8.04	0.85	0.20	0.16	9.42
			Z-I	4	6.28	5.09	0.30	0.60	0.42	21.99
414N		ø10/ 7	Z+I	4	6.28	5.09	0.30	0.60	0.42	21.99
			Y-E	4	15.68	8.04	0.85	0.20	0.16	9.42
			Z-I	4	6.28	5.09	0.30	0.60	0.42	21.99
514N		ø10/ 7	Y-E	4	5.09	5.09	0.45	0.21	0.42	21.99
			Z-E	4	5.09	5.09	0.30	0.61	0.42	21.99
117N		ø10/ 7	Z+I	4	6.28	5.09	0.30	0.60	0.42	21.99
			Y-E	4	5.09	5.09	0.45	0.20	0.42	21.99
			Z-I	4	6.28	5.09	0.30	0.60	0.42	21.99
217N		ø10/ 7	Z+I	4	6.28	5.09	0.30	0.60	0.42	21.99
			Y-E	4	15.68	8.04	0.85	0.20	0.16	9.42
			Z-I	4	6.28	5.09	0.30	0.60	0.42	21.99
317N		ø10/ 7	Z+I	4	6.28	5.09	0.30	0.60	0.42	21.99
			Y-E	4	15.68	8.04	0.85	0.20	0.16	9.42
			Z-I	4	6.28	5.09	0.30	0.60	0.42	21.99
417N		ø10/ 7	Z+I	4	6.28	5.09	0.30	0.60	0.42	21.99
			Y-E	4	15.68	8.04	0.85	0.20	0.16	9.42
			Z-I	4	6.28	5.09	0.30	0.60	0.42	21.99
517N		ø10/ 7	Z+I	4	5.09	5.09	0.30	0.61	0.42	21.99
			Y-E	4	15.68	8.04	0.85	0.21	0.16	9.42
			Z-I	4	5.09	5.09	0.30	0.61	0.42	21.99

Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc <daN>	Vjbd <daN>	vd <sub>s</sub>	vd <sub>i</sub>	Vjbr <daN>	Afni <daN/mq>	Rfni <daN/mq>	Vjwd <daN>	Vjwr <daN>
114	Z+	5	SLV	-2105.84	48333.10	24.69	30.80	114871.00	1549.91	686224.00	---	---
		13	SLV	-2105.84	48333.10	26.98	33.07	110120.00	0.00	686224.00	---	---
	Y-	1	SLV	1180.44	20726.00	24.90	31.00	40397.00	0.00	457482.00	---	---
		13	SLV	1180.44	20726.00	26.98	33.07	37917.40	0.00	457482.00	---	---
	Z-	5	SLV	-2105.84	48333.10	24.69	30.80	114871.00	1549.91	686224.00	---	---
		13	SLV	-2105.84	48333.10	26.98	33.07	110120.00	0.00	686224.00	---	---
214	Z+	5	SLV	-5229.24	43722.20	16.93	24.28	129639.00	11254.90	686224.00	---	---
		13	SLV	-5229.24	43722.20	18.95	26.58	125960.00	511.11	686224.00	---	---
	Y-	5	SLV	2374.22	65103.10	16.93	24.28	92027.80	224532.00	274606.00	---	---
		13	SLV	2374.22	65103.10	18.95	26.58	88306.90	197826.00	274606.00	---	---
	Z-	5	SLV	-5229.24	43722.20	16.93	24.28	129639.00	11254.90	686224.00	---	---
		13	SLV	-5229.24	43722.20	18.95	26.58	125960.00	511.11	686224.00	---	---
314	Z+	5	SLV	-5029.77	43921.70	9.43	16.52	142467.00	74739.30	686224.00	---	---
		13	SLV	-5029.77	43921.70	10.73	18.54	140340.00	60482.30	686224.00	---	---
	Y-	5	SLV	2129.53	65347.80	9.43	16.52	104690.00	381512.00	274606.00	30041.60	36879.60
		13	SLV	2129.53	65347.80	10.73	18.54	102619.00	346130.00	274606.00	29482.20	36879.60
	Z-	5	SLV	-5029.77	43921.70	9.43	16.52	142467.00	74739.30	686224.00	---	---
		13	SLV	-5029.77	43921.70	10.73	18.54	140340.00	60482.30	686224.00	---	---
414	Z+	1	SLV	-4233.47	44718.00	2.76	10.05	152983.00	214954.00	686224.00	---	---



		9	SLV	-4233.47	44718.00	2.09	9.30	153993.00	237782.00	686224.00	---	---
	Y-	1	SLV	-1231.33	66246.00	2.76	10.05	114791.00	722077.00	274606.00	31835.60	36879.60
		5	SLV	-1231.33	66246.00	2.16	9.03	115657.00	772405.00	274606.00	32117.90	36879.60
	Z-	1	SLV	-4233.47	44718.00	2.76	10.05	152983.00	214954.00	686224.00	---	---
		9	SLV	-4233.47	44718.00	2.09	9.30	153993.00	237782.00	686224.00	---	---
514	Y-	1	SLV	0.00	21906.50	0.00	1.71	65993.10	273889.00	457482.00	---	---
	Z-	1	SLV	0.00	21906.50	0.00	1.71	127796.00	0.00	686224.00	---	---
117	Z+	1	SLV	2887.14	46064.30	25.04	30.68	114152.00	0.00	686224.00	---	---
		5	SLV	2887.14	46064.30	27.62	33.14	108763.00	0.00	686224.00	---	---
	Y-	1	SLV	1088.80	20817.70	25.04	30.68	40231.40	0.00	457483.00	---	---
		5	SLV	1088.80	20817.70	27.62	33.14	37125.80	0.00	457483.00	---	---
	Z-	1	SLV	2887.14	46064.30	25.04	30.68	114152.00	0.00	686224.00	---	---
		5	SLV	2887.14	46064.30	27.62	33.14	108763.00	0.00	686224.00	---	---
217	Z+	5	SLV	4862.76	44088.70	19.90	27.21	124198.00	0.00	686224.00	---	---
		13	SLV	4862.76	44088.70	16.41	23.34	130566.00	16763.00	686224.00	---	---
	Y-	5	SLV	2049.96	65427.40	19.90	27.21	86507.30	189819.00	274606.00	---	---
		13	SLV	2049.96	65427.40	16.41	23.34	92958.00	235729.00	274606.00	---	---
	Z-	5	SLV	4862.76	44088.70	19.90	27.21	124198.00	0.00	686224.00	---	---
		13	SLV	4862.76	44088.70	16.41	23.34	130566.00	16763.00	686224.00	---	---
317	Z+	5	SLV	4675.52	44276.00	11.84	19.49	138475.00	52593.40	686224.00	---	---
		13	SLV	4675.52	44276.00	9.61	16.01	142170.00	75924.00	686224.00	---	---
	Y-	5	SLV	2023.56	65453.80	11.84	19.49	100795.00	320705.00	274606.00	29220.00	36879.60
		13	SLV	2023.56	65453.80	9.61	16.01	104401.00	377867.00	274606.00	30185.00	36879.60
	Z-	5	SLV	4675.52	44276.00	11.84	19.49	138475.00	52593.40	686224.00	---	---
		13	SLV	4675.52	44276.00	9.61	16.01	142170.00	75924.00	686224.00	---	---
417	Z+	5	SLV	5180.17	43771.30	3.75	11.44	151464.00	172374.00	686224.00	---	---
		13	SLV	5180.17	43771.30	2.88	9.21	152794.00	196619.00	686224.00	---	---
	Y-	5	SLV	-1256.18	66221.10	3.75	11.44	113344.00	649505.00	274606.00	31450.70	36879.60
		13	SLV	-1256.18	66221.10	2.88	9.21	114611.00	711718.00	274606.00	32067.60	36879.60
	Z-	5	SLV	5180.17	43771.30	3.75	11.44	151464.00	172374.00	686224.00	---	---
		13	SLV	5180.17	43771.30	2.88	9.21	152794.00	196619.00	686224.00	---	---
517	Z+	1	SLV	0.00	43812.90	0.00	2.73	159746.00	300958.00	686224.00	---	---
	Y-	1	SLV	0.00	67477.30	0.00	2.73	124654.00	947852.00	274606.00	33860.40	36879.60
		13	SLV	0.00	67477.30	0.00	2.48	124654.00	947852.00	274606.00	33931.50	36879.60
	Z-	1	SLV	0.00	43812.90	0.00	2.73	159746.00	300958.00	686224.00	---	---

## Pilastrata n. 18

Nodi: 18 118 218 318 418 518

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
1R		30.00	120.00	5.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
1R		30.00	120.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	α <sub>y</sub>	My ver. <daNm>	Mz <daNm>	α <sub>z</sub>	Mz ver. <daNm>	Nu <daN>	MR <sub>dy,r</sub> <daNm>	MR <sub>dz,r</sub> <daNm>	Sic.
0.00	17	SLU	1	1	0.00	-119159.00	-32512.00			0.00			-119159.00	-78297.00	0.00	2.408
0.00	17	SLU	1	1	0.00	-119159.00	-32512.00			0.00			-119159.00	-78297.00	0.00	2.408
2.20	3	(α) SLV	1	1	220.00	-71830.30	11491.20	3.11	35739.20	0.00	4.43	0.00	-71830.30	69401.20	0.00	1.942
2.70	9	(α) SLV	2	1	0.00	-55056.80	0.00	1.88	0.00	-3152.39	3.00	-9465.22	-55056.80	0.00	-15708.00	1.660
2.70	9	(α) SLV	2	1	0.00	-55056.80	0.00	1.88	0.00	-3152.39	3.00	-9465.22	-55056.80	0.00	-15708.00	1.660
5.38	5	(α) SLV	2	1	268.00	-54602.30	-36122.80	1.30	-46959.60	0.00	3.54	0.00	-54602.30	-65420.10	0.00	1.393
5.88	5	(α) SLV	3	1	0.00	-39344.40	-44430.00	1.30	-57759.00	0.00	5.11	0.00	-39344.40	-61757.80	0.00	1.069
5.88	5	(α) SLV	3	1	0.00	-39344.40	-44430.00	1.30	-57759.00	0.00	5.11	0.00	-39344.40	-61757.80	0.00	1.069
8.56	7	(α) SLV	3	1	268.00	-40339.20	0.00	2.08	0.00	2208.18	2.72	5996.07	-40339.20	0.00	14662.70	2.445
9.06	13	(α) SLV	4	1	0.00	-21678.10	0.00	1.91	0.00	-5097.94	1.62	-8236.46	-21678.10	0.00	-13308.20	1.616
9.06	13	(α) SLV	4	1	0.00	-21678.10	0.00	1.91	0.00	-5097.94	1.62	-8236.46	-21678.10	0.00	-13308.20	1.616
11.74	13	(α) SLV	4	1	268.00	-19266.10	0.00	4.02	0.00	3864.99	1.54	5946.21	-19266.10	0.00	13132.00	2.208
12.24	15	(α) SLV	5	1	0.00	-7698.46	0.00	1.93	0.00	-4037.86	1.98	-7986.52	-7698.46	0.00	-12275.00	1.537
12.24	15	(α) SLV	5	1	0.00	-7698.46	0.00	1.93	0.00	-4037.86	1.98	-7986.52	-7698.46	0.00	-12275.00	1.537
14.92	9	SLV	5	1	268.00	-5217.94	0.00			5320.17			-5217.94	0.00	12090.90	2.273

## Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ <sub>c</sub> <daN/cm²>	σ <sub>f</sub> <daN/cm²>	
0.00	18	SLE	R	1	1	0.00	-84585.60	0.00	-22897.30	6.03	30.16	47.99	687.50
0.00	20	SLE	Q	1	1	0.00	-75829.20	0.00	-20503.40	6.03	30.16	42.98	615.85
0.00	18	SLE	R	1	1	0.00	-84585.60	0.00	-22897.30	6.03	30.16	47.99	687.50
0.00	20	SLE	Q	1	1	0.00	-75829.20	0.00	-20503.40	6.03	30.16	42.98	615.85
2.20	18	SLE	R	1	1	220.00	-82605.60	0.00	12431.90	0.00	36.19	34.45	500.08
2.20	20	SLE	Q	1	1	220.00	-73849.20	0.00	10899.50	0.00	36.19	30.55	443.61
2.70	18	SLE	R	2	1	0.00	-72548.70	-3047.84	0.00	0.00	36.19	31.70	410.25
2.70	18	SLE	R	2	1	0.00	-72548.70	0.00	9819.64	0.00	36.19	28.97	421.44



2.70	20	SLE Q	2	1	0.00	-65298.60	-2568.26	0.00	0.00	36.19	27.72	360.78
2.70	18	SLE R	2	1	0.00	-72548.70	-3047.84	0.00	0.00	36.19	31.70	410.25
2.70	18	SLE R	2	1	0.00	-72548.70	0.00	9819.64	0.00	36.19	28.97	421.44
2.70	20	SLE Q	2	1	0.00	-65298.60	-2568.26	0.00	0.00	36.19	27.72	360.78
5.38	18	SLE R	2	1	268.00	-70136.70	2690.28	0.00	0.00	36.19	29.45	384.20
5.38	18	SLE R	2	1	268.00	-70136.70	0.00	-8089.15	0.00	36.19	26.37	384.73
5.38	20	SLE Q	2	1	268.00	-62886.60	2245.73	0.00	0.00	36.19	25.63	336.43
5.88	18	SLE R	3	1	0.00	-52382.70	-3502.85	0.00	0.00	36.19	29.41	362.70
5.88	20	SLE Q	3	1	0.00	-47070.70	-2920.17	0.00	0.00	36.19	25.14	313.25
5.88	18	SLE R	3	1	0.00	-52382.70	-3502.85	0.00	0.00	36.19	29.41	362.70
5.88	20	SLE Q	3	1	0.00	-47070.70	-2920.17	0.00	0.00	36.19	25.14	313.25
8.56	18	SLE R	3	1	268.00	-49970.70	2764.83	0.00	0.00	36.19	24.96	314.98
8.56	20	SLE Q	3	1	268.00	-44658.70	2306.24	0.00	0.00	36.19	21.52	273.36
9.06	18	SLE R	4	1	0.00	-31673.90	-3597.89	0.00	16.09	20.11	28.55	314.35
9.06	20	SLE Q	4	1	0.00	-28430.30	-3010.42	0.00	16.09	20.11	23.85	267.58
9.06	18	SLE R	4	1	0.00	-31673.90	-3597.89	0.00	16.09	20.11	28.55	314.35
9.06	20	SLE Q	4	1	0.00	-28430.30	-3010.42	0.00	16.09	20.11	23.85	267.58
11.74	18	SLE R	4	1	268.00	-29261.90	2812.64	0.00	16.09	20.11	22.29	256.36
11.74	20	SLE Q	4	1	268.00	-26018.30	2352.99	0.00	16.09	20.11	18.70	218.18
12.24	18	SLE R	5	1	0.00	-11144.50	-3853.38	0.00	20.11	16.09	31.54	707.77
12.24	20	SLE Q	5	1	0.00	-10044.10	-3211.61	0.00	20.11	16.09	26.29	570.09
12.24	18	SLE R	5	1	0.00	-11144.50	-3853.38	0.00	20.11	16.09	31.54	707.77
12.24	20	SLE Q	5	1	0.00	-10044.10	-3211.61	0.00	20.11	16.09	26.29	570.09
14.92	18	SLE R	5	1	268.00	-8732.54	3180.19	0.00	20.11	16.09	26.03	596.40
14.92	20	SLE Q	5	1	268.00	-7632.08	2641.77	0.00	20.11	16.09	21.62	485.44

## Stato limite d'esercizio - Verifiche a fessurazione

Xg	CC	TCC	EL	Sez.	X	N	My	Mz	c	s	K3	S <sub>em</sub>	Φ	A <sub>s</sub>	A <sub>c eff</sub>	G <sub>s</sub>	G <sub>r</sub>	ε <sub>sm</sub>	Wk
<cm>					<cm>	<daN>	<daNm>	<daNm>	<mm>	<mm>		<mm>		<cmq>	<cmq>	<daN/cmq>	<daN/cmq>		<mm>
0.00	20	SLE Q	1	1	0.00	-75829.20	-20503.40	0.00	38.00	104.00	0.13	157.70	16.00	6.03	459.19	80.55	486.62	0.02	0.00
0.00	20	SLE Q	1	1	0.00	-75829.20	-20503.40	0.00	38.00	104.00	0.13	157.70	16.00	6.03	459.19	80.55	486.62	0.02	0.00
9.06	20	SLE Q	4	1	0.00	-28430.30	0.00	-3010.42	38.00	158.29	0.13	195.50	16.00	16.09	1766.17	139.98	665.77	0.03	0.01
9.06	20	SLE Q	4	1	0.00	-28430.30	0.00	-3010.42	38.00	158.29	0.13	195.50	16.00	16.09	1766.17	139.98	665.77	0.03	0.01
11.74	20	SLE Q	4	1	268.00	-26018.30	0.00	2352.99	38.00	158.29	0.13	195.54	16.00	16.09	1766.92	63.75	463.96	0.01	0.00
12.24	20	SLE Q	5	1	0.00	-10044.10	0.00	-3211.61	38.00	158.29	0.13	189.99	16.00	20.11	2069.25	570.09	1548.13	0.11	0.04
12.24	20	SLE Q	5	1	0.00	-10044.10	0.00	-3211.61	38.00	158.29	0.13	189.99	16.00	20.11	2069.25	570.09	1548.13	0.11	0.04
14.92	20	SLE Q	5	1	268.00	-7632.08	0.00	2641.77	38.00	158.29	0.13	190.01	16.00	20.11	2069.84	485.44	1579.33	0.09	0.03

## Staffe - Verifiche armatura

X0	X1	Staff.	Br <sub>y</sub>	Br <sub>z</sub>	CC	TCC	bw <sub>y</sub>	Vsdu <sub>y</sub>	ctgθ <sub>y</sub>	VRsd <sub>y</sub>	VRcd <sub>y</sub>	bw <sub>z</sub>	Vsdu <sub>z</sub>	ctgθ <sub>z</sub>	VRsd <sub>z</sub>	VRcd <sub>z</sub>	Sic.T
<cm>	<cm>						<cm>	<daN>		<daN>	<daN>	<cm>	<daN>		<daN>	<daN>	
0.00	2.20	ø12/ 5	2	2	17	SLU	1.20	1147.48	2.39	95815.00	95815.00	0.30	22825.50	1.00	183536.00	153607.00	6.73
0.00	2.20	ø12/ 5	2	2	5(TG)	SLV	1.20	0.00	2.32	93056.90	93056.90	0.30	103186.00	1.00	183536.00	146193.00	1.42
0.00	2.20	ø12/ 5	2	2	5(TG)	SLV	1.20	25368.20	2.32	93056.60	93056.60	0.30	0.00	1.00	183536.00	146192.00	3.67
2.70	5.38	ø8/ 9	2	2	17	SLU	1.20	3062.50	2.50	24783.10	90573.00	0.30	9422.48	2.37	107471.00	107471.00	8.09
2.70	5.38	ø8/ 9	2	2	5(TG)	SLV	1.20	0.00	2.50	24783.10	86908.80	0.30	82311.80	2.31	104879.00	104879.00	1.27
2.70	5.38	ø8/ 9	2	2	5(TG)	SLV	1.20	20057.60	2.50	24783.10	86909.20	0.30	0.00	2.31	104879.00	104879.00	1.24
5.88	8.56	ø10/11	2	2	17	SLU	1.20	3341.05	2.50	31682.90	86844.40	0.30	709.69	1.99	115407.00	115407.00	9.48
5.88	8.56	ø10/11	2	2	5(TG)	SLV	1.20	0.00	2.50	31682.90	84416.50	0.30	77165.70	1.96	113369.00	113369.00	1.47
5.88	8.56	ø10/11	2	2	5(TG)	SLV	1.20	18516.10	2.50	31682.90	84416.30	0.30	0.00	1.96	113369.00	113369.00	1.71
9.06	11.74	ø8/11	2	2	17	SLU	1.20	3416.42	2.50	20277.10	83020.10	0.30	2028.28	2.50	92695.10	94880.10	5.94
9.06	11.74	ø8/11	2	2	5(TG)	SLV	1.20	0.00	2.50	20277.10	81516.60	0.30	70883.60	2.50	92695.10	93161.80	1.31
9.06	11.74	ø8/11	2	2	5(TG)	SLV	1.20	0.00	2.50	20277.10	81516.60	0.30	70883.60	2.50	92695.10	93161.90	1.31
9.06	11.74	ø8/11	2	2	5(TG)	SLV	1.20	16658.40	2.50	20277.10	81516.60	0.30	0.00	2.50	92695.10	93161.80	1.22
12.24	14.92	ø8/11	2	2	17	SLU	1.20	3711.85	2.50	20277.10	79237.50	0.30	361.28	2.47	91446.70	91446.70	5.46
12.24	14.92	ø8/11	2	2	5(TG)	SLV	1.20	0.00	2.50	20277.10	78648.60	0.30	64175.70	2.46	91050.20	91050.20	1.42
12.24	14.92	ø8/11	2	2	5(TG)	SLV	1.20	14766.90	2.50	20277.10	78649.00	0.30	0.00	2.46	91050.40	91050.40	1.37

## Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F.	Mod.	Br.	As1	As2	Bj	Hjc	Hjw	Ash
						<cmq>	<cmq>	<cm>	<cm>	<cm>	<cmq>
118N		ø10/ 6	Y+	E	4	6.28	5.09	0.45	0.20	0.42	25.13
			Z+	I	4	5.09	6.28	0.30	1.10	0.42	25.13
			Z-	I	4	5.09	6.28	0.30	1.10	0.42	25.13
218N		ø10/ 8	Y+	E	4	6.28	5.09	0.45	0.20	0.42	18.85
318N		ø10/10	Y+	E	4	6.28	5.09	0.45	0.20	0.42	15.71
			Z+	E	4	11.06	9.05	0.30	1.10	0.42	15.71
418N		ø10/10	Y+	E	4	6.28	5.09	0.45	0.20	0.42	15.71
			Z+	E	4	11.06	9.05	0.30	1.10	0.42	15.71
518N		ø10/10	Y+	E	4	5.09	5.09	0.45	0.20	0.42	15.71
			Z+	E	4	11.06	9.05	0.30	1.10	0.42	15.71

## Verifiche nodi trave-pilastro

Nodo	F.	CC	TCC	Vc	Vjbd	vd <sub>s</sub>	vd <sub>i</sub>	VjbR	Afni	Rfni	Vjwd	VjwR
				<daN>	<daN>			<daN>	<daN/mq>	<daN/mq>	<daN>	<daN>



118	Y+	5	SLV	2387.28	24657.70	12.92	14.21	53463.50	76859.70	522838.00	---	---
		13	SLV	2387.28	24657.70	9.12	10.72	56800.40	123162.00	522838.00	---	---
	Z+	1	SLV	-20903.40	28048.10	9.79	11.37	261060.00	0.00	784256.00	---	---
		5	SLV	-20903.40	28048.10	12.92	14.21	251446.00	0.00	784256.00	---	---
	Z-	1	SLV	-20903.40	28048.10	9.79	11.37	261060.00	0.00	784256.00	---	---
		5	SLV	-20903.40	28048.10	12.92	14.21	251446.00	0.00	784256.00	---	---
218	Y+	5	SLV	3662.32	23382.70	9.69	12.51	56311.50	90028.20	392128.00	---	---
		13	SLV	3662.32	23382.70	6.20	8.71	59241.90	144631.00	392128.00	---	---
	Z+	1	SLV	-13730.00	33869.20	6.84	9.38	211840.00	0.00	588192.00	---	---
		5	SLV	-13730.00	33869.20	9.69	12.51	203164.00	0.00	588192.00	---	---
318	Y+	5	SLV	3800.34	23244.70	5.94	9.28	59452.80	146432.00	326774.00	---	---
		13	SLV	3800.34	23244.70	3.66	5.79	61281.30	200743.00	326774.00	---	---
	Z+	1	SLV	-9955.78	37643.50	4.11	6.43	219799.00	0.00	490160.00	---	---
		5	SLV	-9955.78	37643.50	5.94	9.28	214497.00	0.00	490160.00	---	---
418	Y+	5	SLV	4160.46	22884.60	2.22	5.53	62404.50	235617.00	326774.00	---	---
		13	SLV	4160.46	22884.60	1.17	3.25	63220.60	277928.00	326774.00	---	---
	Z+	1	SLV	4383.75	43215.50	1.42	3.70	227387.00	0.00	490160.00	---	---
		5	SLV	4383.75	43215.50	2.22	5.53	225146.00	0.00	490160.00	---	---
518	Y+	1	SLV	0.00	21906.50	0.00	1.01	64107.50	298135.00	326774.00	---	---
	Z+	1	SLV	0.00	47599.20	0.00	1.01	231291.00	23822.60	490160.00	---	---



## Verifiche e armature nuclei

## Simbologia

Liv. = Numero del livello  
 Pos. = Posizione (P=Piede, T=Testa)  
 CC = Numero della combinazione delle condizioni di carico elementari  
 TCC = Tipo di combinazione di carico  
 SLU = Stato limite ultimo  
 SLU S = Stato limite ultimo (azione sismica)  
 SLE R = Stato limite d'esercizio, combinazione rara  
 SLE F = Stato limite d'esercizio, combinazione frequente  
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente  
 SLD = Stato limite di danno  
 SLV = Stato limite di salvaguardia della vita  
 SLC = Stato limite di prevenzione del collasso  
 SLO = Stato limite di operatività  
 SLU I = Stato limite di resistenza al fuoco  
 SND = Stato limite di salvaguardia della vita (non dissipativo)  
 N = Sforzo normale  
 N ver. = Sforzo normale di verifica  
 Mz = Momento flettente intorno all'asse Z  
 Mz ver. = Momento flettente di verifica intorno all'asse Z  
 My = Momento flettente intorno all'asse Y  
 Nu = Sforzo normale ultimo  
 MRdy,r = Momento resistente allo stato limite ultimo (ridotto del 30%) intorno all'asse Y  
 MRdz,r = Momento resistente allo stato limite ultimo (ridotto del 30%) intorno all'asse Z  
 M'yd,y,r = Momento resistente massimo in campo sostanzialmente elastico (ridotto del 30%) intorno all'asse Y  
 M'yd,z,r = Momento resistente massimo in campo sostanzialmente elastico (ridotto del 30%) intorno all'asse Z  
 Sic. = Sicurezza a rottura  
 $\sigma_c$  = Tensione nel calcestruzzo  
 $\sigma_f$  = Tensione nel ferro  
 Sez. = Numero della sezione  
 X = Coordinata progressiva rispetto al nodo iniziale  
 Myu = Momento ultimo intorno all'asse Y  
 $\mu\Phi_y$  = Valore di progetto della duttilità di curvatura in dir. Y locale  
 Mzu = Momento ultimo intorno all'asse Z  
 $\mu\Phi_z$  = Valore di progetto della duttilità di curvatura in dir. Z locale  
 c = Ricoprimento dell'armatura  
 s = Distanza minima tra le barre  
 K3 = Coefficiente di forma del diagramma delle tensioni prima della fessurazione  
 S<sub>rm</sub> = Distanza media tra le fessure  
 $\Phi$  = Diametro della barra  
 A<sub>s</sub> = Area complessiva dei ferri nell'area di calcestruzzo efficace  
 A<sub>c eff</sub> = Area di calcestruzzo efficace  
 $\sigma_s$  = Tensione nell'acciaio nella sezione fessurata  
 $\sigma_{sr}$  = Tensione nell'acciaio corrispondente al raggiungimento della resistenza a trazione nel calcestruzzo  
 $\epsilon_{sm}$  = Deformazione unitaria media dell'armatura (\*1000)  
 Wk = Apertura delle fessure  
 T<sub>1</sub> = Taglio parete in dir. longitudinale  
 Vsdu = Taglio agente nella direzione del momento ultimo  
 ctg $\theta$  = Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo  
 VRsd = Taglio ultimo lato armatura  
 VRcd = Taglio ultimo lato calcestruzzo  
 V<sub>rd,s</sub> = Taglio ultimo per scorrimento lungo piani orizzontali  
 V<sub>dd</sub> = Contributo effetto spinotto  
 V<sub>ed</sub> = Contributo resistenza per attrito  
 Sic.T = Sicurezza a rottura per taglio  
 Spess. = Spessore  
 Cf = Copriferro  
 Cls = Tipo di calcestruzzo  
 Fck = Resistenza caratteristica cilindrica a compressione del calcestruzzo  
 Fctk = Resistenza caratteristica a trazione del calcestruzzo  
 Fcd = Resistenza di calcolo a compressione del calcestruzzo  
 Fctd = Resistenza di calcolo a trazione del calcestruzzo  
 Tp = Tipo di acciaio  
 Fyk = Tensione caratteristica di snervamento dell'acciaio  
 Fyd = Resistenza di calcolo dell'acciaio

## Numero del nucleo n. 129

Nodi: -1227 -1226 -1225 -1224

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
<cm>	<cm>		<daN/cm <sup>2</sup> >	<daN/cm <sup>2</sup> >	<daN/cm <sup>2</sup> >	<daN/cm <sup>2</sup> >		<daN/cm <sup>2</sup> >	<daN/cm <sup>2</sup> >
24.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N	N ver.	Mz	Mz ver.	My	Nu	MRdy,r	MRdz,r	Sic.
				<daN>	<daN>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1	P	13	SLV	-1655.33	-1655.33	0.00	0.00	3432.06	-1655.33	16456.10	-2.47	4.795
2	P	13	SLV	-100913.00	-100913.00	0.00	0.00	-386.94	-369795.00	-21567.80	10.61	3.664

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3P	13	SLV	-127153.00	-127153.00	0.00	0.00	-418.87	-369795.00	-22875.70	10.93	2.908
4P	13	SLV	-151729.00	-151729.00	0.00	0.00	-358.67	-369795.00	-24034.00	11.18	2.437
5P	1	SLV	23516.40	23516.40	95765.40	95765.40	0.00	23516.40	0.00	169384.00	1.769
6P	1	SLV	15593.60	15593.60	76399.60	76399.60	0.00	15593.60	0.00	174032.00	2.278
7P	13	SLV	-130947.00	-130947.00	0.00	0.00	-451.61	-369795.00	-23064.70	10.98	2.824
8P	13	SLV	-117240.00	-117240.00	0.00	0.00	-332.42	-369795.00	-22381.80	10.80	3.154
9P	13	SLV	-105152.00	-105152.00	0.00	0.00	-303.35	-369795.00	-21779.20	10.66	3.517
10P	13	SLV	-87307.20	-87307.20	0.00	0.00	-114.51	-369795.00	-20889.00	10.45	4.236
11P	13	SLV	-71923.80	-71923.80	0.00	0.00	-177.45	-369795.00	-20120.70	10.28	5.141
12P	13	SLV	-57752.10	-57752.10	0.00	0.00	-128.75	-369795.00	-19393.40	10.09	6.403
13P	13	SLV	-47040.50	-47040.50	0.00	0.00	-669.41	-369795.00	-18835.30	9.93	7.861
14P	9	SLV	-752.26	-752.26	-19114.10	-19114.10	0.00	-752.26	0.00	-182953.00	9.572
15P	1	SLV	-2092.08	-2092.08	-17370.40	-17370.40	0.00	-2092.08	0.00	-183680.00	10.574
16P	1	SLV	-2474.68	-2474.68	-17348.20	-17348.20	0.00	-2474.68	0.00	-183887.00	10.600
17P	5	SLV	-2159.58	-2159.58	0.00	0.00	-1241.54	-2159.58	-16482.60	9.31	13.276

## Stato limite d'esercizio - Verifiche tensionali

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	$\sigma_c$ <daN/cm <sup>2</sup> >	$\sigma_f$ <daN/cm <sup>2</sup> >
1P	18	SLE	R	-39274.10	0.00	895.20	9.24	118.66
1P	20	SLE	Q	-34668.20	0.00	732.25	7.94	102.81
2P	18	SLE	R	-45647.40	3340.54	0.00	8.11	120.89
2P	20	SLE	Q	-39707.50	2503.61	0.00	6.91	103.02
3P	18	SLE	R	-52227.70	7754.37	0.00	10.74	159.27
3P	20	SLE	Q	-44958.70	6251.74	0.00	9.08	134.85
4P	18	SLE	R	-58554.00	11874.00	0.00	13.21	195.51
4P	20	SLE	Q	-49961.90	9732.76	0.00	11.13	164.69
5P	18	SLE	R	-58749.10	13103.70	0.00	13.70	202.50
5P	20	SLE	Q	-50202.90	10534.50	0.00	11.46	169.51
6P	18	SLE	R	-56065.60	10285.70	0.00	12.25	181.43
6P	20	SLE	Q	-47798.00	8278.88	0.00	10.26	152.06
7P	18	SLE	R	-53435.50	7413.90	0.00	10.79	160.19
7P	20	SLE	Q	-45475.00	5999.46	0.00	9.07	134.67
8P	18	SLE	R	-50548.70	4212.70	0.00	9.17	136.61
8P	20	SLE	Q	-42906.40	3428.38	0.00	7.73	115.17
9P	18	SLE	R	-44439.30	0.00	537.05	8.69	118.34
9P	20	SLE	Q	-37950.40	0.00	426.96	7.30	100.00
10P	18	SLE	R	-38587.70	0.00	280.45	6.85	96.54
10P	20	SLE	Q	-32942.20	0.00	221.59	5.78	81.82
11P	18	SLE	R	-32806.00	-1655.39	0.00	5.55	82.91
11P	20	SLE	Q	-28026.30	-1384.99	0.00	4.73	70.68
12P	18	SLE	R	-26843.90	-3781.91	0.00	5.44	80.78
12P	20	SLE	Q	-22928.80	-3031.73	0.00	4.58	67.94
13P	18	SLE	R	-19822.60	-1236.76	0.00	3.44	51.36
13P	20	SLE	Q	-17187.00	-1105.32	0.00	3.00	44.71
14P	18	SLE	R	-15987.50	-2782.78	0.00	3.44	50.93
14P	20	SLE	Q	-13810.70	-2348.92	0.00	2.95	43.71
15P	18	SLE	R	-12266.80	-4131.20	0.00	3.38	49.71
15P	20	SLE	Q	-10565.40	-3404.52	0.00	2.85	42.00
16P	18	SLE	R	-8421.28	-5873.13	0.00	3.70	53.83
16P	20	SLE	Q	-7193.23	-4799.81	0.00	3.04	44.26
17P	18	SLE	R	-3255.68	0.00	-626.82	4.07	64.49
17P	20	SLE	Q	-2669.84	0.00	-603.81	3.93	68.38

## Stato limite d'esercizio - Verifiche a fessurazione

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K3	$s_{zm}$ <mm>	$\Phi$	$A_s$ <cm <sup>2</sup> >	$A_{c\ eff}$ <cm <sup>2</sup> >	$\sigma_s$ <daN/cm <sup>2</sup> >	$\sigma_{sr}$ <daN/cm <sup>2</sup> >	$\epsilon_{sm}$	Wk <mm>
16P	20	SLE	Q	-7193.23	-4799.81	0.00	40.00	97.62	0.13	156.24	16.00	24.13	1710.40	15.65	766.69	0.00	0.00
16P	19	SLE	F	-7544.10	-5106.48	0.00	40.00	97.62	0.13	156.24	16.00	24.13	1710.40	17.32	780.18	0.00	0.00
17P	20	SLE	Q	-2669.84	0.00	-603.81	40.00	187.00	0.13	198.51	16.00	34.18	3465.58	68.38	1262.05	0.01	0.00
17P	19	SLE	F	-2837.22	0.00	-610.39	40.00	187.00	0.13	198.51	16.00	34.18	3465.58	67.25	1241.69	0.01	0.00

## Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	TCC	$T_1$ <daN>	Vsdu <daN>	ctg $\theta$	VRsd <daN>	VRcd <daN>	$V_{Rd,s}$ <daN>	$V_{dd}$ <daN>	$V_{fd}$ <daN>	Sic.T
2P	9	SLV		-49017.30	73526.00	1.70	112018.00	147136.00				1.52
3P	9	SLV		-49238.40	73857.70	1.70	111102.00	146327.00				1.50
4P	9	SLV		-47697.10	71545.60	1.69	111179.00	145856.00				1.55
5P	1	SLV		-37161.30	55742.00	1.69	111179.00	145856.00				1.99
6P	1	SLV		-39096.50	58644.70	1.69	111179.00	145856.00				1.90
7P	1	SLV		-38692.10	58038.10	1.69	111179.00	145856.00				1.92
8P	1	SLV		-38715.90	58073.90	1.69	111179.00	145856.00				1.91
9P	9	SLV		31471.00	47206.50	1.70	111604.00	146771.00				2.36
10P	9	SLV		31424.00	47136.00	1.70	111761.00	146909.00				2.37





11	P	9	SLV	31441.40	47162.10	1.70	111574.00	146744.00				2.37
12	P	9	SLV	30811.20	46216.80	1.69	110956.00	146198.00				2.40
13	P	13	SLV	18786.10	28179.10	1.69	111179.00	145856.00				3.95
14	P	13	SLV	18733.60	28100.40	1.69	111179.00	145856.00				3.96
15	P	13	SLV	18505.10	27757.60	1.69	111179.00	145856.00				4.01
16	P	13	SLV	19204.50	28806.80	1.69	110732.00	145999.00				3.84
17	T	13	SLV	4612.18	6918.27	1.69	110647.00	145924.00				15.99

**Numero del nucleo n. 130**

Nodi: -1224 -1218 -1211 -1203

**Caratteristiche delle sezioni e dei materiali utilizzati**

Spess. <cm>	Cf	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
24.00	4.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Liv.	Pos.	CC	TCC	N <daN>	N ver. <daN>	Mz <daNm>	Mz ver. <daNm>	My <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
1	P	13	SLV	-18601.90	-18601.90	31322.00	31322.00	0.00	-18601.90	-0.00	186368.00	5.950
2	P	1	SLV	-85752.40	-85752.40	0.00	0.00	-302.96	-360313.00	-21169.40	50.13	4.202
3	P	1	SLV	-111711.00	-111711.00	0.00	0.00	-85.30	-360313.00	-22454.10	31.65	3.225
4	P	1	SLV	-134031.00	-134031.00	0.00	0.00	-389.44	-360313.00	-23514.60	17.77	2.688
5	P	13	SLV	12030.10	12030.10	-87301.10	-87301.10	0.00	12030.10	-3.45	-170862.00	1.957
6	P	13	SLV	6984.48	6984.48	-78026.20	-78026.20	0.00	6984.48	-3.38	-173449.00	2.223
7	P	13	SLV	1602.29	1602.29	-65283.50	-65283.50	0.00	1602.29	-3.32	-176162.00	2.698
8	P	13	SLV	-4188.00	-4188.00	-56687.10	-56687.10	0.00	-4188.00	-3.25	-179110.00	3.160
9	P	13	SLV	-6366.95	-6366.95	-57869.40	-57869.40	0.00	-6366.95	-3.22	-180209.00	3.114
10	P	13	SLV	-9407.78	-9407.78	-51158.10	-51158.10	0.00	-9407.78	-3.19	-181737.00	3.552
11	P	13	SLV	-9574.44	-9574.44	-40511.80	-40511.80	0.00	-9574.44	-3.19	-181821.00	4.488
12	P	13	SLV	-6031.52	-6031.52	-32442.50	-32442.50	0.00	-6031.52	-3.23	-180040.00	5.550
13	P	13	SLV	-1294.52	-1294.52	-28553.70	-28553.70	0.00	-1294.52	-3.28	-177650.00	6.222
14	P	13	SLV	-251.17	-251.17	-24941.30	-24941.30	0.00	-251.17	-3.30	-177121.00	7.102
15	P	13	SLV	342.93	342.93	-17029.70	-17029.70	0.00	342.93	-3.30	-176790.00	10.381
16	P	5	SLV	2417.97	2417.97	10953.10	10953.10	0.00	2417.97	-0.00	175807.00	16.051
17	P	9	SLV	-1452.57	-1452.57	0.00	0.00	-3005.76	-1452.57	-16881.90	114.50	5.617

**Stato limite d'esercizio - Verifiche tensionali**

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
1	P	18	SLE R	-35587.60	16712.00	0.00	12.18	169.22
1	P	20	SLE Q	-31952.00	14140.80	0.00	10.54	146.84
2	P	18	SLE R	-38618.50	9646.98	0.00	9.73	138.41
2	P	20	SLE Q	-34301.70	8286.28	0.00	8.53	121.48
3	P	18	SLE R	-41362.60	4682.69	0.00	8.19	119.08
3	P	20	SLE Q	-36371.40	4184.53	0.00	7.22	105.06
4	P	18	SLE R	-43547.20	0.00	-178.74	7.34	105.94
4	P	18	SLE R	-43547.20	-1626.53	0.00	7.30	108.25
4	P	20	SLE Q	-38020.70	0.00	-163.78	6.44	92.75
5	P	18	SLE R	-41896.70	-22089.50	0.00	15.52	214.93
5	P	20	SLE Q	-36534.00	-17857.00	0.00	12.83	178.37
6	P	18	SLE R	-39158.70	-20373.50	0.00	14.37	199.09
6	P	20	SLE Q	-34131.90	-16495.70	0.00	11.90	165.47
7	P	18	SLE R	-36170.10	-16657.30	0.00	12.22	170.35
7	P	20	SLE Q	-31498.80	-13431.70	0.00	10.16	142.13
8	P	18	SLE R	-32622.10	-14133.70	0.00	10.62	148.46
8	P	20	SLE Q	-28433.60	-11391.90	0.00	8.86	124.29
9	P	18	SLE R	-27622.20	-18176.30	0.00	12.29	167.66
9	P	20	SLE Q	-24202.80	-14667.80	0.00	10.02	137.48
10	P	18	SLE R	-24230.60	-16260.60	0.00	10.97	149.50
10	P	20	SLE Q	-21299.90	-13170.80	0.00	8.97	122.92
11	P	18	SLE R	-21200.80	-11924.40	0.00	8.25	113.83
11	P	20	SLE Q	-18675.40	-9611.93	0.00	6.80	94.27
12	P	18	SLE R	-17800.40	-8255.12	0.00	6.04	84.18
12	P	20	SLE Q	-15764.90	-6654.64	0.00	5.06	70.76
13	P	18	SLE R	-13243.70	-6127.17	0.00	4.49	62.54
13	P	20	SLE Q	-11900.00	-4949.83	0.00	3.79	53.01
14	P	18	SLE R	-10385.40	-5789.35	0.00	4.01	55.40
14	P	20	SLE Q	-9394.44	-4698.79	0.00	3.35	46.54
15	P	18	SLE R	-8299.33	-2605.80	0.00	2.30	32.54
15	P	20	SLE Q	-7501.79	-2024.15	0.00	1.95	27.69
16	P	18	SLE R	-5968.10	0.00	-36.47	1.05	14.92
16	P	18	SLE R	-5968.10	330.86	0.00	1.04	15.40
16	P	20	SLE Q	-5413.27	408.61	0.00	0.99	14.53



17	P	18	SLE R	-2704.79	0.00	-485.29	3.18	46.36
17	P	20	SLE Q	-2367.75	0.00	-451.32	2.96	44.99

## Stato limite d'esercizio - Verifiche a fessurazione

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>sm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
1	P	20	SLE Q	-31952.00	14140.80	0.00	40.00	142.04	0.13	209.70	18.00	5.09	572.77	1.39	75.45	0.00	0.00
1	P	19	SLE F	-32990.80	14875.40	0.00	40.00	142.04	0.13	209.70	18.00	5.09	572.77	3.28	148.42	0.00	0.00
5	P	20	SLE Q	-36534.00	-17857.00	0.00	40.00	80.10	0.13	163.09	18.00	10.18	758.51	13.29	338.32	0.00	0.00
5	P	19	SLE F	-38066.20	-19066.30	0.00	40.00	80.10	0.13	163.09	18.00	10.18	758.51	17.56	380.44	0.00	0.00
6	P	20	SLE Q	-34131.90	-16495.70	0.00	40.00	80.10	0.13	163.09	18.00	10.18	758.51	10.95	316.85	0.00	0.00
6	P	19	SLE F	-35568.10	-17603.60	0.00	40.00	80.10	0.13	163.09	18.00	10.18	758.51	14.68	360.52	0.00	0.00
9	P	20	SLE Q	-24202.80	-14667.80	0.00	40.00	80.10	0.13	150.78	18.00	20.36	1238.72	36.34	622.52	0.01	0.00
9	P	19	SLE F	-25179.80	-15670.20	0.00	40.00	80.10	0.13	150.78	18.00	20.36	1238.72	42.63	651.88	0.01	0.00
10	P	20	SLE Q	-21299.90	-13170.80	0.00	40.00	80.10	0.13	150.78	18.00	20.36	1238.72	35.05	644.81	0.01	0.00
10	P	19	SLE F	-22137.20	-14053.60	0.00	40.00	80.10	0.13	150.78	18.00	20.36	1238.72	40.87	673.72	0.01	0.00
11	P	20	SLE Q	-18675.40	-9611.93	0.00	40.00	80.10	0.13	158.16	18.00	15.27	1054.19	10.80	422.10	0.00	0.00
11	P	19	SLE F	-19396.90	-10272.60	0.00	40.00	80.10	0.13	158.16	18.00	15.27	1054.19	13.80	461.79	0.00	0.00
14	P	20	SLE Q	-9394.44	-4698.79	0.00	40.00	80.10	0.13	163.09	18.00	10.18	758.51	4.28	378.14	0.00	0.00
14	P	19	SLE F	-9677.56	-5010.38	0.00	40.00	80.10	0.13	158.16	18.00	15.27	1054.19	5.85	430.60	0.00	0.00
17	P	20	SLE Q	-2367.75	0.00	-451.32	40.00	200.00	0.13	210.10	18.00	35.63	3566.40	44.99	1134.16	0.01	0.00
17	P	19	SLE F	-2464.05	0.00	-461.03	40.00	200.00	0.13	210.10	18.00	35.63	3566.40	45.38	1125.60	0.01	0.00

## Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	TCC	T <sub>1</sub> <daN>	V <sub>sd</sub> <daN>	ctgθ	VR <sub>sd</sub> <daN>	VR <sub>cd</sub> <daN>	V <sub>rd,s</sub> <daN>	V <sub>dd</sub> <daN>	V <sub>fd</sub> <daN>	Sic. T
5	P	13	SLV	50352.00	75528.00	1.69	108309.00	142116.00				1.43
6	P	13	SLV	57433.60	86150.40	1.69	108309.00	142116.00				1.26
7	P	13	SLV	57372.50	86058.70	1.69	108309.00	142116.00				1.26
8	P	13	SLV	55247.80	82871.60	1.70	108812.00	142561.00				1.31
9	P	13	SLV	61816.40	92724.60	1.70	109073.00	142793.00				1.18
10	P	13	SLV	65452.20	98178.20	1.70	109438.00	143115.00				1.11
11	P	13	SLV	65248.70	97873.00	1.70	109458.00	143132.00				1.12
12	P	13	SLV	60782.20	91173.30	1.70	109033.00	142757.00				1.20
13	P	13	SLV	39349.10	59023.60	1.69	108465.00	142254.00				1.84
14	P	13	SLV	42385.10	63577.70	1.69	108339.00	142143.00				1.70
15	P	13	SLV	42498.20	63747.30	1.69	108309.00	142116.00				1.70
16	P	13	SLV	38011.50	57017.20	1.69	108309.00	142116.00				1.90
17	T	5	SLV	-4570.61	6855.92	1.69	108332.00	142137.00				15.80

## Numero del nucleo n. 131

Nodi: -1203 -1204 -1205 -1206

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess. <cm>	Cf <cm>	Cls	F <sub>ck</sub> <daN/cmq>	F <sub>ctk</sub> <daN/cmq>	F <sub>cd</sub> <daN/cmq>	F <sub>ctd</sub> <daN/cmq>	Tp	F <sub>yk</sub> <daN/cmq>	F <sub>yd</sub> <daN/cmq>
24.00	4.80	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N <daN>	N ver. <daN>	Mz <daNm>	Mz ver. <daNm>	My <daNm>	Nu <daN>	MR <sub>dy,r</sub> <daNm>	MR <sub>dz,r</sub> <daNm>	Sic.
1	P	5	SLV	-86883.00	-86883.00	0.00	0.00	1311.83	-369795.00	20867.90	-13.62	4.256
2	P	5	SLV	-97499.00	-97499.00	0.00	0.00	280.22	-369795.00	21397.50	-13.60	3.793
3	P	5	SLV	-108058.00	-108058.00	0.00	0.00	358.31	-369795.00	21924.10	-13.58	3.422
4	P	9	SLV	64368.20	64368.20	57623.30	57623.30	0.00	64368.20	-12.05	144386.00	2.506
5	P	1	SLV	73544.40	73544.40	-82637.30	-82637.30	0.00	73544.40	-6.94	-138626.00	1.678
6	P	1	SLV	61290.10	61290.10	-65733.60	-65733.60	0.00	61290.10	-7.00	-146448.00	2.228
7	P	1	SLV	48156.20	48156.20	-49635.40	-49635.40	0.00	48156.20	3.53	-154690.00	3.117
8	P	13	SLV	69217.00	69217.00	0.00	0.00	256.18	267500.00	12686.80	-14.06	3.865
9	P	13	SLV	67943.40	67943.40	0.00	0.00	-4825.66	67943.40	-12755.10	-6.47	2.643
10	P	13	SLV	49897.30	49897.30	0.00	0.00	265.06	267500.00	13720.50	-14.00	5.361
11	P	5	SLV	-51779.90	-51779.90	0.00	0.00	141.79	-369795.00	19082.40	-13.71	7.142
12	P	5	SLV	-47854.80	-47854.80	0.00	0.00	836.02	-369795.00	18877.80	-13.72	7.727
13	P	13	SLV	24008.50	24008.50	0.00	0.00	-4333.85	24008.50	-15095.20	-3.20	3.483
14	P	1	SLV	4276.88	4276.88	-17021.60	-17021.60	0.00	4276.88	2.92	-180200.00	10.586
15	P	1	SLV	-1293.37	-1293.37	-13658.60	-13658.60	0.00	-1293.37	2.85	-183271.00	13.418
16	P	9	SLV	-6103.71	-6103.71	-11388.30	-11388.30	0.00	-6103.71	2.79	-185876.00	16.322
17	P	5	SLV	-1711.20	-1711.20	0.00	0.00	-4003.29	-1711.20	-16459.00	-1.47	4.111

## Stato limite d'esercizio - Verifiche tensionali

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	σ <sub>c</sub> <daN/cmq>	σ <sub>f</sub> <daN/cmq>
1	P	18	SLE R	-49782.20	0.00	-1518.98	13.14	163.27



1P	18	SLE R	-49782.20	9718.73	0.00	11.09	164.21
1P	20	SLE Q	-44920.70	0.00	-1232.99	11.35	142.72
2P	18	SLE R	-37058.10	9038.34	0.00	8.93	131.84
2P	20	SLE Q	-34211.80	7544.09	0.00	7.95	117.46
3P	18	SLE R	-24413.70	8208.48	0.00	6.72	98.87
3P	20	SLE Q	-23571.00	6900.95	0.00	6.10	90.00
4P	18	SLE R	-12582.90	6198.56	0.00	4.22	61.92
4P	20	SLE Q	-13598.60	5280.24	0.00	4.00	58.84
5P	18	SLE R	2171.38	0.00	-2626.43	16.75	497.31
5P	20	SLE Q	-1414.20	0.00	-2185.53	14.10	365.47
6P	18	SLE R	69.82	0.00	-606.14	3.89	108.26
6P	20	SLE Q	-2901.21	0.00	-513.18	3.33	49.70
7P	18	SLE R	-2228.95	-2575.69	0.00	1.60	23.38
7P	20	SLE Q	-4537.41	-1941.40	0.00	1.40	20.60
8P	18	SLE R	-5343.81	-3196.00	0.00	2.06	30.10
8P	20	SLE Q	-6851.28	-2444.32	0.00	1.94	28.50
9P	18	SLE R	2601.42	0.00	-3004.39	19.16	570.66
9P	20	SLE Q	-165.69	0.00	-2519.00	16.19	443.08
10P	18	SLE R	-3321.79	0.00	-651.38	4.23	67.82
10P	20	SLE Q	-4756.90	0.00	-553.42	3.54	34.01
11P	18	SLE R	-8813.47	-4433.78	0.00	3.00	43.95
11P	20	SLE Q	-8977.32	-3509.07	0.00	2.65	38.97
12P	18	SLE R	-14856.00	0.00	416.30	3.78	47.49
12P	18	SLE R	-14856.00	-4130.34	0.00	3.77	55.56
12P	20	SLE Q	-13665.40	0.00	361.91	3.40	42.98
13P	18	SLE R	-5041.89	0.00	-2987.10	19.37	453.73
13P	20	SLE Q	-5424.17	0.00	-2518.89	16.36	365.58
14P	18	SLE R	-8415.36	0.00	-565.35	3.60	39.04
14P	20	SLE Q	-7986.09	0.00	-485.61	3.14	34.95
15P	18	SLE R	-10902.30	-2695.90	0.00	2.64	38.99
15P	20	SLE Q	-9804.13	-2244.18	0.00	2.31	34.10
16P	18	SLE R	-13759.10	0.00	366.33	3.43	43.34
16P	18	SLE R	-13759.10	-2436.80	0.00	2.97	44.06
16P	20	SLE Q	-11944.90	0.00	308.27	2.94	37.29
17P	18	SLE R	-3242.21	0.00	-2277.11	14.75	354.68
17P	20	SLE Q	-2671.24	0.00	-2025.95	13.11	318.69

**Stato limite d'esercizio - Verifiche a fessurazione**

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sR</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
5P	20	SLE Q	-1414.20	0.00	-2185.53	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	365.47	1571.09	0.07	0.02	
5P	19	SLE F	-389.75	0.00	-2311.50	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	403.02	1606.16	0.08	0.03	
6P	20	SLE Q	-2901.21	0.00	-513.18	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	49.70	1149.12	0.01	0.00	
6P	19	SLE F	-2052.35	0.00	-539.74	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	65.71	1316.65	0.01	0.00	
7P	20	SLE Q	-4537.41	-1941.40	0.00	40.00	144.00	0.13	181.61	16.00	4.02	365.96	0.12	111.53	0.00	0.00	
7P	19	SLE F	-3877.85	-2122.62	0.00	40.00	101.73	0.13	151.26	16.00	16.09	1023.69	3.49	586.78	0.00	0.00	
9P	20	SLE Q	-165.69	0.00	-2519.00	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	443.08	1613.58	0.09	0.03	
9P	19	SLE F	624.92	0.00	-2657.68	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	479.48	1635.06	0.09	0.03	
10P	20	SLE Q	-4756.90	0.00	-553.42	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	34.01	862.28	0.01	0.00	
10P	19	SLE F	-4346.87	0.00	-581.41	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	43.13	973.45	0.01	0.00	
13P	20	SLE Q	-5424.17	0.00	-2518.89	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	365.58	1454.68	0.07	0.02	
13P	19	SLE F	-5314.95	0.00	-2652.67	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	390.74	1466.67	0.08	0.03	
14P	20	SLE Q	-7986.09	0.00	-485.61	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	1.44	81.15	0.00	0.00	
14P	19	SLE F	-8108.74	0.00	-508.39	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	2.66	135.09	0.00	0.00	
17P	20	SLE Q	-2671.24	0.00	-2025.95	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	318.69	1520.34	0.06	0.02	
17P	19	SLE F	-2834.37	0.00	-2097.71	40.00	187.00	0.13	198.51	16.00	34.18	3465.57	328.97	1517.82	0.06	0.02	

**Stato limite ultimo - Armatura a taglio**

Liv.	Pos.	CC	TCC	T <sub>1</sub> <daN>	V <sub>sdu</sub> <daN>	ctgθ	VR <sub>sdu</sub> <daN>	VR <sub>cd</sub> <daN>	V <sub>Rd,s</sub> <daN>	V <sub>dd</sub> <daN>	V <sub>fd</sub> <daN>	Sic.T
2P	1	SLV	-58295.90	87443.90	1.69	111179.00	145856.00					1.27
3P	1	SLV	-58607.60	87911.50	1.69	111179.00	145856.00					1.26
4P	1	SLV	-56353.70	84530.50	1.69	111472.00	145856.00					1.32
5P	9	SLV	40226.80	60340.10	1.69	111758.00	145856.00					1.85
6P	9	SLV	42030.40	63045.70	1.69	111758.00	145856.00					1.77
7P	9	SLV	41817.40	62726.10	1.69	111472.00	145856.00					1.78
8P	9	SLV	41791.20	62686.90	1.69	111179.00	145856.00					1.77
9P	9	SLV	36562.30	54843.40	1.69	111179.00	145856.00					2.03
10P	9	SLV	36709.40	55064.10	1.69	111179.00	145856.00					2.02
11P	9	SLV	36675.50	55013.30	1.69	111179.00	145856.00					2.02
12P	9	SLV	36255.60	54383.40	1.69	111179.00	145856.00					2.04
13P	13	SLV	19025.90	28538.90	1.69	111179.00	145856.00					3.90
14P	13	SLV	19010.70	28516.10	1.69	111179.00	145856.00					3.90
15P	13	SLV	18602.50	27903.80	1.69	111179.00	145856.00					3.98
16P	13	SLV	19705.80	29558.70	1.70	111412.00	146601.00					3.77
17T	13	SLV	3495.38	5243.07	1.69	110621.00	145901.00					21.10



## Numero del nucleo n. 950

Nodi: 20 -2031 16

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess. <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
30.00	4.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N <daN>	N ver. <daN>	Mz <daNm>	Mz ver. <daNm>	My <daNm>	Nu <daN>	MRdy, r <daNm>	MRdz, r <daNm>	Sic.
1	P	9	SLV	-145356.00	-145356.00	0.00	0.00	6266.92	-365449.00	34998.00	81.68	2.514
2	P	9	SLV	-144107.00	-144107.00	0.00	0.00	3281.03	-365449.00	34917.60	81.07	2.536
3	P	9	SLV	-142858.00	-142858.00	0.00	0.00	429.71	-365449.00	34837.30	80.47	2.558
4	P	9	SLV	-124131.00	-124131.00	0.00	0.00	779.04	-365449.00	33626.40	71.34	2.944
5	P	9	SLV	-123028.00	-123028.00	0.00	0.00	168.09	-365449.00	33551.40	70.67	2.970
6	P	9	SLV	-121925.00	-121925.00	0.00	0.00	128.05	-365449.00	33476.40	70.00	2.997
7	P	5	SLV	-90513.20	-90513.20	68249.00	68249.00	0.00	-90513.20	37.72	195275.00	2.861
8	P	5	SLV	-62862.20	-62862.20	84110.50	84110.50	0.00	-62862.20	40.73	185940.00	2.211
9	P	5	SLV	-61759.10	-61759.10	70583.70	70583.70	0.00	-61759.10	40.86	185562.00	2.629
10	P	5	SLV	-60656.10	-60656.10	57859.60	57859.60	0.00	-60656.10	40.98	185183.00	3.201
11	P	5	SLV	-59553.00	-59553.00	46811.90	46811.90	0.00	-59553.00	41.11	184804.00	3.948
12	P	1	SLV	-33638.80	-33638.80	0.00	0.00	-5045.50	-33638.80	-27382.20	-155.90	5.427
13	P	9	SLV	-52870.60	-52870.60	0.00	0.00	2489.72	-365449.00	28738.70	29.03	6.912
14	P	9	SLV	-51767.50	-51767.50	0.00	0.00	163.55	-365449.00	28660.90	28.30	7.059
15	P	9	SLV	-50664.50	-50664.50	0.00	0.00	1863.26	-365449.00	28583.10	27.57	7.213
16	P	1	SLV	-7577.64	-7577.64	0.00	0.00	-5408.24	-7577.64	-25542.40	-159.14	4.723
17	P	5	SLV	-6376.62	-6376.62	-19494.50	-19494.50	0.00	-6376.62	-21.30	-166123.00	8.522
18	P	5	SLV	-5273.56	-5273.56	-12655.00	-12655.00	0.00	-5273.56	-21.37	-165699.00	13.094
19	T	1	SLV	-3165.39	-3165.39	0.00	0.00	6744.79	-3165.39	25224.80	-2.84	3.740

## Stato limite d'esercizio - Verifiche tensionali

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	σc <daN/cmq>	σf <daN/cmq>
1	P	18	SLE R	-151864.00	0.00	6403.39	40.20	515.99
1	P	20	SLE Q	-132029.00	0.00	5745.95	35.45	453.61
2	P	18	SLE R	-150615.00	0.00	3392.10	31.66	428.85
2	P	20	SLE Q	-130780.00	0.00	3042.70	27.76	375.10
3	T	18	SLE R	-148118.00	-21882.30	0.00	32.07	472.95
3	T	20	SLE Q	-128283.00	-18651.50	0.00	27.64	407.63
4	P	18	SLE R	-125392.00	-28908.00	0.00	31.98	469.04
4	P	20	SLE Q	-108567.00	-24507.70	0.00	27.45	402.65
5	P	18	SLE R	-124289.00	-12564.90	0.00	24.21	358.53
5	P	20	SLE Q	-107464.00	-10927.20	0.00	20.96	310.42
6	P	18	SLE R	-123186.00	3778.15	0.00	19.94	297.72
6	P	20	SLE Q	-106361.00	2653.39	0.00	16.93	253.03
7	P	18	SLE R	-122083.00	20121.20	0.00	27.38	403.30
7	P	20	SLE Q	-105258.00	16234.00	0.00	23.09	340.35
8	P	18	SLE R	-88608.00	9801.31	0.00	17.64	260.97
8	P	20	SLE Q	-76935.80	8175.76	0.00	15.16	224.38
9	P	18	SLE R	-87504.90	12625.20	0.00	18.79	277.19
9	P	20	SLE Q	-75832.70	10449.20	0.00	16.06	236.97
10	P	18	SLE R	-86401.80	15449.10	0.00	19.94	293.41
10	P	20	SLE Q	-74729.60	12722.60	0.00	16.95	249.55
11	P	18	SLE R	-85298.80	18273.10	0.00	21.09	309.64
11	P	20	SLE Q	-73626.60	14996.00	0.00	17.85	262.13
12	P	18	SLE R	-50219.40	-5595.29	0.00	10.02	148.29
12	P	20	SLE Q	-43806.20	-4724.28	0.00	8.67	128.32
13	P	18	SLE R	-49116.30	-912.81	0.00	7.68	114.89
13	P	20	SLE Q	-42703.20	-903.63	0.00	6.73	100.61
14	P	18	SLE R	-48013.30	3769.62	0.00	8.84	131.22
14	P	20	SLE Q	-41600.10	2916.99	0.00	7.50	111.39
15	P	18	SLE R	-46910.20	8452.06	0.00	10.86	159.73
15	P	20	SLE Q	-40497.00	6737.61	0.00	9.11	134.20
16	P	18	SLE R	-13904.90	-11653.30	0.00	9.02	128.49
16	P	20	SLE Q	-12660.00	-9411.92	0.00	7.29	104.30
17	P	18	SLE R	-12801.80	-8257.37	0.00	6.43	92.31
17	P	20	SLE Q	-11556.90	-6599.55	0.00	5.18	74.68
18	P	18	SLE R	-11698.80	-4861.48	0.00	4.06	58.97
18	P	20	SLE Q	-10453.80	-3787.25	0.00	3.32	48.38
19	T	18	SLE R	-9492.65	0.00	1176.02	5.35	57.67



19	T	20	SLE Q	-8247.71	0.00	926.11	4.24	46.79
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## Stato limite d'esercizio - Verifiche a fessurazione

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
16	P	20	SLE Q	-12660.00	-9411.92	0.00	40.00	96.62	0.13	155.89	18.00	35.63	2239.17	76.97	1042.93	0.01	0.00
16	P	19	SLE F	-13015.70	-10052.30	0.00	40.00	96.62	0.13	155.89	18.00	35.63	2239.17	87.02	1074.12	0.02	0.00
17	P	20	SLE Q	-11556.90	-6599.55	0.00	40.00	96.62	0.13	157.15	18.00	30.54	1961.97	32.62	812.91	0.01	0.00
17	P	19	SLE F	-11912.60	-7073.21	0.00	40.00	96.62	0.13	157.15	18.00	30.54	1961.97	38.20	847.68	0.01	0.00
18	P	20	SLE Q	-10453.80	-3787.25	0.00	40.00	202.00	0.13	206.55	18.00	5.09	487.17	2.26	350.96	0.00	0.00
18	P	19	SLE F	-10809.50	-4094.17	0.00	40.00	96.62	0.13	167.70	18.00	10.18	773.30	3.85	423.59	0.00	0.00
19	T	20	SLE Q	-8247.71	0.00	926.11	40.00	194.67	0.13	187.30	18.00	40.72	3092.93	22.58	568.22	0.00	0.00
19	T	19	SLE F	-8603.41	0.00	997.52	40.00	194.67	0.13	187.30	18.00	40.72	3092.93	26.27	596.81	0.01	0.00

## Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	TCC	T <sub>1</sub> <daN>	V <sub>sd</sub> <daN>	ctgθ	VR <sub>sd</sub> <daN>	VR <sub>cd</sub> <daN>	V <sub>Rd,s</sub> <daN>	V <sub>dd</sub> <daN>	V <sub>fd</sub> <daN>	Sic.T
1	P	5	SLV	-21464.10	32196.20	2.41	93078.20	52630.50	151810.00	79659.90	72150.10	1.63
2	P	5	SLV	-21464.10	32196.20	2.41	92928.40	52593.20				1.63
3	T	5	SLV	-21464.10	32196.20	2.41	92628.70	52518.40	151237.00	79659.90	71577.00	1.63
4	P	5	SLV	46359.10	69538.70	2.38	90807.60	129679.00				1.31
5	P	5	SLV	46359.10	69538.70	2.37	90675.20	129595.00				1.30
6	P	5	SLV	46359.10	69538.70	2.37	90542.90	129511.00				1.30
7	P	5	SLV	46359.10	69538.70	2.37	90410.50	129428.00				1.30
8	P	13	SLV	23915.00	35872.40	2.34	87375.40	127493.00				2.44
9	P	13	SLV	23915.00	35872.40	2.33	87243.00	127408.00				2.43
10	P	13	SLV	23915.00	35872.40	2.33	87110.70	127323.00				2.43
11	P	13	SLV	23915.00	35872.40	2.33	86978.30	127238.00				2.42
12	P	13	SLV	16200.10	24300.20	2.29	83817.80	125188.00				3.45
13	P	13	SLV	16200.10	24300.20	2.29	84397.60	125101.00				3.47
14	P	13	SLV	16200.10	24300.20	2.29	84265.20	125015.00				3.47
15	P	13	SLV	16200.10	24300.20	2.29	84132.80	124928.00				3.46
16	P	5	SLV	9078.46	13617.70	2.25	81158.60	122963.00				5.96
17	P	5	SLV	9078.46	13617.70	2.25	81026.20	122875.00				5.95
18	P	5	SLV	9078.46	13617.70	2.25	80893.90	122787.00				5.94
19	T	5	SLV	9078.46	13617.70	2.25	80629.10	122610.00				5.92

## Numero del nucleo n. 951

Nodi: -2131 15 -2130 19

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess.	Cf	Cls	F <sub>ck</sub> <daN/cmq>	F <sub>ctk</sub> <daN/cmq>	F <sub>cd</sub> <daN/cmq>	F <sub>ctd</sub> <daN/cmq>	TP	F <sub>yk</sub> <daN/cmq>	F <sub>yd</sub> <daN/cmq>
30.00	4.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N <daN>	N ver. <daN>	Mz <daNm>	Mz ver. <daNm>	My <daNm>	Nu <daN>	MR <sub>dy,r</sub> <daNm>	MR <sub>dz,r</sub> <daNm>	Sic.
1	P	13	SLV	-126563.00	-126563.00	0.00	0.00	-6275.63	-365449.00	-33790.40	6.93	2.887
2	P	13	SLV	-125314.00	-125314.00	0.00	0.00	-3561.47	-365449.00	-33706.90	6.28	2.916
3	P	13	SLV	-124066.00	-124066.00	0.00	0.00	-686.45	-365449.00	-33622.00	5.57	2.946
4	P	13	SLV	-106722.00	-106722.00	0.00	0.00	2038.26	-365449.00	32443.30	-102.22	3.424
5	P	13	SLV	-105619.00	-105619.00	0.00	0.00	1231.00	-365449.00	32368.40	-102.57	3.460
6	P	13	SLV	-104516.00	-104516.00	0.00	0.00	836.10	-365449.00	32293.50	-102.92	3.497
7	P	13	SLV	-87796.60	-87796.60	63660.20	63660.20	0.00	-87796.60	0.00	194411.00	3.054
8	P	13	SLV	-62095.00	-62095.00	76859.00	76859.00	0.00	-62095.00	0.00	185710.00	2.416
9	P	13	SLV	-60992.00	-60992.00	64808.60	64808.60	0.00	-60992.00	0.00	185332.00	2.860
10	P	13	SLV	-59888.90	-59888.90	53363.50	53363.50	0.00	-59888.90	0.00	184953.00	3.466
11	P	13	SLV	-58785.80	-58785.80	43337.60	43337.60	0.00	-58785.80	0.00	184574.00	4.259
12	P	5	SLV	-34160.20	-34160.20	-24987.30	-24987.30	0.00	-34160.20	12.47	-176204.00	7.052
13	P	5	SLV	-49268.80	-49268.80	0.00	0.00	454.88	-365449.00	28484.70	-121.29	7.417
14	P	5	SLV	-48165.80	-48165.80	0.00	0.00	211.35	-365449.00	28406.90	-121.69	7.587
15	P	5	SLV	-47062.70	-47062.70	0.00	0.00	551.31	-365449.00	28329.10	-122.09	7.765
16	P	13	SLV	-6106.64	-6106.64	-26637.10	-26637.10	0.00	-6106.64	13.51	-166178.00	6.239
17	P	13	SLV	-5003.58	-5003.58	-19396.70	-19396.70	0.00	-5003.58	13.56	-165755.00	8.546
18	P	13	SLV	-3900.51	-3900.51	-12475.50	-12475.50	0.00	-3900.51	13.61	-165331.00	13.252
19	T	9	SLV	-1944.56	-1944.56	0.00	0.00	-6270.60	-1944.56	-25136.80	-64.38	4.009

## Stato limite d'esercizio - Verifiche tensionali

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	σ <sub>c</sub> <daN/cmq>	σ <sub>f</sub> <daN/cmq>
1	P	18	SLE R	-135221.00	0.00	-7576.42	41.02	512.13



1P	20	SLE Q	-118876.00	0.00	-6702.17	36.18	451.42
2P	18	SLE R	-133972.00	0.00	-4223.94	31.51	415.29
2P	20	SLE Q	-117627.00	0.00	-3739.58	27.75	365.49
3T	18	SLE R	-131475.00	-19671.10	0.00	28.58	421.43
3T	20	SLE Q	-115130.00	-16774.60	0.00	24.82	366.06
4P	18	SLE R	-112970.00	-27810.60	0.00	29.63	434.21
4P	20	SLE Q	-98844.30	-23805.90	0.00	25.68	376.44
5P	18	SLE R	-111867.00	-11617.00	0.00	21.94	324.74
5P	20	SLE Q	-97741.20	-10251.00	0.00	19.21	284.40
6P	18	SLE R	-110764.00	4576.78	0.00	18.48	275.45
6P	20	SLE Q	-96638.20	0.00	550.92	15.81	229.63
7P	18	SLE R	-109660.00	20770.70	0.00	25.84	380.00
7P	20	SLE Q	-95535.10	16859.20	0.00	21.94	322.88
8P	18	SLE R	-80168.60	11723.60	0.00	17.28	254.94
8P	20	SLE Q	-70099.70	9433.63	0.00	14.73	217.51
9P	18	SLE R	-79065.50	13588.30	0.00	17.99	264.81
9P	20	SLE Q	-68996.60	10976.80	0.00	15.29	225.27
10P	18	SLE R	-77962.50	15452.90	0.00	18.69	274.69
10P	20	SLE Q	-67893.50	12519.90	0.00	15.84	233.02
11P	18	SLE R	-76859.40	17317.70	0.00	19.40	284.57
11P	20	SLE Q	-66790.50	14063.10	0.00	16.40	240.78
12P	18	SLE R	-48129.40	-2982.90	0.00	8.50	126.39
12P	20	SLE Q	-42149.60	-2576.39	0.00	7.43	110.45
13P	18	SLE R	-47026.40	222.90	0.00	7.04	105.58
13P	20	SLE Q	-41046.50	0.00	-18.96	6.12	91.51
14P	18	SLE R	-45923.30	3428.64	0.00	8.37	124.32
14P	20	SLE Q	-39943.50	2703.90	0.00	7.15	106.29
15P	18	SLE R	-44820.30	6634.33	0.00	9.70	143.06
15P	20	SLE Q	-38840.40	5343.98	0.00	8.22	121.29
16P	18	SLE R	-16368.20	-12548.40	0.00	9.71	138.79
16P	20	SLE Q	-14487.40	-10237.50	0.00	7.94	113.70
17P	18	SLE R	-15265.20	-8668.25	0.00	6.80	98.12
17P	20	SLE Q	-13384.30	-7010.24	0.00	5.56	80.31
18P	18	SLE R	-14162.10	-4788.32	0.00	4.32	63.09
18P	20	SLE Q	-12281.30	-3783.11	0.00	3.58	52.23
19T	18	SLE R	-11956.00	2971.02	0.00	3.15	46.10
19T	20	SLE Q	-10075.10	2670.73	0.00	2.73	39.95

Stato limite d'esercizio - Verifiche a fessurazione

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K3	s <sub>zm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
16P	20	SLE Q		-14487.40	-10237.50	0.00	40.00	96.63	0.13	155.89	18.00	35.63	2239.17	77.13	1000.18	0.01	0.00
16P	19	SLE F		-15024.80	-10897.80	0.00	40.00	96.63	0.13	155.89	18.00	35.63	2239.17	85.67	1022.21	0.02	0.00
17P	20	SLE Q		-13384.30	-7010.24	0.00	40.00	96.63	0.13	157.87	18.00	25.45	1655.17	27.81	736.29	0.01	0.00
17P	19	SLE F		-13921.70	-7483.96	0.00	40.00	96.63	0.13	157.87	18.00	25.45	1655.17	31.83	759.32	0.01	0.00

Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	TCC	T <sub>1</sub> <daN>	V <sub>sd</sub> <daN>	ctgθ	VR <sub>sd</sub> <daN>	VR <sub>cd</sub> <daN>	V <sub>Rd,s</sub> <daN>	V <sub>dd</sub> <daN>	V <sub>fd</sub> <daN>	Sic.T
1P	5	SLV		-20910.40	31365.70	2.40	92134.90	52395.10	150397.00	79659.90	70737.40	1.67
2P	5	SLV		-20910.40	31365.70	2.40	92369.40	52357.60				1.67
3T	5	SLV		-20910.50	31365.70	2.39	92442.00	52282.60	149842.00	79659.90	70182.50	1.67
4P	13	SLV		42830.10	64245.10	2.37	90481.60	129473.00				1.41
5P	13	SLV		42830.10	64245.10	2.37	90349.20	129389.00				1.41
6P	13	SLV		42830.10	64245.10	2.37	90216.90	129305.00				1.40
7P	13	SLV		42830.10	64245.10	2.37	90084.50	129221.00				1.40
8P	5	SLV		20135.00	30202.50	2.33	86999.70	127252.00				2.88
9P	5	SLV		20135.00	30202.50	2.33	86867.30	127167.00				2.88
10P	5	SLV		20135.00	30202.50	2.33	86735.00	127081.00				2.87
11P	5	SLV		20135.00	30202.50	2.33	86602.60	126996.00				2.87
12P	5	SLV		11382.50	17073.70	2.29	84360.30	125077.00				4.94
13P	5	SLV		11382.50	17073.70	2.29	84227.90	124990.00				4.93
14P	5	SLV		11382.50	17073.70	2.29	84095.50	124904.00				4.93
15P	5	SLV		11382.50	17073.70	2.29	83963.20	124817.00				4.92
16P	13	SLV		9602.72	14404.10	2.25	80993.80	122854.00				5.62
17P	13	SLV		9602.72	14404.10	2.25	80861.50	122765.00				5.61
18P	13	SLV		9602.72	14404.10	2.25	80729.10	122677.00				5.60
19T	13	SLV		9602.72	14404.10	2.24	80464.40	122500.00				5.59



## Numero del nucleo n. 960

Nodi: -517 -516 -515 -514

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
24.00	4.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N	N ver.	Mz	Mz ver.	My	Nu	MRdy,r	MRdz,r	Sic.
				<daN>	<daN>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1	P	17	SLU	-61006.30	-61006.30	0.00	0.00	11155.00	-61006.30	21016.70	-61.99	1.884
2	T	5	SLV	-17232.90	-17232.90	0.00	0.00	-5894.12	-17232.90	-18777.90	-29.08	3.186
3	T	13	SLV	-9133.04	-9133.04	0.00	0.00	-8689.86	-9133.04	-18359.20	-31.49	2.113
4	P	13	SLV	-11935.60	-11935.60	0.00	0.00	-9540.20	-11935.60	-18504.10	-30.66	1.940
5	P	13	SLV	-75143.10	-75143.10	0.00	0.00	-1459.91	-369795.00	-21713.50	-12.80	4.921

## Stato limite d'esercizio - Verifiche tensionali

Liv.	Pos.	CC	TCC	N	Mz	My	$\sigma_c$	$\sigma_f$
				<daN>	<daNm>	<daNm>	<daN/cmq>	<daN/cmq>
1	P	18	SLE R	-44190.90	0.00	8050.03	50.63	730.43
1	P	20	SLE Q	-40029.10	0.00	7078.34	44.51	628.53
2	T	18	SLE R	-31758.50	0.00	-3954.46	24.71	247.48
2	T	20	SLE Q	-28601.50	0.00	-3493.44	21.82	213.03
3	P	18	SLE R	-27477.20	0.00	-3618.51	22.64	243.00
3	P	20	SLE Q	-24716.80	0.00	-3210.75	20.08	212.07
4	T	18	SLE R	-32493.40	0.00	1839.24	11.88	133.61
4	T	20	SLE Q	-28602.20	0.00	1495.03	9.87	112.93
5	P	18	SLE R	-39274.10	0.00	895.20	9.09	116.28
5	P	20	SLE Q	-34668.20	0.00	732.25	7.81	100.75

## Stato limite d'esercizio - Verifiche a fessurazione

Liv.	Pos.	CC	TCC	N	Mz	My	c	s	K3	$s_{rm}$	$\Phi$	$A_s$	$A_s^{eff}$	$\sigma_s$	$\sigma_{sr}$	$\epsilon_{sm}$	Wk
				<daN>	<daNm>	<daNm>	<mm>	<mm>		<mm>		<cmq>	<cmq>	<daN/cmq>	<daN/cmq>		<mm>
1	P	20	SLE Q	-40029.10	0.00	7078.34	40.00	200.00	0.13	209.09	18.00	38.17	3778.46	628.48	1067.34	0.12	0.04
1	P	19	SLE F	-41218.20	0.00	7355.97	40.00	200.00	0.13	209.09	18.00	38.17	3778.46	657.58	1071.71	0.13	0.05
2	T	20	SLE Q	-28601.50	0.00	-3493.44	40.00	200.00	0.13	209.04	18.00	38.17	3776.51	213.02	844.67	0.04	0.01
2	T	19	SLE F	-29503.50	0.00	-3625.16	40.00	200.00	0.13	209.04	18.00	38.17	3776.51	222.86	849.08	0.04	0.02
3	P	20	SLE Q	-24716.80	0.00	-3210.75	40.00	200.00	0.13	209.04	18.00	38.17	3776.51	212.07	888.75	0.04	0.01
3	P	19	SLE F	-25505.50	0.00	-3327.25	40.00	200.00	0.13	209.04	18.00	38.17	3776.51	220.90	891.66	0.04	0.02
4	T	20	SLE Q	-28602.20	-12862.10	0.00	40.00	142.02	0.13	203.46	18.00	5.09	537.49	1.59	112.63	0.00	0.00
4	T	19	SLE F	-29714.00	-13698.00	0.00	40.00	142.02	0.13	203.46	18.00	5.09	537.49	3.71	203.28	0.00	0.00

## Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	TCC	$T_1$	Vsdu	ctg $\theta$	VRsd	VRcd	V $_{Rd,s}$	V $_{dd}$	V $_{fd}$	Sic. T
				<daN>	<daN>		<daN>	<daN>	<daN>	<daN>	<daN>	
1	P	9	SLV	-15331.90	22997.90	1.53	133220.00	63202.70	120930.00	74681.10	46249.00	2.75
2	T	9	SLV	-17588.00	26382.10	1.51	131547.00	62541.30	124707.00	74681.10	50025.80	2.37
3	T	9	SLV	36280.90	54421.30	1.50	130582.00	62156.80	124214.00	74681.10	49532.80	1.14

## Numero del nucleo n. 961

Nodi: -514 -499 -469 -432

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
24.00	5.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N	N ver.	Mz	Mz ver.	My	Nu	MRdy,r	MRdz,r	Sic.
				<daN>	<daN>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1	P	17	SLU	-43005.60	-43005.60	0.00	0.00	7206.23	-43005.60	24622.60	134.38	3.417
2	T	17	SLU	-37572.30	-37572.30	56155.30	56155.30	0.00	-37572.30	0.45	257447.00	4.585
3	T	9	SLV	-18820.80	-18820.80	0.00	0.00	5399.94	-18820.80	23445.00	156.66	4.342
4	P	13	SLV	-26829.90	-26829.90	84470.90	84470.90	0.00	-26829.90	0.46	253204.00	2.998
5	P	1	SLV	-58587.40	-58587.40	0.00	0.00	-1178.75	-360313.00	-25380.20	218.13	6.150

## Stato limite d'esercizio - Verifiche tensionali

Liv.	Pos.	CC	TCC	N	Mz	My	$\sigma_c$	$\sigma_f$
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			<daN>	<daNm>	<daNm>	<daN/cmq>	<daN/cmq>
1P	18	SLE R	-31657.20	0.00	5281.42	30.92	358.29
1P	20	SLE Q	-28444.70	0.00	4572.25	26.78	301.17
2T	18	SLE R	-27882.90	39992.90	0.00	23.40	377.72
2T	20	SLE Q	-25454.20	34514.90	0.00	20.24	312.46
3P	18	SLE R	-30522.60	33820.80	0.00	19.99	287.13
3P	20	SLE Q	-27944.90	28979.80	0.00	17.18	247.12
4P	18	SLE R	-34164.70	37214.90	0.00	22.01	316.30
4P	20	SLE Q	-30875.50	31249.80	0.00	18.54	266.93
5P	18	SLE R	-35587.60	16712.00	0.00	11.27	164.84
5P	20	SLE Q	-31952.00	14140.80	0.00	9.76	142.94

## Stato limite d'esercizio - Verifiche a fessurazione

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K3	S <sub>sm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
1P	20	SLE Q		-28444.70	0.00	4572.25	42.00	198.36	0.13	191.98	18.00	50.89	3862.88	301.15	832.77	0.06	0.02
1P	19	SLE F		-29362.60	0.00	4774.87	42.00	198.36	0.13	191.98	18.00	50.89	3862.88	317.46	837.43	0.06	0.02
2T	20	SLE Q		-25454.20	34514.90	0.00	42.00	96.92	0.13	152.63	18.00	50.89	2784.76	312.40	1186.00	0.06	0.02
2T	19	SLE F		-26148.10	36080.00	0.00	42.00	96.92	0.13	152.63	18.00	50.89	2784.76	331.02	1193.78	0.06	0.02
3P	20	SLE Q		-27944.90	28979.80	0.00	42.00	96.92	0.13	148.75	18.00	45.80	2308.69	202.56	1046.35	0.04	0.01
3P	19	SLE F		-28681.30	30363.00	0.00	42.00	96.92	0.13	152.63	18.00	50.89	2784.76	217.34	1058.45	0.04	0.01
4P	20	SLE Q		-30875.50	31249.80	0.00	42.00	96.92	0.13	148.75	18.00	45.80	2308.69	212.18	1031.77	0.04	0.01
4P	19	SLE F		-31815.30	32954.10	0.00	42.00	96.92	0.13	148.75	18.00	45.80	2308.69	230.02	1045.64	0.04	0.01
5P	20	SLE Q		-31952.00	14140.80	0.00	42.00	138.00	0.13	183.96	18.00	5.09	409.20	6.42	364.43	0.00	0.00
5P	19	SLE F		-32990.80	14875.40	0.00	42.00	96.92	0.13	159.96	18.00	10.18	639.85	8.39	396.88	0.00	0.00

## Numero del nucleo n. 962

Nodi: -432 -433 -434 -435

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess. <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
24.00	4.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N <daN>	N ver. <daN>	Mz <daNm>	Mz ver. <daNm>	My <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
1P	5	SLV		-68125.60	-68125.60	0.00	0.00	2656.87	-369795.00	23343.20	-97.66	5.428
2P	5	SLV		-83095.00	-83095.00	0.00	0.00	431.36	-369795.00	24084.70	-100.11	4.450
3T	13	SLV		-56334.70	-56334.70	0.00	0.00	9927.37	-56334.70	22758.80	-95.78	2.293
4P	13	SLV		-40806.60	-40806.60	0.00	0.00	10660.50	-40806.60	21988.20	-93.38	2.063
5P	5	SLV		-86883.00	-86883.00	0.00	0.00	1311.83	-369795.00	24272.20	-100.75	4.256

## Stato limite d'esercizio - Verifiche tensionali

Liv.	Pos.	CC	TCC	N <daN>	Mz <daNm>	My <daNm>	σ <sub>c</sub> <daN/cmq>	σ <sub>f</sub> <daN/cmq>
1P	18	SLE R		-71210.90	13225.50	0.00	14.97	221.56
1P	20	SLE Q		-62623.50	12435.90	0.00	13.45	198.93
2T	18	SLE R		-81362.40	0.00	1400.85	16.79	221.06
2T	18	SLE R		-81362.40	9227.11	0.00	15.02	223.31
2T	20	SLE Q		-70986.40	0.00	1237.00	14.70	193.34
3T	18	SLE R		-81993.10	0.00	1707.25	17.98	232.17
3T	20	SLE Q		-71369.50	0.00	1390.56	15.30	199.05
4P	18	SLE R		-70594.90	0.00	2134.48	17.86	221.03
4P	20	SLE Q		-61813.60	0.00	1754.79	15.23	189.90
5P	18	SLE R		-49782.20	0.00	-1518.98	12.64	156.32
5P	18	SLE R		-49782.20	9718.73	0.00	10.63	157.29
5P	20	SLE Q		-44920.70	0.00	-1232.99	10.92	136.67

## Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	TCC	T <sub>1</sub> <daN>	V <sub>sd</sub> <daN>	ctgθ	VR <sub>sd</sub> <daN>	VR <sub>cd</sub> <daN>	V <sub>rd,s</sub> <daN>	V <sub>dd</sub> <daN>	V <sub>fd</sub> <daN>	Sic. T
1P	1	SLV		13561.90	20342.90	1.76	119514.00	60825.10	146078.00	84638.60	61439.20	2.99
2T	1	SLV		17787.80	26681.70	1.77	120237.00	61070.80	147231.00	84638.60	62591.90	2.29
3T	9	SLV		-39920.20	59880.40	1.76	119695.00	60886.70	146322.00	84638.60	61682.90	1.02



## Verifiche e armature solette/platee

## Simbologia

Nodo	= Numero del nodo
X	= Coordinata X del nodo
Y	= Coordinata Y del nodo
DV	= Direzione di verifica XX = Verifica per momento Mxx YY = Verifica per momento Myy
CC	= Numero della combinazione delle condizioni di carico elementari
TCC	= Tipo di combinazione di carico SLU = Stato limite ultimo SLU S = Stato limite ultimo (azione sismica) SLE R = Stato limite d'esercizio, combinazione rara SLE F = Stato limite d'esercizio, combinazione frequente SLE Q = Stato limite d'esercizio, combinazione quasi permanente SLD = Stato limite di danno SLV = Stato limite di salvaguardia della vita SLC = Stato limite di prevenzione del collasso SLO = Stato limite di operatività SLU I = Stato limite di resistenza al fuoco SND = Stato limite di salvaguardia della vita (non dissipativo)
c	= Ricoprimento dell'armatura
s	= Distanza minima tra le barre
K3	= Coefficiente di forma del diagramma delle tensioni prima della fessurazione
s <sub>zm</sub>	= Distanza media tra le fessure
Φ	= Diametro della barra
A <sub>s</sub>	= Area complessiva dei ferri nell'area di calcestruzzo efficace
A <sub>c eff</sub>	= Area di calcestruzzo efficace
σ <sub>s</sub>	= Tensione nell'acciaio nella sezione fessurata
σ <sub>sr</sub>	= Tensione nell'acciaio corrispondente al raggiungimento della resistenza a trazione nel calcestruzzo
ε <sub>sm</sub>	= Deformazione unitaria media dell'armatura (*1000)
Wk	= Apertura delle fessure
AfE S	= Area di ferro effettiva totale presente nel punto di verifica, superiore
AfE I	= Area di ferro effettiva totale presente nel punto di verifica, inferiore
My	= Momento flettente intorno all'asse Y
M'ydy	= Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
MRdy	= Momento resistente allo stato limite ultimo intorno all'asse Y
Sic.	= Sicurezza a rottura
Vsdu	= Taglio agente nella direzione del momento ultimo
Vrdu	= Taglio ultimo assorbibile dal solo calcestruzzo
Mom	= Momento flettente
σ <sub>c</sub>	= Tensione nel calcestruzzo
σ <sub>s</sub>	= Tensione nel ferro
Pil	= Numero del pilastro
P <sub>sd</sub>	= Sollecitazione di punzonamento
Pv	= Perimetro di verifica per punzonamento
Ab	= Area di base della superficie di punzonamento
σ <sub>t</sub>	= Tensione sul terreno
Af punz.	= Area di ferro resistente a punzonamento
P <sub>rd</sub>	= Resistenza al punzonamento
Spess.	= Spessore
Cf sup	= Copriferro superiore
Cf inf	= Copriferro inferiore
Cls	= Tipo di calcestruzzo
Fck	= Resistenza caratteristica cilindrica a compressione del calcestruzzo
Fctk	= Resistenza caratteristica a trazione del calcestruzzo
Fcd	= Resistenza di calcolo a compressione del calcestruzzo
Fctd	= Resistenza di calcolo a trazione del calcestruzzo
Tp	= Tipo di acciaio
Fyk	= Tensione caratteristica di snervamento dell'acciaio
Fyd	= Resistenza di calcolo dell'acciaio

## Armatura platea a quota 0.00

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess.	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
40.00	4.00	4.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Nodo	X	Y	DV	CC	TCC	AfE S	AfE I	My	MRdy	Sic.
	<m>	<m>				<cmq>	<cmq>	<daNm>	<daNm>	
4	14.37	-0.45	XX	17	SLU	6.16	7.70	10033.60	10765.90	1.073
18	23.11	10.31	XX	17	SLU	13.85	7.70	9848.30	10815.60	1.098
17	19.00	10.31	XX	17	SLU	13.85	15.39	16659.70	20534.50	1.233
-2031	14.37	9.36	XX	17	SLU	6.16	15.39	13105.40	20541.10	1.567
-668	3.35	11.79	XX	17	SLU	6.16	15.39	245.43	20541.10	83.694
14	4.40	10.31	XX	17	SLU	13.85	15.39	17316.90	20534.50	1.186
15	9.29	10.31	XX	17	SLU	6.16	15.39	12706.00	20541.10	1.617
-526	3.39	9.06	XX	17	SLU	6.16	15.39	-1644.53	-8874.79	5.397
-520	5.11	9.01	XX	21	SLU	13.85	15.39	-138.45	-18593.40	>100



-272	5.28	3.21	XX	17	SLU	13.85	7.70	318.85	10815.60	33.920
-546	0.78	9.47	XX	17	SLU	13.85	7.70	323.74	10815.60	33.408
8	4.40	4.59	XX	17	SLU	13.85	15.39	15491.30	20534.50	1.326
-292	3.31	3.47	XX	17	SLU	13.85	15.39	27.86	20534.50	>100
-587	8.29	9.97	XX	17	SLU	6.16	15.39	-1951.17	-8874.79	4.548
10	14.37	4.59	XX	17	SLU	6.16	15.39	18292.90	20541.10	1.123
-528	18.03	9.08	XX	17	SLU	6.16	15.39	-2623.16	-8874.79	3.383
-530	19.78	9.09	XX	17	SLU	13.85	15.39	317.94	20534.50	64.586
-482	22.75	8.05	XX	17	SLU	13.85	7.70	-1829.89	-18594.30	10.161
11	19.00	4.59	XX	17	SLU	13.85	15.39	16170.40	20534.50	1.270
-324	17.96	4.20	XX	17	SLU	13.85	15.39	-2808.20	-18593.40	6.621
-271	18.99	3.19	XX	17	SLU	13.85	7.70	4406.47	10815.60	2.454
12	23.11	4.59	XX	17	SLU	13.85	7.70	10063.80	10815.60	1.075
-295	22.33	3.54	XX	17	SLU	13.85	7.70	-640.34	-18594.30	29.038
-482	22.75	8.05	YY	17	SLU	13.85	7.70	-6227.11	-18594.30	2.986
4	14.37	-0.45	YY	17	SLU	6.16	7.70	9871.88	10765.90	1.091
-679	13.97	11.79	YY	17	SLU	6.16	15.39	-2088.34	-8874.79	4.250
-269	21.87	3.11	YY	17	SLU	13.85	7.70	-1831.65	-18594.30	10.152
15	9.29	10.31	YY	17	SLU	6.16	15.39	8691.31	20541.10	2.363
-470	7.76	7.94	YY	17	SLU	6.16	15.39	-4147.81	-8874.79	2.140
-520	5.11	9.01	YY	17	SLU	13.85	15.39	-4811.59	-18593.40	3.864
-513	6.10	8.92	YY	17	SLU	13.85	7.70	-3948.72	-18594.30	4.709
-396	5.10	5.93	YY	17	SLU	13.85	7.70	-989.41	-18594.30	18.793
-510	0.37	8.89	YY	17	SLU	13.85	7.70	-4658.91	-18594.30	3.991
8	4.40	4.59	YY	17	SLU	13.85	15.39	19543.60	20534.50	1.051
10	14.37	4.59	YY	17	SLU	6.16	15.39	17237.20	20541.10	1.192
16	14.37	10.31	YY	17	SLU	6.16	15.39	10171.10	20541.10	2.020
-275	14.98	3.27	YY	17	SLU	6.16	15.39	-3188.99	-8874.79	2.783
-512	18.91	8.91	YY	17	SLU	13.85	15.39	-5927.64	-18593.40	3.137
-281	18.12	3.37	YY	17	SLU	13.85	15.39	133.98	20534.50	>100
-271	18.99	3.19	YY	17	SLU	13.85	7.70	-2789.51	-18594.30	6.666

## Stato limite elastico - Verifiche a flessione/pressoflessione

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
4	14.37	-0.45	XX	9	SLV (E)	6.16	7.70	7417.09	10042.10	1.354
-509	7.01	8.86	XX	13	SLV (E)	6.16	7.70	-6473.65	-8086.69	1.249
18	23.11	10.31	XX	5	SLV (E)	13.85	7.70	8081.67	10031.50	1.241
17	19.00	10.31	XX	5	SLV (E)	13.85	15.39	11968.70	19606.70	1.638
-2031	14.37	9.36	XX	9	SLV (E)	6.16	15.39	9965.26	19545.30	1.961
-668	3.35	11.79	XX	13	SLV (E)	6.16	15.39	210.48	19545.30	92.859
14	4.40	10.31	XX	13	SLV (E)	13.85	15.39	12009.10	19606.70	1.633
15	9.29	10.31	XX	1	SLV (E)	6.16	15.39	9314.02	19545.30	2.098
-526	3.39	9.06	XX	1	SLV (E)	6.16	15.39	-1420.44	-8072.03	5.683
-520	5.11	9.01	XX	1	SLV (E)	13.85	15.39	-403.41	-17723.30	43.934
-272	5.28	3.21	XX	13	SLV (E)	13.85	7.70	353.65	10031.50	28.365
13	0.00	10.31	XX	9	SLV (E)	13.85	7.70	9383.70	10031.50	1.069
-546	0.78	9.47	XX	9	SLV (E)	13.85	7.70	266.14	10031.50	37.693
8	4.40	4.59	XX	9	SLV (E)	13.85	15.39	10873.20	19606.70	1.803
-292	3.31	3.47	XX	9	SLV (E)	13.85	15.39	209.28	19606.70	93.686
-363	7.07	5.13	XX	1	SLV (E)	6.16	15.39	-6975.82	-8072.03	1.157
7	0.00	4.59	XX	9	SLV (E)	13.85	7.70	8941.68	10031.50	1.122
-587	8.29	9.97	XX	13	SLV (E)	6.16	15.39	-1561.57	-8072.03	5.169
10	14.37	4.59	XX	13	SLV (E)	6.16	15.39	13741.10	19545.30	1.422
-528	18.03	9.08	XX	9	SLV (E)	6.16	15.39	-2231.91	-8072.03	3.617
-530	19.78	9.09	XX	1	SLV (E)	13.85	15.39	437.11	19606.70	44.855
-482	22.75	8.05	XX	9	SLV (E)	13.85	7.70	-1504.94	-17685.60	11.752
11	19.00	4.59	XX	5	SLV (E)	13.85	15.39	11376.50	19606.70	1.723
-324	17.96	4.20	XX	1	SLV (E)	13.85	15.39	-2206.81	-17723.30	8.031
-271	18.99	3.19	XX	9	SLV (E)	13.85	7.70	3135.75	10031.50	3.199
12	23.11	4.59	XX	1	SLV (E)	13.85	7.70	8318.17	10031.50	1.206
-295	22.33	3.54	XX	9	SLV (E)	13.85	7.70	-854.69	-17685.60	20.692
-441	4.18	7.05	YY	13	SLV (E)	6.16	7.70	-7854.15	-8086.69	1.030
-482	22.75	8.05	YY	5	SLV (E)	13.85	7.70	-4788.15	-17685.60	3.694
18	23.11	10.31	YY	5	SLV (E)	13.85	7.70	9433.21	10031.50	1.063
4	14.37	-0.45	YY	9	SLV (E)	6.16	7.70	7476.32	10042.10	1.343
17	19.00	10.31	YY	5	SLV (E)	13.85	15.39	15456.90	19606.70	1.268
-679	13.97	11.79	YY	9	SLV (E)	6.16	15.39	-1585.45	-8072.03	5.091
-269	21.87	3.11	YY	9	SLV (E)	13.85	7.70	-1504.50	-17685.60	11.755
14	4.40	10.31	YY	13	SLV (E)	13.85	15.39	14814.90	19606.70	1.323
15	9.29	10.31	YY	1	SLV (E)	6.16	15.39	6356.26	19545.30	3.075
-470	7.76	7.94	YY	5	SLV (E)	6.16	15.39	-3173.01	-8072.03	2.544
-520	5.11	9.01	YY	5	SLV (E)	13.85	15.39	-3841.19	-17723.30	4.614
-513	6.10	8.92	YY	5	SLV (E)	13.85	7.70	-3173.36	-17685.60	5.573
-396	5.10	5.93	YY	13	SLV (E)	13.85	7.70	-874.70	-17685.60	20.219



-510	0.37	8.89	YY	13	SLV (E)	13.85	7.70	-3527.80	-17685.60	5.013
8	4.40	4.59	YY	9	SLV (E)	13.85	15.39	13786.50	19606.70	1.422
10	14.37	4.59	YY	5	SLV (E)	6.16	15.39	13010.70	19545.30	1.502
7	0.00	4.59	YY	9	SLV (E)	13.85	7.70	9655.05	10031.50	1.039
16	14.37	10.31	YY	9	SLV (E)	6.16	15.39	7618.81	19545.30	2.565
-275	14.98	3.27	YY	13	SLV (E)	6.16	15.39	-2478.81	-8072.03	3.256
-512	18.91	8.91	YY	13	SLV (E)	13.85	15.39	-4701.40	-17723.30	3.770
11	19.00	4.59	YY	1	SLV (E)	13.85	15.39	15925.70	19606.70	1.231
-281	18.12	3.37	YY	5	SLV (E)	13.85	15.39	168.73	19606.70	>100
-271	18.99	3.19	YY	13	SLV (E)	13.85	7.70	-2123.92	-17685.60	8.327

## Stato limite ultimo - Verifica a taglio del calcestruzzo

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Vsdu <daN>	Vrdu <daN>
-530	19.78	9.09	XX	17	SLU	13.85	15.39	6240.99	17462.00
-501	14.91	8.31	XX	17	SLU	6.16	15.39	16776.70	17462.00
-526	3.39	9.06	XX	17	SLU	6.16	15.39	7047.13	15659.20
-520	5.11	9.01	XX	17	SLU	13.85	15.39	6496.82	16859.40
-605	9.95	10.36	XX	17	SLU	6.16	15.39	16507.40	17462.00
-272	5.28	3.21	XX	17	SLU	13.85	7.70	8686.05	15659.20
-546	0.78	9.47	XX	17	SLU	13.85	7.70	14054.20	15659.20
-283	-0.64	3.38	XX	17	SLU	13.85	7.70	10007.40	15659.20
-528	18.03	9.08	XX	17	SLU	6.16	15.39	7104.58	15659.20
-324	17.96	4.20	XX	17	SLU	13.85	15.39	18927.70	16859.40
-271	18.99	3.19	XX	17	SLU	13.85	7.70	2077.09	15659.20
-530	19.78	9.09	YY	17	SLU	13.85	15.39	14497.10	16859.40
-641	14.99	10.89	YY	17	SLU	6.16	15.39	15804.20	17462.00
14	4.40	10.31	YY	17	SLU	13.85	15.39	15751.20	17462.00
15	9.29	10.31	YY	17	SLU	6.16	15.39	16419.20	17462.00
-513	6.10	8.92	YY	17	SLU	13.85	7.70	5738.67	16859.40
-396	5.10	5.93	YY	17	SLU	13.85	7.70	14873.60	16859.40
-378	3.22	5.34	YY	17	SLU	13.85	15.39	16296.50	17462.00
-283	-0.64	3.38	YY	17	SLU	13.85	7.70	14585.30	15659.20
-271	18.99	3.19	YY	17	SLU	13.85	7.70	15311.40	16859.40

## Stato limite d'esercizio - Verifiche tensionali

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Mom <daNm>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
4	14.37	-0.45	XX	18	SLE R	6.16	7.70	7089.45	49.85	2766.24
4	14.37	-0.45	XX	20	SLE Q	6.16	7.70	6456.34	45.40	2519.20
-509	7.01	8.86	XX	18	SLE R	6.16	7.70	-6454.79	49.19	3129.21
-509	7.01	8.86	XX	20	SLE Q	6.16	7.70	-5665.56	43.18	2746.60
18	23.11	10.31	XX	18	SLE R	13.85	7.70	6975.09	45.93	2725.02
18	23.11	10.31	XX	20	SLE Q	13.85	7.70	6289.85	41.42	2457.31
17	19.00	10.31	XX	18	SLE R	13.85	15.39	11784.80	58.84	2349.88
17	19.00	10.31	XX	20	SLE Q	13.85	15.39	10219.70	51.03	2037.81
-2031	14.37	9.36	XX	18	SLE R	6.16	15.39	9344.26	50.14	1867.73
-2031	14.37	9.36	XX	20	SLE Q	6.16	15.39	8115.73	43.55	1622.17
-668	3.35	11.79	XX	18	SLE R	6.16	15.39	173.12	0.93	34.60
-668	3.35	11.79	XX	20	SLE Q	6.16	15.39	148.25	0.80	29.63
14	4.40	10.31	XX	18	SLE R	13.85	15.39	12231.70	61.08	2439.01
14	4.40	10.31	XX	20	SLE Q	13.85	15.39	10535.50	52.61	2100.79
15	9.29	10.31	XX	18	SLE R	6.16	15.39	9067.39	48.66	1812.39
15	9.29	10.31	XX	20	SLE Q	6.16	15.39	7969.72	42.77	1592.99
-526	3.39	9.06	XX	18	SLE R	6.16	15.39	-1198.80	8.61	582.39
-526	3.39	9.06	XX	20	SLE Q	6.16	15.39	-1094.96	7.87	531.94
-520	5.11	9.01	XX	18	SLE R	13.85	15.39	-78.95	0.40	17.43
-520	5.11	9.01	XX	20	SLE Q	13.85	15.39	-138.45	0.71	30.56
-272	5.28	3.21	XX	18	SLE R	13.85	7.70	216.57	1.43	84.61
-272	5.28	3.21	XX	20	SLE Q	13.85	7.70	198.10	1.30	77.39
13	0.00	10.31	XX	20	SLE Q	13.85	7.70	8012.39	52.76	3130.27
8	4.40	4.59	XX	18	SLE R	13.85	15.39	10979.20	54.82	2189.24
8	4.40	4.59	XX	20	SLE Q	13.85	15.39	9728.41	48.58	1939.84
-363	7.07	5.13	XX	18	SLE R	6.16	15.39	-7002.22	50.31	3401.73
-363	7.07	5.13	XX	20	SLE Q	6.16	15.39	-6191.97	44.48	3008.11
7	0.00	4.59	XX	18	SLE R	13.85	7.70	8850.76	58.28	3457.81
7	0.00	4.59	XX	20	SLE Q	13.85	7.70	7610.77	50.12	2973.37
-587	8.29	9.97	XX	18	SLE R	6.16	15.39	-1394.70	10.02	677.56
-587	8.29	9.97	XX	20	SLE Q	6.16	15.39	-1205.16	8.66	585.47
10	14.37	4.59	XX	18	SLE R	6.16	15.39	13001.50	69.77	2598.74
10	14.37	4.59	XX	20	SLE Q	6.16	15.39	11601.10	62.25	2318.83
-528	18.03	9.08	XX	18	SLE R	6.16	15.39	-1910.35	13.72	928.06
-528	18.03	9.08	XX	20	SLE Q	6.16	15.39	-1736.69	12.48	843.70
-482	22.75	8.05	XX	18	SLE R	13.85	7.70	-1330.49	7.31	294.13
-482	22.75	8.05	XX	20	SLE Q	13.85	7.70	-1141.41	6.27	252.33



11	19.00	4.59	XX	18	SLE R	13.85	15.39	11540.80	57.63	2301.24
11	19.00	4.59	XX	20	SLE Q	13.85	15.39	10174.00	50.80	2028.69
-324	17.96	4.20	XX	18	SLE R	13.85	15.39	-2007.03	10.29	443.00
-324	17.96	4.20	XX	20	SLE Q	13.85	15.39	-1829.65	9.38	403.84
-271	18.99	3.19	XX	18	SLE R	13.85	7.70	3141.95	20.69	1227.49
-271	18.99	3.19	XX	20	SLE Q	13.85	7.70	2729.30	17.97	1066.28
12	23.11	4.59	XX	18	SLE R	13.85	7.70	7128.60	46.94	2784.99
12	23.11	4.59	XX	20	SLE Q	13.85	7.70	6554.90	43.16	2560.86
-295	22.33	3.54	XX	18	SLE R	13.85	7.70	-491.35	2.70	108.62
-295	22.33	3.54	XX	20	SLE Q	13.85	7.70	-356.51	1.96	78.81
-441	4.18	7.05	YY	20	SLE Q	6.16	7.70	-6831.71	52.07	3311.94
-482	22.75	8.05	YY	18	SLE R	13.85	7.70	-4453.23	24.48	984.49
-482	22.75	8.05	YY	20	SLE Q	13.85	7.70	-4006.19	22.02	885.66
18	23.11	10.31	YY	18	SLE R	13.85	7.70	8385.15	55.22	3275.90
18	23.11	10.31	YY	20	SLE Q	13.85	7.70	7515.37	49.49	2936.10
4	14.37	-0.45	YY	18	SLE R	6.16	7.70	6943.00	48.82	2709.09
4	14.37	-0.45	YY	20	SLE Q	6.16	7.70	6388.01	44.91	2492.54
17	19.00	10.31	YY	18	SLE R	13.85	15.39	15236.40	76.08	3038.14
17	19.00	10.31	YY	20	SLE Q	13.85	15.39	13209.80	65.96	2634.03
12	23.11	4.59	YY	20	SLE Q	13.85	7.70	8396.76	55.29	3280.44
-679	13.97	11.79	YY	18	SLE R	6.16	15.39	-1495.70	10.75	726.62
-679	13.97	11.79	YY	20	SLE Q	6.16	15.39	-1296.74	9.32	629.97
-269	21.87	3.11	YY	18	SLE R	13.85	7.70	-1316.00	7.23	290.93
-269	21.87	3.11	YY	20	SLE Q	13.85	7.70	-1212.69	6.67	268.09
14	4.40	10.31	YY	18	SLE R	13.85	15.39	15155.50	75.67	3022.01
14	4.40	10.31	YY	20	SLE Q	13.85	15.39	13016.20	64.99	2595.42
15	9.29	10.31	YY	18	SLE R	6.16	15.39	6192.18	33.23	1237.69
15	9.29	10.31	YY	20	SLE Q	6.16	15.39	5353.54	28.73	1070.07
-470	7.76	7.94	YY	18	SLE R	6.16	15.39	-2933.13	21.07	1424.94
-470	7.76	7.94	YY	20	SLE Q	6.16	15.39	-2627.05	18.87	1276.24
-520	5.11	9.01	YY	18	SLE R	13.85	15.39	-3452.83	17.70	762.12
-520	5.11	9.01	YY	20	SLE Q	13.85	15.39	-3141.20	16.10	693.33
-513	6.10	8.92	YY	18	SLE R	13.85	7.70	-2830.74	15.56	625.80
-513	6.10	8.92	YY	20	SLE Q	13.85	7.70	-2584.59	14.21	571.38
-396	5.10	5.93	YY	18	SLE R	13.85	7.70	-719.35	3.95	159.03
-396	5.10	5.93	YY	20	SLE Q	13.85	7.70	-616.30	3.39	136.25
13	0.00	10.31	YY	20	SLE Q	13.85	7.70	8956.43	58.98	3499.09
-510	0.37	8.89	YY	18	SLE R	13.85	7.70	-3319.64	18.25	733.88
-510	0.37	8.89	YY	20	SLE Q	13.85	7.70	-2950.53	16.22	652.28
8	4.40	4.59	YY	18	SLE R	13.85	15.39	13850.70	69.16	2761.83
8	4.40	4.59	YY	20	SLE Q	13.85	15.39	12251.70	61.17	2442.99
10	14.37	4.59	YY	18	SLE R	6.16	15.39	12228.70	65.62	2444.27
10	14.37	4.59	YY	20	SLE Q	6.16	15.39	10896.00	58.47	2177.90
7	0.00	4.59	YY	20	SLE Q	13.85	7.70	8313.21	54.74	3247.80
16	14.37	10.31	YY	18	SLE R	6.16	15.39	7246.54	38.89	1448.44
16	14.37	10.31	YY	20	SLE Q	6.16	15.39	6158.13	33.05	1230.89
-275	14.98	3.27	YY	18	SLE R	6.16	15.39	-2295.91	16.49	1115.37
-275	14.98	3.27	YY	20	SLE Q	6.16	15.39	-2070.66	14.88	1005.94
-512	18.91	8.91	YY	18	SLE R	13.85	15.39	-4270.13	21.89	942.51
-512	18.91	8.91	YY	20	SLE Q	13.85	15.39	-3873.14	19.85	854.88
11	19.00	4.59	YY	18	SLE R	13.85	15.39	16025.10	80.02	3195.40
11	19.00	4.59	YY	20	SLE Q	13.85	15.39	14194.00	70.87	2830.27
-271	18.99	3.19	YY	18	SLE R	13.85	7.70	-1997.59	10.98	441.61
-271	18.99	3.19	YY	20	SLE Q	13.85	7.70	-1818.91	10.00	402.11

## Stato limite d'esercizio - Verifiche a fessurazione

Nodo	X <m>	Y <m>	DV	CC	TCC	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sz</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
4	14.37	-0.45	XX	20	SLE Q	33.00	196.00	0.16	238.23	14.00	1.54	223.55	2519.20	3862.44	0.49	0.20
4	14.37	-0.45	XX	19	SLE F	33.00	196.00	0.16	238.23	14.00	1.54	223.55	2589.78	3862.44	0.50	0.20
-509	7.01	8.86	XX	20	SLE Q	33.00	196.00	0.16	238.84	14.00	1.54	223.55	2746.60	4775.69	0.53	0.22
-509	7.01	8.86	XX	19	SLE F	33.00	196.00	0.16	238.84	14.00	1.54	223.55	2855.92	4775.69	0.55	0.23
18	23.11	10.31	XX	20	SLE Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	2457.31	3976.02	0.48	0.19
18	23.11	10.31	XX	19	SLE F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	2533.80	3976.02	0.49	0.20
17	19.00	10.31	XX	20	SLE Q	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2037.81	1808.19	0.60	0.17
17	19.00	10.31	XX	19	SLE F	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2126.97	2169.83	0.50	0.14
-2031	14.37	9.36	XX	20	SLE Q	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	1622.17	2116.94	0.31	0.09
-2031	14.37	9.36	XX	19	SLE F	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	1692.33	2116.94	0.33	0.09
-668	3.35	11.79	XX	20	SLE Q	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	29.63	2116.94	0.01	0.00
-668	3.35	11.79	XX	19	SLE F	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	31.05	2116.94	0.01	0.00
14	4.40	10.31	XX	20	SLE Q	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2100.79	2169.83	0.48	0.13
14	4.40	10.31	XX	19	SLE F	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2197.42	2169.83	0.55	0.15
15	9.29	10.31	XX	20	SLE Q	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	1592.99	2116.94	0.31	0.09
15	9.29	10.31	XX	19	SLE F	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	1655.67	2116.94	0.32	0.09
-526	3.39	9.06	XX	20	SLE Q	33.00	196.00	0.17	240.29	14.00	1.54	223.55	531.94	4997.86	0.10	0.04



-526	3.39	9.06	XX	19	SLE	F	33.00	196.00	0.17	240.29	14.00	1.54	223.55	546.35	4916.59	0.11	0.04
-520	5.11	9.01	XX	20	SLE	Q	33.00	111.11	0.16	175.20	14.00	13.85	1309.55	30.56	2381.34	0.01	0.00
-520	5.11	9.01	XX	19	SLE	F	33.00	111.11	0.16	175.20	14.00	13.85	1309.55	26.81	2381.34	0.01	0.00
-272	5.28	3.21	XX	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	77.39	3976.02	0.02	0.01
-272	5.28	3.21	XX	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	79.45	3976.02	0.02	0.01
13	0.00	10.31	XX	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3130.27	3976.02	0.61	0.25
13	0.00	10.31	XX	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3287.24	3976.02	0.64	0.26
8	4.40	4.59	XX	20	SLE	Q	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	1939.84	2169.83	0.38	0.11
8	4.40	4.59	XX	19	SLE	F	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2011.10	2169.83	0.41	0.11
-363	7.07	5.13	XX	20	SLE	Q	33.00	196.00	0.17	240.29	14.00	1.54	223.55	3008.11	4997.86	0.58	0.24
-363	7.07	5.13	XX	19	SLE	F	33.00	196.00	0.17	240.29	14.00	1.54	223.55	3120.57	4916.59	0.61	0.25
7	0.00	4.59	XX	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	2973.37	3976.02	0.58	0.24
7	0.00	4.59	XX	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3111.78	3976.02	0.60	0.25
-587	8.29	9.97	XX	20	SLE	Q	33.00	196.00	0.17	240.29	14.00	1.54	223.55	585.47	4916.59	0.11	0.05
-587	8.29	9.97	XX	19	SLE	F	33.00	196.00	0.17	240.29	14.00	1.54	223.55	611.78	4997.86	0.12	0.05
10	14.37	4.59	XX	20	SLE	Q	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	2318.83	2116.94	0.66	0.18
10	14.37	4.59	XX	19	SLE	F	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	2398.81	2116.94	0.71	0.20
-528	18.03	9.08	XX	20	SLE	Q	33.00	196.00	0.17	240.29	14.00	1.54	223.55	843.70	4916.59	0.16	0.07
-528	18.03	9.08	XX	19	SLE	F	33.00	196.00	0.17	240.29	14.00	1.54	223.55	867.80	4997.86	0.17	0.07
-482	22.75	8.05	XX	20	SLE	Q	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	252.33	2322.58	0.05	0.01
-482	22.75	8.05	XX	19	SLE	F	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	264.28	2322.58	0.05	0.02
11	19.00	4.59	XX	20	SLE	Q	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2028.69	2169.83	0.42	0.12
11	19.00	4.59	XX	19	SLE	F	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2106.56	2169.83	0.48	0.13
-324	17.96	4.20	XX	20	SLE	Q	33.00	111.11	0.16	175.20	14.00	13.85	1309.55	403.84	2381.34	0.08	0.02
-324	17.96	4.20	XX	19	SLE	F	33.00	111.11	0.16	175.20	14.00	13.85	1309.55	415.03	2381.34	0.08	0.02
-271	18.99	3.19	XX	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	1066.28	3976.02	0.21	0.08
-271	18.99	3.19	XX	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	1112.34	3976.02	0.22	0.09
12	23.11	4.59	XX	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	2560.86	3976.02	0.50	0.20
12	23.11	4.59	XX	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	2624.90	4070.99	0.51	0.21
-295	22.33	3.54	XX	20	SLE	Q	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	78.81	2322.58	0.02	0.00
-295	22.33	3.54	XX	19	SLE	F	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	87.33	2322.58	0.02	0.01
-441	4.18	7.05	YY	20	SLE	Q	33.00	196.00	0.16	238.84	14.00	1.54	223.55	3311.94	4775.69	0.64	0.26
-441	4.18	7.05	YY	19	SLE	F	33.00	196.00	0.16	238.84	14.00	1.54	223.55	3438.62	4775.69	0.67	0.27
-482	22.75	8.05	YY	20	SLE	Q	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	885.66	2322.58	0.17	0.05
-482	22.75	8.05	YY	19	SLE	F	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	913.89	2322.58	0.18	0.05
18	23.11	10.31	YY	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	2936.10	3976.02	0.57	0.23
18	23.11	10.31	YY	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3033.19	3976.02	0.59	0.24
4	14.37	-0.45	YY	20	SLE	Q	33.00	196.00	0.16	238.23	14.00	1.54	223.55	2492.54	3862.44	0.48	0.20
4	14.37	-0.45	YY	19	SLE	F	33.00	196.00	0.16	238.23	14.00	1.54	223.55	2554.41	3862.44	0.50	0.20
17	19.00	10.31	YY	20	SLE	Q	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2634.03	2169.83	0.84	0.24
17	19.00	10.31	YY	19	SLE	F	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2749.49	2169.83	0.92	0.26
12	23.11	4.59	YY	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3280.44	3976.02	0.64	0.26
12	23.11	4.59	YY	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3375.77	3976.02	0.66	0.27
-679	13.97	11.79	YY	20	SLE	Q	33.00	196.00	0.17	240.29	14.00	1.54	223.55	629.97	4997.86	0.12	0.05
-679	13.97	11.79	YY	19	SLE	F	33.00	196.00	0.17	240.29	14.00	1.54	223.55	657.58	4916.59	0.13	0.05
-269	21.87	3.11	YY	20	SLE	Q	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	268.09	2322.58	0.05	0.02
-269	21.87	3.11	YY	19	SLE	F	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	274.62	2322.58	0.05	0.02
14	4.40	10.31	YY	20	SLE	Q	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2595.42	2169.83	0.82	0.23
14	4.40	10.31	YY	19	SLE	F	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2717.31	2169.83	0.90	0.25
15	9.29	10.31	YY	20	SLE	Q	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	1070.07	2116.94	0.21	0.06
15	9.29	10.31	YY	19	SLE	F	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	1117.96	2116.94	0.22	0.06
-470	7.76	7.94	YY	20	SLE	Q	33.00	196.00	0.17	240.29	14.00	1.54	223.55	1276.24	4916.59	0.25	0.10
-470	7.76	7.94	YY	19	SLE	F	33.00	196.00	0.17	240.29	14.00	1.54	223.55	1318.73	4997.86	0.26	0.10
-520	5.11	9.01	YY	20	SLE	Q	33.00	111.11	0.16	175.20	14.00	13.85	1309.55	693.33	2381.34	0.13	0.04
-520	5.11	9.01	YY	19	SLE	F	33.00	111.11	0.16	175.20	14.00	13.85	1309.55	712.98	2381.34	0.14	0.04
-513	6.10	8.92	YY	20	SLE	Q	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	571.38	2322.58	0.11	0.03
-513	6.10	8.92	YY	19	SLE	F	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	586.93	2322.58	0.11	0.03
-396	5.10	5.93	YY	20	SLE	Q	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	136.25	2322.58	0.03	0.01
-396	5.10	5.93	YY	19	SLE	F	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	142.76	2322.58	0.03	0.01
13	0.00	10.31	YY	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3499.09	3976.02	0.68	0.28
13	0.00	10.31	YY	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3674.70	3976.02	0.74	0.30
-510	0.37	8.89	YY	20	SLE	Q	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	652.28	2322.58	0.13	0.04
-510	0.37	8.89	YY	19	SLE	F	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	675.59	2322.58	0.13	0.04
8	4.40	4.59	YY	20	SLE	Q	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2442.99	2169.83	0.72	0.20
8	4.40	4.59	YY	19	SLE	F	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2534.08	2169.83	0.78	0.22
10	14.37	4.59	YY	20	SLE	Q	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	2177.90	2116.94	0.56	0.16
10	14.37	4.59	YY	19	SLE	F	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	2254.01	2116.94	0.61	0.17
7	0.00	4.59	YY	20	SLE	Q	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3247.80	3976.02	0.63	0.26
7	0.00	4.59	YY	19	SLE	F	33.00	196.00	0.17	239.72	14.00	1.54	223.55	3388.09	3976.02	0.66	0.27
16	14.37	10.31	YY	20	SLE	Q	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	1230.89	2116.94	0.24	0.07
16	14.37	10.31	YY	19	SLE	F	33.00	100.00	0.16	163.78	14.00	15.39	1322.33	1293.04	2116.94	0.25	0.07
-275	14.98	3.27	YY	20	SLE	Q	33.00	196.00	0.17	240.29	14.00	1.54	223.55	1005.94	4916.59	0.20	0.08
-275	14.98	3.27	YY	19	SLE	F	33.00	196.00	0.17	240.29	14.00	1.54	223.55	1037.21	4997.86		





11	19.00	4.59	YY	19	SLE F	33.00	100.00	0.16	164.70	14.00	15.39	1322.33	2934.60	1808.19	1.15	0.32
-271	18.99	3.19	YY	20	SLE Q	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	402.11	2322.58	0.08	0.02
-271	18.99	3.19	YY	19	SLE F	33.00	111.11	0.16	174.22	14.00	13.85	1309.55	413.40	2322.58	0.08	0.02

Stato limite ultimo - Armatura a punzonamento - Verifiche armatura

Pil	X <m>	Y <m>	CC	TCC	P <sub>sd</sub> <daN>	P <sub>v</sub> <m>	Ab <cmq>	σ <sub>t</sub> <daN/cmq>	Af punz. <cmq>	P <sub>rd</sub> <daN>
1	0.00	-0.45	5	SLV	-48330.40	8.76	4.59	0.70		137175.00
2	4.40	-0.45	17	SLU	-79237.80	7.76	3.72	1.26		121515.00
3	9.29	-0.45	17	SLU	-88562.40	7.76	3.72	1.25		121515.00
4	14.37	-0.45	17	SLU	-98851.80	7.76	3.72	1.25		121515.00
5	19.00	-0.45	17	SLU	-77521.20	7.76	3.72	1.19		121515.00
6	23.11	-0.45	13	SLV	-47641.70	8.76	4.59	0.61		137175.00
7	0.00	4.59	17	SLU	-126004.00	8.76	4.59	1.52		137175.00
8	4.40	4.59	13	SLV	-120365.00	7.76	3.72	0.81		121515.00
9	9.29	4.59	5	SLV	-120491.00	7.96	3.94	0.92		124647.00
10	14.37	4.59	13	SLV	-107027.00	7.96	3.94	0.88		124647.00
11	19.00	4.59	17	SLU	-141342.00	7.76	3.72	1.37	56.55	156468.00
12	23.11	4.59	17	SLU	-78266.80	8.76	4.59	1.32		137175.00
13	0.00	10.31	17	SLU	-77759.70	8.76	4.59	1.60		137175.00
14	4.40	10.31	17	SLU	-124366.00	7.76	3.72	1.56	46.68	129173.00
17	19.00	10.31	17	SLU	-120659.00	7.76	3.72	1.50		121515.00
18	23.11	10.31	5	SLV	-59755.70	8.76	4.59	0.76		137175.00

Armatura soletta a quota 2.70

Caratteristiche delle sezioni e dei materiali utilizzati

Spess. <cm>	Cf sup <cm>	Cf inf <cm>	Cls	F <sub>ck</sub> <daN/cmq>	F <sub>ctk</sub> <daN/cmq>	F <sub>cd</sub> <daN/cmq>	F <sub>ctd</sub> <daN/cmq>	TP	F <sub>yk</sub> <daN/cmq>	F <sub>yd</sub> <daN/cmq>
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	MRdy <daNm>	Sic.
-1157	12.59	-0.45	XX	17	SLU	3.93	3.93	168.26	2435.65	14.475
-1154	10.05	-0.45	XX	17	SLU	3.93	3.93	-162.21	-2435.65	15.015
116	14.37	10.31	XX	17	SLU	3.93	3.93	-617.84	-2435.65	3.942
-1200	9.97	6.23	XX	17	SLU	3.93	3.93	231.11	2435.65	10.539
-1145	13.43	-2.38	YY	17	SLU	3.93	3.93	-1246.57	-2435.65	1.954
-1158	13.43	-0.45	YY	17	SLU	3.93	3.93	184.55	2435.65	13.198
109	9.29	4.59	YY	17	SLU	3.93	3.93	-612.03	-2435.65	3.980
-1186	10.69	5.66	YY	17	SLU	3.93	3.93	494.68	2435.65	4.924

Stato limite elastico - Verifiche a flessione/pressoflessione

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
-1157	12.59	-0.45	XX	13	SND	3.93	3.93	129.53	2109.68	16.287
-1154	10.05	-0.45	XX	9	SND	3.93	3.93	-178.71	-2109.68	11.805
-1231	14.37	9.36	XX	1	SND	3.93	3.93	-1014.50	-2109.68	2.080
-1227	13.00	8.93	XX	1	SND	3.93	3.93	807.19	2109.68	2.614
-1145	13.43	-2.38	YY	13	SND	3.93	3.93	-1030.79	-2109.68	2.047
-1158	13.43	-0.45	YY	13	SND	3.93	3.93	186.76	2109.68	11.296
-1204	11.44	6.65	YY	5	SND	3.93	3.93	-1223.44	-2109.68	1.724
-1205	12.22	6.65	YY	13	SND	3.93	3.93	1119.33	2109.68	1.885

Stato limite ultimo - Verifica a taglio del calcestruzzo

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	V <sub>sd</sub> <daN>	V <sub>rd</sub> <daN>
-1154	10.05	-0.45	XX	17	SLU	3.93	3.93	2058.76	8003.45
-1154	10.05	-0.45	XX	9	SND	3.93	3.93	1495.62	8003.45
-1236	13.00	10.31	XX	17	SLU	3.93	3.93	4214.84	8003.45
-1201	10.66	6.23	XX	13	SND	3.93	3.93	5514.87	8003.45
-1141	10.05	-2.38	YY	17	SLU	3.93	3.93	2427.41	8003.45
-1141	10.05	-2.38	YY	5	SND	3.93	3.93	2034.25	8003.45
-1204	11.44	6.65	YY	17	SLU	3.93	3.93	4697.81	8003.45
-1231	14.37	9.36	YY	13	SND	3.93	3.93	4543.66	8003.45

Stato limite d'esercizio - Verifiche tensionali

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Mom <daNm>	σ <sub>c</sub> <daN/cmq>	σ <sub>f</sub> <daN/cmq>
-1157	12.59	-0.45	XX	18	SLE R	3.93	3.93	117.67	4.56	218.44
-1157	12.59	-0.45	XX	20	SLE Q	3.93	3.93	104.47	4.05	193.94





-1154	10.05	-0.45	XX	18	SLE R	3.93	3.93	-113.76	4.41	211.19
-1154	10.05	-0.45	XX	20	SLE Q	3.93	3.93	-109.67	4.25	203.59
116	14.37	10.31	XX	18	SLE R	3.93	3.93	-447.25	17.32	830.28
116	14.37	10.31	XX	20	SLE Q	3.93	3.93	-400.84	15.52	744.12
-1200	9.97	6.23	XX	18	SLE R	3.93	3.93	165.27	6.40	306.81
-1227	13.00	8.93	XX	20	SLE Q	3.93	3.93	141.90	5.50	263.42
-1145	13.43	-2.38	YY	18	SLE R	3.93	3.93	-867.44	33.59	1610.32
-1145	13.43	-2.38	YY	20	SLE Q	3.93	3.93	-780.58	30.23	1449.07
-1158	13.43	-0.45	YY	18	SLE R	3.93	3.93	126.59	4.90	235.01
-1158	13.43	-0.45	YY	20	SLE Q	3.93	3.93	101.80	3.94	188.99
109	9.29	4.59	YY	18	SLE R	3.93	3.93	-440.40	17.06	817.56
109	9.29	4.59	YY	20	SLE Q	3.93	3.93	-377.90	14.64	701.55
-1186	10.69	5.66	YY	18	SLE R	3.93	3.93	348.67	13.50	647.27
-1186	10.69	5.66	YY	20	SLE Q	3.93	3.93	266.52	10.32	494.78

**Stato limite d'esercizio - Verifiche a fessurazione**

Nodo	X <m>	Y <m>	DV	CC	TCC	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
-1157	12.59	-0.45	XX	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	193.94	3657.39	0.04	0.01
-1157	12.59	-0.45	XX	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	200.94	3657.39	0.04	0.01
-1154	10.05	-0.45	XX	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	203.59	3657.39	0.04	0.01
-1154	10.05	-0.45	XX	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	205.76	3657.39	0.04	0.01
116	14.37	10.31	XX	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	744.12	3657.39	0.14	0.04
116	14.37	10.31	XX	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	768.74	3657.39	0.15	0.04
-1227	13.00	8.93	XX	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	263.42	3657.39	0.05	0.01
-1227	13.00	8.93	XX	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	264.09	3657.39	0.05	0.01
-1145	13.43	-2.38	YY	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	1449.07	3657.39	0.28	0.07
-1145	13.43	-2.38	YY	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	1495.14	3657.39	0.29	0.07
-1158	13.43	-0.45	YY	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	188.99	3657.39	0.04	0.01
-1158	13.43	-0.45	YY	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	202.13	3657.39	0.04	0.01
109	9.29	4.59	YY	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	701.55	3657.39	0.14	0.04
109	9.29	4.59	YY	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	734.69	3657.39	0.14	0.04
-1186	10.69	5.66	YY	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	494.78	3657.39	0.10	0.02
-1186	10.69	5.66	YY	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	538.35	3657.39	0.10	0.03

**Armatura soletta a quota 5.88**

**Caratteristiche delle sezioni e dei materiali utilizzati**

Spess. <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	MRdy <daNm>	Sic.
216	14.37	10.31	XX	17	SLU	3.93	3.93	-955.91	-2435.65	2.548
-1348	9.29	6.23	XX	17	SLU	3.93	3.93	638.55	2435.65	3.814
-1354	0.00	6.50	XX	17	SLU	3.93	3.93	-1875.76	-2435.65	1.298
-1466	7.12	12.19	XX	17	SLU	3.93	3.93	732.80	2435.65	3.324
213	0.00	10.31	XX	17	SLU	9.58	3.93	-3777.82	-5189.64	1.374
-1321	-0.61	4.56	XX	17	SLU	9.58	3.93	-3117.26	-5189.64	1.665
-1303	0.00	0.39	XX	17	SLU	9.58	3.93	-2973.64	-5189.64	1.745
-1391	13.00	9.62	YY	17	SLU	3.93	3.93	-1831.73	-2435.65	1.330
214	4.40	10.31	YY	17	SLU	9.58	3.93	-3472.76	-5189.64	1.494
-1414	21.47	10.31	YY	17	SLU	3.93	3.93	-1863.05	-2435.65	1.307
213	0.00	10.31	YY	17	SLU	9.58	3.93	-4107.09	-5189.64	1.264
21	9.29	10.31	YY	17	SLU	9.58	3.93	-2267.54	-5189.64	2.289
-1363	-1.25	7.36	YY	17	SLU	3.93	3.93	757.57	2435.65	3.215
216	14.37	10.31	YY	17	SLU	9.58	3.93	-3840.66	-5189.64	1.351
217	19.00	10.31	YY	17	SLU	9.58	3.93	-3798.92	-5189.64	1.366
-1415	22.29	10.31	YY	17	SLU	9.58	3.93	-2895.05	-5189.64	1.793
-1340	10.69	5.66	YY	17	SLU	3.93	3.93	426.39	2435.65	5.712

**Stato limite elastico - Verifiche a flessione/pressoflessione**

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
-1348	9.29	6.23	XX	9	SND	3.93	3.93	1093.18	2109.68	1.930
-1359	13.00	6.65	XX	9	SND	3.93	3.93	-933.25	-2109.68	2.261
-1466	7.12	12.19	XX	9	SND	3.93	3.93	507.15	2109.68	4.160
-1354	0.00	6.50	XX	1	SND	3.93	3.93	-1196.80	-2109.68	1.763
213	0.00	10.31	XX	9	SND	9.58	3.93	-2355.69	-4914.97	2.086
-1321	-0.61	4.56	XX	1	SND	9.58	3.93	-1867.40	-4914.97	2.632



-1303	0.00	0.39	XX	1	SND	9.58	3.93	-1805.16	-4914.97	2.723
-1357	11.44	6.65	YY	13	SND	3.93	3.93	-1541.84	-2109.68	1.368
-2030	14.37	8.46	YY	13	SND	3.93	3.93	684.71	2109.68	3.081
214	4.40	10.31	YY	9	SND	9.58	3.93	-2005.86	-4914.97	2.450
-1414	21.47	10.31	YY	9	SND	3.93	3.93	-1103.93	-2109.68	1.911
213	0.00	10.31	YY	9	SND	9.58	3.93	-2614.90	-4914.97	1.880
-1389	0.00	9.36	YY	9	SND	9.58	3.93	-874.05	-4914.97	5.623
21	9.29	10.31	YY	9	SND	9.58	3.93	-1334.98	-4914.97	3.682
-1363	-1.25	7.36	YY	9	SND	3.93	3.93	555.67	2109.68	3.797
216	14.37	10.31	YY	13	SND	9.58	3.93	-2308.68	-4914.97	2.129
217	19.00	10.31	YY	1	SND	9.58	3.93	-2201.30	-4914.97	2.233
-1415	22.29	10.31	YY	9	SND	9.58	3.93	-1756.07	-4914.97	2.799

Stato limite ultimo - Verifica a taglio del calcestruzzo

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Vsdu <daN>	Vrdu <daN>
209	9.29	4.59	XX	17	SLU	3.93	3.93	4759.71	8003.45
-1380	13.35	8.81	XX	1	SND	3.93	3.93	3737.40	8003.45
-1408	15.30	10.31	XX	17	SLU	3.93	3.93	5418.76	8003.45
-1408	15.30	10.31	XX	1	SND	3.93	3.93	4005.19	8003.45
-1416	-0.85	10.59	XX	17	SLU	9.58	3.93	5492.91	9530.88
-1422	0.95	10.84	XX	1	SND	9.58	3.93	3340.59	9530.88
-1321	-0.61	4.56	XX	17	SLU	9.58	3.93	4889.65	9530.88
-1321	-0.61	4.56	XX	9	SND	9.58	3.93	3086.08	9530.88
-1302	-0.94	-0.45	XX	17	SLU	9.58	3.93	3645.08	9530.88
-1303	0.00	0.39	XX	1	SND	9.58	3.93	2420.10	9530.88
-1390	14.37	9.36	YY	17	SLU	3.93	3.93	6819.22	8003.45
-1357	11.44	6.65	YY	9	SND	3.93	3.93	5549.95	8003.45
214	4.40	10.31	YY	17	SLU	9.58	3.93	5332.56	9530.88
214	4.40	10.31	YY	9	SND	9.58	3.93	3402.85	9530.88
-1303	0.00	0.39	YY	17	SLU	3.93	3.93	5722.05	8003.45
-1303	0.00	0.39	YY	1	SND	3.93	3.93	3985.18	8003.45
-1389	0.00	9.36	YY	17	SLU	9.58	3.93	7011.37	9530.88
-1389	0.00	9.36	YY	9	SND	9.58	3.93	4712.77	9530.88
21	9.29	10.31	YY	17	SLU	9.58	3.93	4379.38	9530.88
21	9.29	10.31	YY	9	SND	9.58	3.93	2651.70	9530.88
-1424	14.41	10.87	YY	17	SLU	9.58	3.93	4757.76	9530.88
-1407	13.69	10.31	YY	9	SND	9.58	3.93	2965.52	9530.88
217	19.00	10.31	YY	17	SLU	9.58	3.93	5776.61	9530.88
217	19.00	10.31	YY	1	SND	9.58	3.93	3753.91	9530.88
-1444	23.11	11.25	YY	17	SLU	9.58	3.93	3752.60	9530.88
-1444	23.11	11.25	YY	13	SND	9.58	3.93	2251.16	9530.88
-1407	13.69	10.31	YY	17	SLU	9.58	3.93	4485.35	9530.88

Stato limite d'esercizio - Verifiche tensionali

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Mom <daNm>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
216	14.37	10.31	XX	18	SLE R	3.93	3.93	-668.66	25.90	1241.31
216	14.37	10.31	XX	20	SLE Q	3.93	3.93	-550.86	21.33	1022.62
-1348	9.29	6.23	XX	18	SLE R	3.93	3.93	431.37	16.71	800.80
-1348	9.29	6.23	XX	20	SLE Q	3.93	3.93	366.53	14.20	680.43
-1354	0.00	6.50	XX	18	SLE R	3.93	3.93	-1303.16	50.47	2419.20
-1354	0.00	6.50	XX	20	SLE Q	3.93	3.93	-1059.59	41.04	1967.03
-1466	7.12	12.19	XX	18	SLE R	3.93	3.93	513.67	19.89	953.58
-1466	7.12	12.19	XX	20	SLE Q	3.93	3.93	411.04	15.92	763.06
213	0.00	10.31	XX	18	SLE R	9.58	3.93	-2622.01	71.22	2075.00
213	0.00	10.31	XX	20	SLE Q	9.58	3.93	-2144.57	58.25	1697.16
-1321	-0.61	4.56	XX	18	SLE R	9.58	3.93	-2160.55	58.69	1709.81
-1321	-0.61	4.56	XX	20	SLE Q	9.58	3.93	-1782.07	48.41	1410.28
-1303	0.00	0.39	XX	18	SLE R	9.58	3.93	-2054.53	55.81	1625.90
-1303	0.00	0.39	XX	20	SLE Q	9.58	3.93	-1717.75	46.66	1359.39
-1391	13.00	9.62	YY	18	SLE R	3.93	3.93	-1271.78	49.25	2360.95
-1391	13.00	9.62	YY	20	SLE Q	3.93	3.93	-1007.53	39.02	1870.39
214	4.40	10.31	YY	18	SLE R	9.58	3.93	-2423.69	65.84	1918.05
214	4.40	10.31	YY	20	SLE Q	9.58	3.93	-1944.55	52.82	1538.87
-1414	21.47	10.31	YY	18	SLE R	3.93	3.93	-1291.68	50.02	2397.89
-1414	21.47	10.31	YY	20	SLE Q	3.93	3.93	-1047.88	40.58	1945.29
213	0.00	10.31	YY	18	SLE R	9.58	3.93	-2843.00	77.23	2249.88
213	0.00	10.31	YY	20	SLE Q	9.58	3.93	-2348.97	63.81	1858.92
21	9.29	10.31	YY	18	SLE R	9.58	3.93	-1571.23	42.68	1243.44
21	9.29	10.31	YY	20	SLE Q	9.58	3.93	-1291.05	35.07	1021.71
-1363	-1.25	7.36	YY	18	SLE R	3.93	3.93	531.90	20.60	987.42
-1363	-1.25	7.36	YY	20	SLE Q	3.93	3.93	426.70	16.53	792.13
216	14.37	10.31	YY	18	SLE R	9.58	3.93	-2677.12	72.72	2118.61
216	14.37	10.31	YY	20	SLE Q	9.58	3.93	-2120.70	57.61	1678.27



217	19.00	10.31	YY	18	SLE R	9.58	3.93	-2653.95	72.09	2100.27
217	19.00	10.31	YY	20	SLE Q	9.58	3.93	-2122.87	57.67	1679.99
-1415	22.29	10.31	YY	18	SLE R	9.58	3.93	-2001.61	54.37	1584.02
-1415	22.29	10.31	YY	20	SLE Q	9.58	3.93	-1650.60	44.84	1306.24
-1340	10.69	5.66	YY	18	SLE R	3.93	3.93	302.69	11.72	561.91
-1340	10.69	5.66	YY	20	SLE Q	3.93	3.93	221.60	8.58	411.38

## Stato limite d'esercizio - Verifiche a fessurazione

Nodo	X <m>	Y <m>	DV	CC	TCC	c <mm>	s <mm>	K3	s <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sz</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
216	14.37	10.31	XX	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	1022.62	3657.39	0.20	0.05
216	14.37	10.31	XX	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	1085.10	3657.39	0.21	0.05
-1348	9.29	6.23	XX	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	680.43	3657.39	0.13	0.03
-1348	9.29	6.23	XX	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	714.82	3657.39	0.14	0.04
-1354	0.00	6.50	XX	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	1967.03	3657.39	0.38	0.10
-1354	0.00	6.50	XX	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	2096.22	3657.39	0.41	0.11
-1466	7.12	12.19	XX	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	763.06	3657.39	0.15	0.04
-1466	7.12	12.19	XX	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	817.50	3657.39	0.16	0.04
213	0.00	10.31	XX	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1697.16	1573.33	0.47	0.10
213	0.00	10.31	XX	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1805.11	1573.33	0.54	0.11
-1321	-0.61	4.56	XX	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1410.28	1586.78	0.27	0.06
-1321	-0.61	4.56	XX	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1495.86	1573.33	0.32	0.07
-1303	0.00	0.39	XX	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1359.39	1586.78	0.26	0.05
-1303	0.00	0.39	XX	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1435.54	1586.78	0.28	0.06
-1391	13.00	9.62	YY	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	1870.39	3710.36	0.36	0.09
-1391	13.00	9.62	YY	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	2010.55	3657.39	0.39	0.10
214	4.40	10.31	YY	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1538.87	1573.33	0.36	0.07
214	4.40	10.31	YY	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1647.21	1573.33	0.43	0.09
-1414	21.47	10.31	YY	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	1945.29	3657.39	0.38	0.10
-1414	21.47	10.31	YY	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	2074.61	3816.32	0.40	0.10
213	0.00	10.31	YY	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1858.92	1573.33	0.58	0.12
213	0.00	10.31	YY	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1970.62	1573.33	0.65	0.13
21	9.29	10.31	YY	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1021.71	1586.78	0.20	0.04
21	9.29	10.31	YY	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1085.06	1586.78	0.21	0.04
-1363	-1.25	7.36	YY	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	792.13	3657.39	0.15	0.04
-1363	-1.25	7.36	YY	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	847.93	3657.39	0.16	0.04
216	14.37	10.31	YY	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1678.27	1573.33	0.46	0.09
216	14.37	10.31	YY	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1804.08	1573.33	0.54	0.11
217	19.00	10.31	YY	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1679.99	1573.33	0.46	0.09
217	19.00	10.31	YY	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1800.07	1573.33	0.54	0.11
-1415	22.29	10.31	YY	20	SLE Q	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1306.24	1586.78	0.25	0.05
-1415	22.29	10.31	YY	19	SLE F	24.50	99.18	0.13	121.75	11.00	10.45	1005.65	1385.61	1586.78	0.27	0.06
-1340	10.69	5.66	YY	20	SLE Q	25.00	140.00	0.13	151.75	10.00	0.79	115.85	411.38	3657.39	0.08	0.02
-1340	10.69	5.66	YY	19	SLE F	25.00	140.00	0.13	151.75	10.00	0.79	115.85	454.39	3657.39	0.09	0.02

## Armatura soletta a quota 9.06

## Caratteristiche delle sezioni e dei materiali utilizzati

Spess. <cm>	Cf sup <cm>	Cf inf <cm>	Cls	F <sub>ck</sub> <daN/cmq>	F <sub>ctk</sub> <daN/cmq>	F <sub>cd</sub> <daN/cmq>	F <sub>ctd</sub> <daN/cmq>	Tp	F <sub>yk</sub> <daN/cmq>	F <sub>yd</sub> <daN/cmq>
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Stato limite ultimo - Verifiche a flessione/pressoflessione

Nodo	X <m>	Y <m>	DV	CC	TCC	A <sub>fE S</sub> <cmq>	A <sub>fE I</sub> <cmq>	My <daNm>	MR <sub>dy</sub> <daNm>	Sic.
-1562	10.66	6.23	XX	17	SLU	5.65	5.65	-780.67	-3295.04	4.221
-1567	14.37	6.50	XX	17	SLU	5.65	5.65	398.47	3295.04	8.269
-1526	0.00	2.91	XX	17	SLU	5.65	5.65	-2303.36	-3295.04	1.431
-1678	7.12	12.19	XX	17	SLU	5.65	5.65	778.41	3295.04	4.233
-1605	-0.69	9.98	XX	17	SLU	11.31	5.65	-2773.65	-6019.32	2.170
-1533	-0.61	4.56	XX	17	SLU	11.31	5.65	-3241.29	-6019.32	1.857
-1515	0.00	0.39	XX	17	SLU	11.31	5.65	-2964.19	-6019.32	2.031
-1573	13.44	6.70	YY	17	SLU	5.65	5.65	-676.56	-3295.04	4.870
-1541	11.28	5.13	YY	17	SLU	5.65	5.65	559.32	3295.04	5.891
314	4.40	10.31	YY	17	SLU	11.31	5.65	-3547.30	-6019.32	1.697
-1617	12.07	10.31	YY	17	SLU	5.65	5.65	-1893.99	-3295.04	1.740
-1607	0.88	10.31	YY	17	SLU	11.31	5.65	-3198.66	-6019.32	1.882
315	9.29	10.31	YY	17	SLU	11.31	5.65	-1762.49	-6019.32	3.415
-1575	-1.25	7.36	YY	17	SLU	5.65	5.65	820.93	3295.04	4.014
-1590	0.00	8.40	YY	17	SLU	11.31	5.65	356.88	3319.15	9.300
-1619	13.69	10.31	YY	17	SLU	11.31	5.65	-3935.42	-6019.32	1.530
-1624	19.82	10.31	YY	17	SLU	11.31	5.65	-2988.47	-6019.32	2.014



318	23.11	10.31	YY	17	SLU	11.31	5.65	-3294.23	-6019.32	1.827
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## Stato limite elastico - Verifiche a flessione/pressoflessione

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
-1589	13.83	8.35	XX	1	SND	5.65	5.65	1880.36	2979.85	1.585
-1600	13.65	9.29	XX	9	SND	5.65	5.65	-1830.30	-2979.85	1.628
-1625	20.64	10.31	XX	9	SND	5.65	5.65	772.23	2979.85	3.859
-1526	0.00	2.91	XX	9	SND	5.65	5.65	-1791.43	-2979.85	1.663
-1607	0.88	10.31	XX	1	SND	11.31	5.65	-1332.76	-5738.11	4.305
-1605	-0.69	9.98	XX	9	SND	11.31	5.65	-1891.41	-5738.11	3.034
-1533	-0.61	4.56	XX	1	SND	11.31	5.65	-2098.16	-5738.11	2.735
-1515	0.00	0.39	XX	1	SND	11.31	5.65	-1957.55	-5738.11	2.931
-1589	13.83	8.35	YY	13	SND	5.65	5.65	1543.60	2979.85	1.930
-1562	10.66	6.23	YY	13	SND	5.65	5.65	-2015.45	-2979.85	1.478
314	4.40	10.31	YY	9	SND	11.31	5.65	-2139.17	-5738.11	2.682
-1529	-0.60	3.67	YY	9	SND	5.65	5.65	-1496.36	-2979.85	1.991
-1605	-0.69	9.98	YY	9	SND	11.31	5.65	-2673.49	-5738.11	2.146
-1590	0.00	8.40	YY	1	SND	11.31	5.65	805.36	2965.95	3.683
315	9.29	10.31	YY	13	SND	11.31	5.65	-1067.23	-5738.11	5.377
-1566	0.00	6.50	YY	9	SND	5.65	5.65	1193.31	2979.85	2.497
-1619	13.69	10.31	YY	13	SND	11.31	5.65	-2744.30	-5738.11	2.091
-1624	19.82	10.31	YY	1	SND	11.31	5.65	-1981.02	-5738.11	2.897
318	23.11	10.31	YY	13	SND	11.31	5.65	-2176.41	-5738.11	2.636
-1600	13.65	9.29	YY	5	SND	11.31	5.65	-1685.55	-5738.11	3.404

## Stato limite ultimo - Verifica a taglio del calcestruzzo

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Vsdu <daN>	Vrdu <daN>
-1619	13.69	10.31	XX	17	SLU	5.65	5.65	4555.09	8003.45
-1562	10.66	6.23	XX	13	SND	5.65	5.65	5533.27	8003.45
-1620	15.30	10.31	XX	17	SLU	5.65	5.65	5681.11	8003.45
-1624	19.82	10.31	XX	1	SND	5.65	5.65	6129.53	8003.45
-1607	0.88	10.31	XX	17	SLU	11.31	5.65	6277.72	10072.40
-1607	0.88	10.31	XX	1	SND	11.31	5.65	6456.34	8003.45
-1533	-0.61	4.56	XX	17	SLU	11.31	5.65	5061.90	10072.40
-1533	-0.61	4.56	XX	9	SND	11.31	5.65	3744.78	10072.40
-1514	-0.94	-0.45	XX	17	SLU	11.31	5.65	3679.76	10072.40
-1515	0.00	0.39	XX	5	SND	11.31	5.65	3014.88	10072.40
-1562	10.66	6.23	YY	17	SLU	5.65	5.65	6978.77	8003.45
-1562	10.66	6.23	YY	9	SND	5.65	5.65	7083.85	8003.45
314	4.40	10.31	YY	17	SLU	11.31	5.65	5412.52	10072.40
314	4.40	10.31	YY	9	SND	11.31	5.65	4272.15	10072.40
-1515	0.00	0.39	YY	17	SLU	5.65	5.65	5217.04	8003.45
-1526	0.00	2.91	YY	9	SND	5.65	5.65	7616.87	8003.45
-1598	-0.65	9.20	YY	17	SLU	11.31	5.65	4899.92	10072.40
-1590	0.00	8.40	YY	9	SND	11.31	5.65	6496.67	8003.45
315	9.29	10.31	YY	17	SLU	11.31	5.65	3580.53	10072.40
315	9.29	10.31	YY	9	SND	11.31	5.65	2393.56	10072.40
-1636	14.41	10.87	YY	17	SLU	11.31	5.65	5199.24	10072.40
-1619	13.69	10.31	YY	9	SND	11.31	5.65	4201.96	10072.40
-1639	19.01	10.92	YY	17	SLU	11.31	5.65	4213.94	10072.40
-1624	19.82	10.31	YY	1	SND	11.31	5.65	3198.40	10072.40
318	23.11	10.31	YY	17	SLU	11.31	5.65	5350.46	10072.40
318	23.11	10.31	YY	13	SND	11.31	5.65	3345.71	10072.40
-1619	13.69	10.31	YY	17	SLU	11.31	5.65	4538.44	10072.40
-1600	13.65	9.29	YY	13	SND	11.31	5.65	4971.68	8003.45

## Stato limite d'esercizio - Verifiche tensionali

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Mom <daNm>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
-1562	10.66	6.23	XX	18	SLE R	5.65	5.65	-529.26	17.32	694.52
-1562	10.66	6.23	XX	20	SLE Q	5.65	5.65	-466.26	15.26	611.85
-1567	14.37	6.50	XX	18	SLE R	5.65	5.65	267.71	8.76	351.31
-1567	14.37	6.50	XX	20	SLE Q	5.65	5.65	237.62	7.78	311.82
-1526	0.00	2.91	XX	18	SLE R	5.65	5.65	-1596.06	52.24	2094.45
-1526	0.00	2.91	XX	20	SLE Q	5.65	5.65	-1312.16	42.95	1721.90
-1678	7.12	12.19	XX	18	SLE R	5.65	5.65	544.80	17.83	714.92
-1678	7.12	12.19	XX	20	SLE Q	5.65	5.65	439.60	14.39	576.87
-1605	-0.69	9.98	XX	18	SLE R	11.31	5.65	-1921.77	48.19	1300.55
-1605	-0.69	9.98	XX	20	SLE Q	11.31	5.65	-1581.17	39.65	1070.05
-1533	-0.61	4.56	XX	18	SLE R	11.31	5.65	-2243.71	56.26	1518.42
-1533	-0.61	4.56	XX	20	SLE Q	11.31	5.65	-1864.56	46.75	1261.83
-1515	0.00	0.39	XX	18	SLE R	11.31	5.65	-2047.22	51.33	1385.44



-1515	0.00	0.39	XX	20	SLE Q	11.31	5.65	-1713.25	42.96	1159.43
-1573	13.44	6.70	YY	18	SLE R	5.65	5.65	-458.77	15.02	602.02
-1562	10.66	6.23	YY	20	SLE Q	5.65	5.65	-414.52	13.57	543.96
-1541	11.28	5.13	YY	18	SLE R	5.65	5.65	387.52	12.68	508.52
-1541	11.28	5.13	YY	20	SLE Q	5.65	5.65	312.08	10.21	409.53
314	4.40	10.31	YY	18	SLE R	11.31	5.65	-2478.50	62.15	1677.31
314	4.40	10.31	YY	20	SLE Q	11.31	5.65	-1976.48	49.56	1337.57
-1617	12.07	10.31	YY	18	SLE R	5.65	5.65	-1313.39	42.99	1723.50
-1617	12.07	10.31	YY	20	SLE Q	5.65	5.65	-1069.97	35.02	1404.08
-1607	0.88	10.31	YY	18	SLE R	11.31	5.65	-2219.19	55.64	1501.82
-1607	0.88	10.31	YY	20	SLE Q	11.31	5.65	-1799.26	45.11	1217.64
315	9.29	10.31	YY	18	SLE R	11.31	5.65	-1227.80	30.79	830.91
315	9.29	10.31	YY	20	SLE Q	11.31	5.65	-978.80	24.54	662.40
-1575	-1.25	7.36	YY	18	SLE R	5.65	5.65	575.53	18.84	755.25
-1575	-1.25	7.36	YY	20	SLE Q	5.65	5.65	465.15	15.22	610.39
-1590	0.00	8.40	YY	18	SLE R	11.31	5.65	252.54	7.93	333.33
-1590	0.00	8.40	YY	20	SLE Q	11.31	5.65	214.72	6.74	283.42
-1619	13.69	10.31	YY	18	SLE R	11.31	5.65	-2735.20	68.58	1851.03
-1619	13.69	10.31	YY	20	SLE Q	11.31	5.65	-2196.18	55.07	1486.25
-1624	19.82	10.31	YY	18	SLE R	11.31	5.65	-2086.46	52.32	1412.00
-1624	19.82	10.31	YY	20	SLE Q	11.31	5.65	-1663.29	41.70	1125.62
318	23.11	10.31	YY	18	SLE R	11.31	5.65	-2282.40	57.23	1544.60
318	23.11	10.31	YY	20	SLE Q	11.31	5.65	-1857.03	46.56	1256.74

Stato limite d'esercizio - Verifiche a fessurazione

Nodo	X <m>	Y <m>	DV	CC	TCC	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cmq>	A <sub>c eff</sub> <cmq>	σ <sub>s</sub> <daN/cmq>	σ <sub>sr</sub> <daN/cmq>	ε <sub>sm</sub>	Wk <mm>
-1562	10.66	6.23	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	611.85	2671.68	0.12	0.03
-1562	10.66	6.23	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	635.47	2671.68	0.12	0.03
-1567	14.37	6.50	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	311.82	2671.68	0.06	0.02
-1567	14.37	6.50	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	323.10	2671.68	0.06	0.02
-1526	0.00	2.91	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1721.90	2671.68	0.33	0.09
-1526	0.00	2.91	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1828.34	2671.68	0.36	0.10
-1678	7.12	12.19	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	576.87	2671.68	0.11	0.03
-1678	7.12	12.19	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	616.31	2671.68	0.12	0.03
-1605	-0.69	9.98	XX	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1070.05	1490.30	0.21	0.04
-1605	-0.69	9.98	XX	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1135.90	1490.30	0.22	0.05
-1533	-0.61	4.56	XX	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1261.83	1490.30	0.25	0.05
-1533	-0.61	4.56	XX	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1335.14	1490.30	0.26	0.06
-1515	0.00	0.39	XX	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1159.43	1490.30	0.23	0.05
-1515	0.00	0.39	XX	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1224.01	1490.30	0.24	0.05
-1562	10.66	6.23	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	543.96	2671.68	0.11	0.03
-1562	10.66	6.23	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	558.63	2671.68	0.11	0.03
-1541	11.28	5.13	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	409.53	2671.68	0.08	0.02
-1541	11.28	5.13	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	437.82	2671.68	0.09	0.02
314	4.40	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1337.57	1490.30	0.26	0.06
314	4.40	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1434.64	1490.30	0.32	0.07
-1617	12.07	10.31	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1404.08	2671.68	0.27	0.08
-1617	12.07	10.31	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1495.34	2671.68	0.29	0.08
-1607	0.88	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1217.64	1490.30	0.24	0.05
-1607	0.88	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1298.83	1490.30	0.25	0.05
315	9.29	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	662.40	1490.30	0.13	0.03
315	9.29	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	710.54	1490.30	0.14	0.03
-1575	-1.25	7.36	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	610.39	2671.68	0.12	0.03
-1575	-1.25	7.36	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	651.78	2671.68	0.13	0.04
-1590	0.00	8.40	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	283.42	2759.20	0.06	0.02
-1590	0.00	8.40	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	297.68	2759.20	0.06	0.02
-1619	13.69	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1486.25	1490.30	0.36	0.08
-1619	13.69	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1590.47	1490.30	0.43	0.09
-1624	19.82	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1125.62	1490.30	0.22	0.05
-1624	19.82	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1207.44	1490.30	0.23	0.05
318	23.11	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1256.74	1490.30	0.24	0.05
318	23.11	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1338.98	1490.30	0.26	0.06

Armatura soletta a quota 12.24

Caratteristiche delle sezioni e dei materiali utilizzati

Spess. <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	MRdy <daNm>	Sic.
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416	14.37	10.31	XX	17	SLU	5.65	5.65	-894.54	-3295.04	3.684
-1779	14.37	6.50	XX	17	SLU	5.65	5.65	560.74	3295.04	5.876
-1738	0.00	2.91	XX	17	SLU	5.65	5.65	-1703.49	-3295.04	1.934
-1890	7.12	12.19	XX	17	SLU	5.65	5.65	780.92	3295.04	4.219
413	0.00	10.31	XX	17	SLU	10.41	5.65	-3384.08	-5586.59	1.651
407	0.00	4.59	XX	17	SLU	11.31	5.65	-4072.02	-6019.32	1.478
401	0.00	-0.45	XX	17	SLU	11.31	5.65	-3263.40	-6019.32	1.844
-1783	13.00	6.65	YY	17	SLU	5.65	5.65	-1294.06	-3295.04	2.546
-1753	11.28	5.13	YY	17	SLU	5.65	5.65	652.91	3295.04	5.047
414	4.40	10.31	YY	17	SLU	11.31	5.65	-3299.40	-6019.32	1.824
-1837	20.64	10.31	YY	17	SLU	5.65	5.65	-1709.15	-3295.04	1.928
413	0.00	10.31	YY	17	SLU	10.41	5.65	-3525.06	-5586.59	1.585
415	9.29	10.31	YY	17	SLU	11.31	5.65	-1909.59	-6019.32	3.152
-1800	-0.63	8.33	YY	17	SLU	10.41	5.65	446.88	3316.76	7.422
-1786	-1.88	7.33	YY	17	SLU	5.65	5.65	952.38	3295.04	3.460
416	14.37	10.31	YY	17	SLU	11.31	5.65	-3641.02	-6019.32	1.653
417	19.00	10.31	YY	17	SLU	11.31	5.65	-3629.13	-6019.32	1.659
418	23.11	10.31	YY	17	SLU	11.31	5.65	-3086.61	-6019.32	1.950

## Stato limite elastico - Verifiche a flessione/pressoflessione

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
-1801	13.83	8.35	XX	1	SND	5.65	5.65	2014.82	2979.85	1.479
-1783	13.00	6.65	XX	9	SND	5.65	5.65	-2267.03	-2979.85	1.314
-1836	19.82	10.31	XX	1	SND	5.65	5.65	-1030.84	-2979.85	2.891
416	14.37	10.31	XX	9	SND	5.65	5.65	-1380.72	-2979.85	2.158
413	0.00	10.31	XX	1	SND	10.41	5.65	-2365.79	-5308.24	2.244
-1819	0.88	10.31	XX	1	SND	10.41	5.65	-1080.20	-5308.24	4.914
407	0.00	4.59	XX	9	SND	11.31	5.65	-2510.34	-5738.11	2.286
401	0.00	-0.45	XX	1	SND	11.31	5.65	-1938.38	-5738.11	2.960
-1801	13.83	8.35	YY	13	SND	5.65	5.65	1552.83	2979.85	1.919
-1783	13.00	6.65	YY	13	SND	5.65	5.65	-2762.17	-2979.85	1.079
414	4.40	10.31	YY	9	SND	11.31	5.65	-1967.29	-5738.11	2.917
401	0.00	-0.45	YY	5	SND	5.65	5.65	-1581.36	-2979.85	1.884
413	0.00	10.31	YY	9	SND	10.41	5.65	-2589.35	-5308.24	2.050
-1800	-0.63	8.33	YY	5	SND	10.41	5.65	826.98	2967.91	3.589
415	9.29	10.31	YY	13	SND	11.31	5.65	-1158.18	-5738.11	4.954
-1778	0.00	6.50	YY	9	SND	5.65	5.65	1048.03	2979.85	2.843
416	14.37	10.31	YY	13	SND	11.31	5.65	-2582.98	-5738.11	2.222
417	19.00	10.31	YY	1	SND	11.31	5.65	-2228.30	-5738.11	2.575
418	23.11	10.31	YY	13	SND	11.31	5.65	-2020.30	-5738.11	2.840
-1812	13.65	9.29	YY	5	SND	11.31	5.65	-1719.95	-5738.11	3.336

## Stato limite ultimo - Verifica a taglio del calcestruzzo

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Vsdu <daN>	Vrdu <daN>
-1773	9.97	6.23	XX	17	SLU	5.65	5.65	4732.39	8003.45
-1785	13.44	6.70	XX	9	SND	5.65	5.65	4856.95	8003.45
-1832	15.30	10.31	XX	17	SLU	5.65	5.65	5535.63	8003.45
-1836	19.82	10.31	XX	1	SND	5.65	5.65	6189.14	8003.45
-1819	0.88	10.31	XX	17	SLU	10.41	5.65	6340.74	9796.82
-1819	0.88	10.31	XX	9	SND	10.41	5.65	5127.36	8003.45
407	0.00	4.59	XX	17	SLU	11.31	5.65	6279.55	10072.40
407	0.00	4.59	XX	13	SND	11.31	5.65	5112.73	10072.40
401	0.00	-0.45	XX	17	SLU	11.31	5.65	4502.87	10072.40
401	0.00	-0.45	XX	13	SND	11.31	5.65	3196.34	10072.40
409	9.29	4.59	YY	17	SLU	5.65	5.65	5667.88	8003.45
409	9.29	4.59	YY	9	SND	5.65	5.65	5932.43	8003.45
414	4.40	10.31	YY	17	SLU	11.31	5.65	5174.73	10072.40
414	4.40	10.31	YY	9	SND	11.31	5.65	3991.91	10072.40
401	0.00	-0.45	YY	17	SLU	5.65	5.65	6562.47	8003.45
401	0.00	-0.45	YY	5	SND	5.65	5.65	7455.38	8003.45
-1813	0.00	9.36	YY	17	SLU	10.41	5.65	7986.85	9796.82
-1802	0.00	8.40	YY	13	SND	10.41	5.65	6068.89	8003.45
415	9.29	10.31	YY	17	SLU	11.31	5.65	3757.32	10072.40
415	9.29	10.31	YY	9	SND	11.31	5.65	2528.19	10072.40
-1848	14.41	10.87	YY	17	SLU	11.31	5.65	4684.83	10072.40
-1831	13.69	10.31	YY	9	SND	11.31	5.65	4013.23	10072.40
417	19.00	10.31	YY	17	SLU	11.31	5.65	5619.92	10072.40
417	19.00	10.31	YY	1	SND	11.31	5.65	4649.88	10072.40
418	23.11	10.31	YY	17	SLU	11.31	5.65	4635.85	10072.40
418	23.11	10.31	YY	13	SND	11.31	5.65	2851.42	10072.40
-1831	13.69	10.31	YY	17	SLU	11.31	5.65	4112.52	10072.40
-1812	13.65	9.29	YY	13	SND	11.31	5.65	4202.72	8003.45





## Stato limite d'esercizio - Verifiche tensionali

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Mom <daNm>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
416	14.37	10.31	XX	18	SLE R	5.65	5.65	-627.84	20.55	823.89
416	14.37	10.31	XX	20	SLE Q	5.65	5.65	-513.00	16.79	673.18
-1779	14.37	6.50	XX	18	SLE R	5.65	5.65	382.32	12.51	501.70
-1779	14.37	6.50	XX	20	SLE Q	5.65	5.65	333.23	10.91	437.28
-1738	0.00	2.91	XX	18	SLE R	5.65	5.65	-1189.85	38.94	1561.38
-1738	0.00	2.91	XX	20	SLE Q	5.65	5.65	-933.59	30.56	1225.11
-1890	7.12	12.19	XX	18	SLE R	5.65	5.65	545.68	17.86	716.07
-1890	7.12	12.19	XX	20	SLE Q	5.65	5.65	446.80	14.62	586.32
413	0.00	10.31	XX	18	SLE R	10.41	5.65	-2361.75	61.00	1730.25
413	0.00	10.31	XX	20	SLE Q	10.41	5.65	-1873.31	48.38	1372.41
407	0.00	4.59	XX	18	SLE R	11.31	5.65	-2847.74	71.40	1927.19
407	0.00	4.59	XX	20	SLE Q	11.31	5.65	-2236.94	56.09	1513.84
401	0.00	-0.45	XX	18	SLE R	11.31	5.65	-2271.88	56.96	1537.48
401	0.00	-0.45	XX	20	SLE Q	11.31	5.65	-1822.51	45.70	1233.37
-1783	13.00	6.65	YY	18	SLE R	5.65	5.65	-888.60	29.08	1166.08
-1783	13.00	6.65	YY	20	SLE Q	5.65	5.65	-756.27	24.75	992.42
-1753	11.28	5.13	YY	18	SLE R	5.65	5.65	454.36	14.87	596.23
-1748	11.83	4.59	YY	20	SLE Q	5.65	5.65	368.17	12.05	483.13
414	4.40	10.31	YY	18	SLE R	11.31	5.65	-2307.32	57.85	1561.46
414	4.40	10.31	YY	20	SLE Q	11.31	5.65	-1821.86	45.68	1232.93
-1837	20.64	10.31	YY	18	SLE R	5.65	5.65	-1192.48	39.03	1564.84
-1837	20.64	10.31	YY	20	SLE Q	5.65	5.65	-937.99	30.70	1230.89
413	0.00	10.31	YY	18	SLE R	10.41	5.65	-2458.88	63.51	1801.40
413	0.00	10.31	YY	20	SLE Q	10.41	5.65	-1949.98	50.36	1428.58
415	9.29	10.31	YY	18	SLE R	11.31	5.65	-1333.60	33.44	902.51
415	9.29	10.31	YY	20	SLE Q	11.31	5.65	-1050.65	26.34	711.02
-1800	-0.63	8.33	YY	18	SLE R	10.41	5.65	314.49	9.93	414.75
-1800	-0.63	8.33	YY	20	SLE Q	10.41	5.65	256.45	8.10	338.21
-1786	-1.88	7.33	YY	18	SLE R	5.65	5.65	666.44	21.81	874.54
-1786	-1.88	7.33	YY	20	SLE Q	5.65	5.65	533.95	17.48	700.68
416	14.37	10.31	YY	18	SLE R	11.31	5.65	-2543.15	63.77	1721.06
416	14.37	10.31	YY	20	SLE Q	11.31	5.65	-1991.01	49.92	1347.41
417	19.00	10.31	YY	18	SLE R	11.31	5.65	-2537.40	63.62	1717.17
417	19.00	10.31	YY	20	SLE Q	11.31	5.65	-2013.59	50.49	1362.69
418	23.11	10.31	YY	18	SLE R	11.31	5.65	-2148.38	53.87	1453.90
418	23.11	10.31	YY	20	SLE Q	11.31	5.65	-1707.65	42.82	1155.64

## Stato limite d'esercizio - Verifiche a fessurazione

Nodo	X <m>	Y <m>	DV	CC	TCC	c <mm>	s <mm>	K3	$s_{rm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_{c\ eff}$ <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	$W_k$ <mm>
416	14.37	10.31	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	673.18	2671.68	0.13	0.04
416	14.37	10.31	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	716.24	2671.68	0.14	0.04
-1779	14.37	6.50	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	437.28	2671.68	0.08	0.02
-1779	14.37	6.50	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	455.68	2671.68	0.09	0.02
-1738	0.00	2.91	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1225.11	2671.68	0.24	0.07
-1738	0.00	2.91	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1321.19	2671.68	0.26	0.07
-1890	7.12	12.19	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	586.32	2671.68	0.11	0.03
-1890	7.12	12.19	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	623.39	2671.68	0.12	0.03
413	0.00	10.31	XX	20	SLE Q	24.25	99.81	0.13	120.91	11.50	11.43	1042.13	1372.41	1474.18	0.28	0.06
413	0.00	10.31	XX	19	SLE F	24.25	99.81	0.13	120.91	11.50	11.43	1042.13	1474.65	1474.18	0.36	0.07
407	0.00	4.59	XX	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1513.84	1490.30	0.38	0.08
407	0.00	4.59	XX	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1631.94	1490.30	0.46	0.10
401	0.00	-0.45	XX	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1233.37	1490.30	0.24	0.05
401	0.00	-0.45	XX	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1320.26	1490.30	0.26	0.05
-1783	13.00	6.65	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	992.42	2671.68	0.19	0.05
-1783	13.00	6.65	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1042.04	2671.68	0.20	0.06
-1748	11.83	4.59	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	483.13	2671.68	0.09	0.03
-1753	11.28	5.13	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	514.47	2671.68	0.10	0.03
414	4.40	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1232.93	1490.30	0.24	0.05
414	4.40	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1326.80	1490.30	0.26	0.05
-1837	20.64	10.31	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1230.89	2671.68	0.24	0.07
-1837	20.64	10.31	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1326.30	2671.68	0.26	0.07
413	0.00	10.31	YY	20	SLE Q	24.25	99.81	0.13	120.91	11.50	11.43	1042.13	1428.58	1474.18	0.32	0.07
413	0.00	10.31	YY	19	SLE F	24.25	99.81	0.13	120.91	11.50	11.43	1042.13	1535.10	1474.18	0.40	0.08
415	9.29	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	711.02	1490.30	0.14	0.03
415	9.29	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	765.73	1490.30	0.15	0.03
-1800	-0.63	8.33	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	338.21	2747.30	0.07	0.02
-1800	-0.63	8.33	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	360.08	2747.30	0.07	0.02
-1786	-1.88	7.33	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	700.68	2671.68	0.14	0.04
-1786	-1.88	7.33	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	750.35	2671.68	0.15	0.04
416	14.37	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1347.41	1490.30	0.26	0.06
416	14.37	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1454.16	1490.30	0.34	0.07





417	19.00	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1362.69	1490.30	0.27	0.06
417	19.00	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1463.97	1490.30	0.34	0.07
418	23.11	10.31	YY	20	SLE Q	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1155.64	1490.30	0.22	0.05
418	23.11	10.31	YY	19	SLE F	24.00	100.00	0.13	124.98	12.00	11.31	1074.14	1240.86	1490.30	0.24	0.05

**Armatura soletta a quota 15.42****Caratteristiche delle sezioni e dei materiali utilizzati**

Spess. <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cm <sup>2</sup> >	Fctk <daN/cm <sup>2</sup> >	Fcd <daN/cm <sup>2</sup> >	Fctd <daN/cm <sup>2</sup> >	TP	Fyk <daN/cm <sup>2</sup> >	Fyd <daN/cm <sup>2</sup> >
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	MRdy <daNm>	Sic.
-1961	10.66	6.23	XX	17	SLU	10.05	10.05	-846.58	-5417.69	6.399
-1962	14.37	6.50	XX	17	SLU	10.05	10.05	465.30	5417.69	11.643
-1938	10.98	4.59	YY	17	SLU	5.65	5.65	338.93	3295.04	9.722
515	9.29	10.31	YY	17	SLU	5.65	5.65	-1513.61	-3295.04	2.177

**Stato limite elastico - Verifiche a flessione/pressoflessione**

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
-1980	10.66	8.17	XX	9	SND	10.05	10.05	-4775.55	-5126.38	1.073
-1989	10.66	8.93	YY	9	SND	5.65	5.65	-1679.44	-2979.85	1.774
-1958	11.09	6.18	YY	13	SND	5.65	5.65	-2954.08	-2979.85	1.009

**Stato limite ultimo - Verifica a taglio del calcestruzzo**

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Vsdu <daN>	Vrdu <daN>
-1960	9.97	6.23	XX	17	SLU	10.05	10.05	2973.94	9684.63
-1996	9.29	9.49	XX	1	SND	10.05	10.05	9544.20	9684.63
-1958	11.09	6.18	YY	17	SLU	5.65	5.65	3097.22	8003.45
-1989	10.66	8.93	YY	1	SND	5.65	5.65	6196.79	8003.45

**Stato limite d'esercizio - Verifiche tensionali**

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Mom <daNm>	$\sigma_c$ <daN/cm <sup>2</sup> >	$\sigma_f$ <daN/cm <sup>2</sup> >
-1961	10.66	6.23	XX	18	SLE R	10.05	10.05	-577.86	14.40	439.12
-1961	10.66	6.23	XX	20	SLE Q	10.05	10.05	-506.43	12.62	384.84
-1962	14.37	6.50	XX	18	SLE R	10.05	10.05	320.35	7.98	243.43
-1962	14.37	6.50	XX	20	SLE Q	10.05	10.05	282.35	7.04	214.56
515	9.29	10.31	YY	18	SLE R	5.65	5.65	-1058.84	34.66	1389.47
-1938	10.98	4.59	YY	20	SLE Q	5.65	5.65	207.79	6.80	272.67
-1938	10.98	4.59	YY	18	SLE R	5.65	5.65	231.71	7.58	304.06
-1958	11.09	6.18	YY	20	SLE Q	5.65	5.65	-887.55	29.05	1164.69

**Stato limite d'esercizio - Verifiche a fessurazione**

Nodo	X <m>	Y <m>	DV	CC	TCC	c <mm>	s <mm>	K3	$s_{rm}$ <mm>	$\Phi$	$A_s$ <cm <sup>2</sup> >	$A_{c\ eff}$ <cm <sup>2</sup> >	$\sigma_s$ <daN/cm <sup>2</sup> >	$\sigma_{sr}$ <daN/cm <sup>2</sup> >	$\epsilon_{sm}$	Wk <mm>
-1961	10.66	6.23	XX	20	SLE Q	22.00	200.00	0.13	178.19	16.00	10.05	1183.60	384.84	1645.07	0.07	0.02
-1961	10.66	6.23	XX	19	SLE F	22.00	200.00	0.13	178.19	16.00	10.05	1183.60	400.35	1645.07	0.08	0.02
-1962	14.37	6.50	XX	20	SLE Q	22.00	200.00	0.13	178.19	16.00	10.05	1183.60	214.56	1645.07	0.04	0.01
-1962	14.37	6.50	XX	19	SLE F	22.00	200.00	0.13	178.19	16.00	10.05	1183.60	222.81	1645.07	0.04	0.01
-1938	10.98	4.59	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	272.67	2671.68	0.05	0.01
-1958	11.09	6.18	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1212.42	2671.68	0.24	0.07
-1938	10.98	4.59	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	281.64	2671.68	0.05	0.02
-1958	11.09	6.18	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	1164.69	2671.68	0.23	0.06

**Armatura soletta a quota 16.41****Caratteristiche delle sezioni e dei materiali utilizzati**

Spess. <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cm <sup>2</sup> >	Fctk <daN/cm <sup>2</sup> >	Fcd <daN/cm <sup>2</sup> >	Fctd <daN/cm <sup>2</sup> >	TP	Fyk <daN/cm <sup>2</sup> >	Fyd <daN/cm <sup>2</sup> >
18.00	3.00	3.00	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**



Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	My <daNm>	MRdy <daNm>	Sic.
-2013	10.66	8.17	XX	5	SLV	5.65	5.65	-209.16	-3295.04	15.753
-2008	13.00	6.65	XX	1	SLV	5.65	5.65	202.64	3295.04	16.260
-2020	13.00	8.93	YY	5	SLV	5.65	5.65	-350.81	-3295.04	9.393
-2012	13.00	7.41	YY	5	SLV	5.65	5.65	343.45	3295.04	9.594

Stato limite ultimo - Verifica a taglio del calcestruzzo

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Vsdu <daN>	Vrdu <daN>
-2013	10.66	8.17	XX	1	SLV	5.65	5.65	744.21	8003.45
-2020	13.00	8.93	YY	5	SLV	5.65	5.65	1255.48	8003.45

Stato limite d'esercizio - Verifiche tensionali

Nodo	X <m>	Y <m>	DV	CC	TCC	AfE S <cmq>	AfE I <cmq>	Mom <daNm>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
-2013	10.66	8.17	XX	18	SLE R	5.65	5.65	-45.00	1.47	59.05
-2013	10.66	8.17	XX	20	SLE Q	5.65	5.65	-34.22	1.12	44.91
-2008	13.00	6.65	XX	18	SLE R	5.65	5.65	116.90	3.83	153.41
-2008	13.00	6.65	XX	20	SLE Q	5.65	5.65	101.68	3.33	133.43
-2020	13.00	8.93	YY	18	SLE R	5.65	5.65	-41.98	1.37	55.09
-2020	13.00	8.93	YY	20	SLE Q	5.65	5.65	-26.26	0.86	34.46
-2012	13.00	7.41	YY	18	SLE R	5.65	5.65	165.11	5.40	216.67
-2012	13.00	7.41	YY	20	SLE Q	5.65	5.65	132.87	4.35	174.36

Stato limite d'esercizio - Verifiche a fessurazione

Nodo	X <m>	Y <m>	DV	CC	TCC	c <mm>	s <mm>	K3	$s_{rm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_c^{eff}$ <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
-2013	10.66	8.17	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	44.91	2671.68	0.01	0.00
-2013	10.66	8.17	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	48.95	2671.68	0.01	0.00
-2008	13.00	6.65	XX	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	133.43	2671.68	0.03	0.01
-2008	13.00	6.65	XX	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	139.14	2671.68	0.03	0.01
-2020	13.00	8.93	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	34.46	2671.68	0.01	0.00
-2020	13.00	8.93	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	40.35	2671.68	0.01	0.00
-2012	13.00	7.41	YY	20	SLE Q	24.00	168.00	0.13	165.25	12.00	1.13	157.67	174.36	2671.68	0.03	0.01
-2012	13.00	7.41	YY	19	SLE F	24.00	168.00	0.13	165.25	12.00	1.13	157.67	186.45	2671.68	0.04	0.01

## Verifiche e armature pareti

### Simbologia

CC	= Numero della combinazione delle condizioni di carico elementari
Zona	= Zona di verifica
Zv	= Coordinata Z di verifica
Xi	= Coordinata X iniziale
Xf	= Coordinata X finale
Xv	= Coordinata X di verifica
TCC	= Tipo di combinazione di carico
	SLU = Stato limite ultimo
	SLU S = Stato limite ultimo (azione sismica)
	SLE R = Stato limite d'esercizio, combinazione rara
	SLE F = Stato limite d'esercizio, combinazione frequente
	SLE Q = Stato limite d'esercizio, combinazione quasi permanente
	SLD = Stato limite di danno
	SLV = Stato limite di salvaguardia della vita
	SLC = Stato limite di prevenzione del collasso
	SLO = Stato limite di operatività
	SLU I = Stato limite di resistenza al fuoco
	SND = Stato limite di salvaguardia della vita (non dissipativo)
N	= Sforzo normale
My	= Momento flettente intorno all'asse Y
Nu	= Sforzo normale ultimo
M'yd	= Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
MRdy	= Momento resistente allo stato limite ultimo intorno all'asse Y
Sic.	= Sicurezza a rottura
$\sigma_c$	= Tensione nel calcestruzzo
$\sigma_f$	= Tensione nel ferro
c	= Ricoprimento dell'armatura
s	= Distanza minima tra le barre
K3	= Coefficiente di forma del diagramma delle tensioni prima della fessurazione
$s_{rm}$	= Distanza media tra le fessure



- $\Phi$  = Diametro della barra
- $A_s$  = Area complessiva dei ferri nell'area di calcestruzzo efficace
- $A_{c\ eff}$  = Area di calcestruzzo efficace
- $\sigma_s$  = Tensione nell'acciaio nella sezione fessurata
- $\sigma_{sr}$  = Tensione nell'acciaio corrispondente al raggiungimento della resistenza a trazione nel calcestruzzo
- $\epsilon_{sm}$  = Deformazione unitaria media dell'armatura (\*1000)
- $W_k$  = Apertura delle fessure
- $T_y$  = Taglio in dir. Y
- $V_{sdu}$  = Taglio agente nella direzione del momento ultimo
- $VR_{sd}$  = Taglio ultimo lato armatura
- $VR_{cd}$  = Taglio ultimo lato calcestruzzo
- $VR_{du}$  = Taglio ultimo assorbibile dal solo calcestruzzo
- Sic.T = Sicurezza a rottura per taglio
- Sez. = Sezione di verifica
- Spess. = Spessore
- Cf = Copriferro
- Cls = Tipo di calcestruzzo
- Fck = Resistenza caratteristica cilindrica a compressione del calcestruzzo
- Fctk = Resistenza caratteristica a trazione del calcestruzzo
- Fcd = Resistenza di calcolo a compressione del calcestruzzo
- Fctd = Resistenza di calcolo a trazione del calcestruzzo
- Tp = Tipo di acciaio
- Fyk = Tensione caratteristica di snervamento dell'acciaio
- Fyd = Resistenza di calcolo dell'acciaio

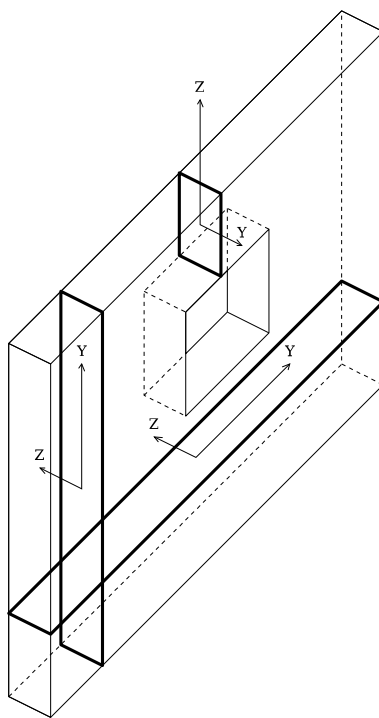


Figura numero 4: Riferimenti sezione

Parete n. 123

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm <sup>2</sup> >	Fctk <daN/cm <sup>2</sup> >	Fcd <daN/cm <sup>2</sup> >	Fctd <daN/cm <sup>2</sup> >	Tp	Fyk <daN/cm <sup>2</sup> >	Fyd <daN/cm <sup>2</sup> >
Oriz.	30.00	5.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
A-A	30.00	5.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	MRdy <daNm>	Sic.
17	SLU	Diff.	0.00	0.00	26.07	-176808.00	-4486.31	-176808.00	-156175.00	34.812
17	SLU	Diff.	1.45	0.00	26.07	-134241.00	-2580.88	-134241.00	-150978.00	58.498
17	SLU	Diff.	1.45	0.00	14.54	-78198.40	-3702.95	-78198.40	-83400.60	22.523
17	SLU	Diff.	1.45	18.54	26.07	-40315.30	-1397.65	-40315.30	-45792.50	32.764
17	SLU	Diff.	2.17	0.00	14.54	-67991.30	14880.90	-67991.30	82123.30	5.519
17	SLU	Diff.	2.17	18.54	26.07	-35029.30	-976.79	-35029.30	-45207.30	46.282



17	SLU	Diff.	2.17	2.83	14.54	-61036.50	12254.90	-61036.50	66570.60	5.432
17	SLU	Diff.	2.17	18.54	26.07	-29047.30	-999.32	-29047.30	-44497.40	44.528
17	SLU	Diff.	2.22	2.83	14.54	-71695.30	15569.70	-71695.30	67903.70	4.361
17	SLU	Diff.	2.22	18.54	26.07	-27101.70	4479.98	-27101.70	44261.10	9.880
17	SLU	Diff.	2.22	2.83	14.54	-71695.30	15569.70	-71695.30	67903.70	4.361
17	SLU	Diff.	2.22	18.54	26.07	-27101.70	4479.98	-27101.70	44261.10	9.880
17	SLU	Diff.	2.70	11.16	14.54	-30572.80	7488.20	-30572.80	20893.60	2.790
17	SLU	Diff.	2.70	18.54	26.07	-25156.20	9959.27	-25156.20	44021.20	4.420
17	SLU	Sez. A-A	2.22	24.44	24.74	-2890.95	877.53	-2890.95	3978.03	4.533

## Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	M'ydy <daNm>	Sic.
5	SND	Diff.	0.00	0.00	26.07	-98007.80	-17409.90	-98007.80	-124110.00	7.129
5	SND	Diff.	1.45	0.00	26.07	-69964.20	-10296.80	-69964.20	-120748.00	11.727
13	SND	Diff.	1.45	0.00	14.54	-43144.90	-10180.30	-43144.90	-66807.90	6.562
1	SND	Diff.	1.45	18.54	26.07	-23005.70	-4056.25	-23005.70	-37014.60	9.125
5	SND	Diff.	2.17	0.00	14.54	-37381.60	12633.50	-37381.60	66116.30	5.233
13	SND	Diff.	2.17	18.54	26.07	-16286.90	-14483.30	-16286.90	-36210.90	2.500
5	SND	Diff.	2.17	2.83	14.54	-34691.60	10652.90	-34691.60	53487.60	5.021
13	SND	Diff.	2.17	18.54	26.07	-16406.40	-14409.50	-16406.40	-36224.90	2.514
13	SND	Diff.	2.22	2.83	14.54	-18646.00	10650.90	-18646.00	51551.60	4.840
5	SND	Diff.	2.22	18.54	26.07	-14534.40	6603.21	-14534.40	36001.00	5.452
13	SND	Diff.	2.22	2.83	14.54	-18646.00	10650.90	-18646.00	51551.60	4.840
5	SND	Diff.	2.22	18.54	26.07	-14534.40	6603.21	-14534.40	36001.00	5.452
1	SND	Diff.	2.70	11.16	14.54	-16887.10	4884.53	-16887.10	16403.00	3.358
13	SND	Diff.	2.70	18.54	26.07	-13413.30	12369.60	-13413.30	35865.90	2.900
1	SND	Sez. A-A	2.22	24.44	24.74	-1581.94	622.32	-1581.94	3584.34	5.760

## Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	$\sigma_c$ <daN/cm <sup>2</sup> >	$\sigma_t$ <daN/cm <sup>2</sup> >	
18	SLE	R	Diff.	0.00	0.00	26.07	-128960.00	-1725.44	1.99	27.78
20	SLE	Q	Diff.	0.00	0.00	26.07	-113424.00	-2486.27	1.99	26.74
18	SLE	R	Diff.	1.45	0.00	26.07	-96052.90	-1786.40	1.61	21.88
20	SLE	Q	Diff.	1.45	0.00	26.07	-81838.70	-1990.04	1.48	19.76
18	SLE	R	Diff.	1.45	0.00	14.54	-55835.80	-2532.95	2.32	29.20
20	SLE	Q	Diff.	1.45	0.00	14.54	-47469.00	-2688.73	2.21	27.17
18	SLE	R	Diff.	1.45	18.54	26.07	-28856.50	-972.92	2.03	26.37
20	SLE	Q	Diff.	1.45	18.54	26.07	-25085.50	-808.92	1.74	22.62
18	SLE	R	Diff.	2.17	0.00	14.54	-47984.30	10446.30	10.66	313.27
20	SLE	Q	Diff.	2.17	0.00	14.54	-39617.40	8335.34	8.45	241.15
18	SLE	R	Diff.	2.17	18.54	26.07	-24790.30	-680.53	1.62	21.37
20	SLE	Q	Diff.	2.17	18.54	26.07	-21019.30	-548.62	1.35	17.89
18	SLE	R	Diff.	2.17	2.83	14.54	-42968.30	8596.36	10.70	292.93
20	SLE	Q	Diff.	2.17	2.83	14.54	-35674.00	6659.38	8.15	207.99
18	SLE	R	Diff.	2.17	18.54	26.07	-20530.50	-696.31	1.45	18.79
20	SLE	Q	Diff.	2.17	18.54	26.07	-17485.30	-557.88	1.21	15.72
18	SLE	R	Diff.	2.22	2.83	14.54	-49828.90	10903.40	13.82	409.84
20	SLE	Q	Diff.	2.22	2.83	14.54	-41025.50	8641.56	10.87	312.13
18	SLE	R	Diff.	2.22	18.54	26.07	-19033.90	3114.06	5.62	117.22
20	SLE	Q	Diff.	2.22	18.54	26.07	-15988.70	2774.31	5.10	114.67
18	SLE	R	Diff.	2.22	2.83	14.54	-49828.90	10903.40	13.82	409.84
20	SLE	Q	Diff.	2.22	2.83	14.54	-41025.50	8641.56	10.87	312.13
18	SLE	R	Diff.	2.22	18.54	26.07	-19033.90	3114.06	5.62	117.22
20	SLE	Q	Diff.	2.22	18.54	26.07	-15988.70	2774.31	5.10	114.67
18	SLE	R	Diff.	2.70	11.16	14.54	-21299.20	5193.23	23.32	743.51
20	SLE	Q	Diff.	2.70	11.16	14.54	-18094.20	4473.32	20.13	647.93
18	SLE	R	Diff.	2.70	18.54	26.07	-17537.30	6924.43	14.53	561.72
20	SLE	Q	Diff.	2.70	18.54	26.07	-14492.10	6106.49	12.88	508.46
18	SLE	R	Sez. A-A	2.22	24.44	24.74	-2023.43	609.62	21.11	451.11
20	SLE	Q	Sez. A-A	2.22	24.44	24.74	-1719.60	529.27	18.34	395.92

## Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cm <sup>2</sup> >	A <sub>c</sub> eff <cm <sup>2</sup> >	σ <sub>s</sub> <daN/cm <sup>2</sup> >	σ <sub>sr</sub> <daN/cm <sup>2</sup> >	ε <sub>sm</sub> <mm>	Wk <mm>	
20	SLE	Q	Diff.	2.17	0.00	14.54	-39617.40	8335.34	45.00	168.00	0.13	223.37	12.00	1.13	188.06	241.14	3001.12	0.05	0.02
19	SLE	F	Diff.	2.17	0.00	14.54	-42008.00	8938.49	45.00	168.00	0.13	223.37	12.00	1.13	188.06	261.73	3026.83	0.05	0.02
20	SLE	Q	Diff.	2.17	2.83	14.54	-35674.00	6659.38	45.00	168.00	0.13	223.37	12.00	1.13	188.06	207.99	2717.86	0.04	0.02
19	SLE	F	Diff.	2.17	2.83	14.54	-37758.10	7212.80	45.00	168.00	0.13	223.37	12.00	1.13	188.06	232.18	2777.63	0.05	0.02
20	SLE	Q	Diff.	2.22	2.83	14.54	-41025.50	8641.56	45.00	168.00	0.13	223.37	12.00	1.13	188.06	312.13	3015.32	0.06	0.02
19	SLE	F	Diff.	2.22	2.83	14.54	-43540.70	9287.79	45.00	168.00	0.13	223.37	12.00	1.13	188.06	340.02	3044.18	0.07	0.03
20	SLE	Q	Diff.	2.22	18.54	26.07	-15988.70	2774.31	45.00	194.00	0.13	233.59	16.00	5.15	674.88	112.04	2332.29	0.02	0.01
19	SLE	F	Diff.	2.22	18.54	26.07	-16858.80	2871.38	45.00	194.00	0.13	233.59	16.00	5.15	674.88	112.72	2284.74	0.02	0.01
20	SLE	Q	Diff.	2.22	2.83	14.54	-41025.50	8641.56	45.00	168.00	0.13	223.37	12.00	1.13	188.06	312.13	3015.32	0.06	0.02
19	SLE	F	Diff.	2.22	2.83	14.54	-43540.70	9287.79	45.00	168.00	0.13	223.37	12.00	1.13	188.06	340.02	3044.18	0.07	0.03



20	SLE	Q	Diff.	2.22	18.54	26.07	-15988.70	2774.31	45.00	194.00	0.13	233.59	16.00	5.15	674.88	112.04	2332.29	0.02	0.01
19	SLE	F	Diff.	2.22	18.54	26.07	-16858.80	2871.38	45.00	194.00	0.13	233.59	16.00	5.15	674.88	112.72	2284.74	0.02	0.01
20	SLE	Q	Diff.	2.70	11.16	14.54	-18094.20	4473.32	45.00	168.00	0.13	223.37	12.00	1.13	188.06	647.93	3336.94	0.13	0.05
19	SLE	F	Diff.	2.70	11.16	14.54	-19009.90	4679.01	45.00	168.00	0.13	223.37	12.00	1.13	188.06	675.23	3328.50	0.13	0.05
20	SLE	Q	Diff.	2.70	18.54	26.07	-14492.10	6106.49	45.00	194.00	0.13	233.59	16.00	5.15	674.88	493.83	3762.07	0.10	0.04
19	SLE	F	Diff.	2.70	18.54	26.07	-15362.20	6340.19	45.00	194.00	0.13	233.59	16.00	5.15	674.88	508.65	3742.83	0.10	0.04
20	SLE	Q	Sez.-A-A	2.22	24.44	24.74	-1719.60	529.27	45.00	194.00	0.13	219.38	16.00	4.02	455.28	395.92	1606.59	0.08	0.03
19	SLE	F	Sez.-A-A	2.22	24.44	24.74	-1806.41	552.23	45.00	194.00	0.13	219.38	16.00	4.02	455.28	411.69	1603.32	0.08	0.03

## Parete n. 124

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
Oriz.	30.00	5.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
A-A	30.00	5.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
B-B	30.00	5.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Verifiche su sezioni orizzontali

## Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	MRdy <daNm>	Sic.
17	SLU	Diff.	0.00	0.00	26.07	-97121.40	-49840.50	-97121.40	-146949.00	2.948
17	SLU	Diff.	1.35	0.00	26.07	-78381.40	-24469.90	-78381.40	-144603.00	5.909
17	SLU	Diff.	2.70	0.00	26.07	-55973.10	11070.00	-55973.10	141796.00	12.809
17	SLU	Sez.-A-A	2.70	1.33	1.63	-4877.86	1422.78	-4877.86	4179.38	2.937
17	SLU	Sez.-B-B	2.70	24.44	24.74	-3670.88	1002.37	-3670.88	4057.33	4.048

## Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	M'ydy <daNm>	Sic.
5	SND	Diff.	0.00	0.00	26.07	-41006.00	-33306.20	-41006.00	-117751.00	3.535
5	SND	Diff.	1.35	0.00	26.07	-33880.40	-16570.30	-33880.40	-116888.00	7.054
5	SND	Diff.	2.70	0.00	26.07	-29758.90	7506.90	-29758.90	116385.00	15.504
9	SND	Sez.-A-A	2.70	1.33	1.63	-2449.60	938.18	-2449.60	3676.84	3.919
1	SND	Sez.-B-B	2.70	24.44	24.74	-1806.75	909.15	-1806.75	3608.11	3.969

## Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	$\sigma_c$ <daN/cm²>	$\sigma_f$ <daN/cm²>	
18	SLE	R	Diff.	0.00	0.00	26.07	-71730.50	-34481.70	20.95	901.06
20	SLE	Q	Diff.	0.00	0.00	26.07	-68291.70	-27805.40	16.76	684.37
18	SLE	R	Diff.	1.35	0.00	26.07	-56866.70	-16960.30	9.98	357.27
20	SLE	Q	Diff.	1.35	0.00	26.07	-52131.50	-13558.10	7.85	259.97
18	SLE	R	Diff.	2.70	0.00	26.07	-38664.60	7675.78	4.24	113.72
20	SLE	Q	Diff.	2.70	0.00	26.07	-31302.90	6510.04	3.63	101.71
18	SLE	R	Sez.-A-A	2.70	1.33	1.63	-3394.88	986.32	34.14	715.98
20	SLE	Q	Sez.-A-A	2.70	1.33	1.63	-2770.06	805.12	27.87	584.58
18	SLE	R	Sez.-B-B	2.70	24.44	24.74	-2563.72	697.07	24.10	487.34
20	SLE	Q	Sez.-B-B	2.70	24.44	24.74	-2244.30	624.75	21.61	442.82

## Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	c <mm>	s <mm>	K3	$s_{sm}$ <mm>	$\phi$	$A_s$ <cm²>	$A_{s\text{eff}}$ <cm²>	$\sigma_s$ <daN/cm²>	$\sigma_{s2}$ <daN/cm²>	$\epsilon_{sm}$	Wk <mm>	
20	SLE	Q	Diff.	0.00	0.00	26.07	-68291.70	-27805.40	45.00	194.00	0.13	231.43	16.00	5.15	660.96	676.85	3929.20	0.13	0.05
19	SLE	F	Diff.	0.00	0.00	26.07	-69274.20	-29712.90	45.00	194.00	0.13	231.43	16.00	5.15	660.96	738.06	3980.78	0.14	0.06
20	SLE	Q	Diff.	1.35	0.00	26.07	-52131.50	-13558.10	45.00	194.00	0.13	231.43	16.00	5.15	660.96	256.94	3326.46	0.05	0.02
19	SLE	F	Diff.	1.35	0.00	26.07	-53484.40	-14530.20	45.00	194.00	0.13	231.43	16.00	5.15	660.96	284.37	3400.17	0.06	0.02
20	SLE	Q	Diff.	2.70	0.00	26.07	-31302.90	6510.04	45.00	194.00	0.13	231.43	16.00	5.15	660.96	100.45	2883.47	0.02	0.01
19	SLE	F	Diff.	2.70	0.00	26.07	-33406.20	6843.11	45.00	194.00	0.13	231.43	16.00	5.15	660.96	103.83	2849.19	0.02	0.01
20	SLE	Q	Sez.-A-A	2.70	1.33	1.63	-2770.06	805.12	45.00	194.00	0.13	219.38	16.00	4.02	455.28	584.58	1578.11	0.11	0.04
19	SLE	F	Sez.-A-A	2.70	1.33	1.63	-2948.58	856.89	45.00	194.00	0.13	219.38	16.00	4.02	455.28	622.13	1578.04	0.12	0.05
20	SLE	Q	Sez.-B-B	2.70	24.44	24.74	-2244.30	624.75	45.00	194.00	0.13	219.38	16.00	4.02	455.28	442.82	1555.34	0.09	0.03
19	SLE	F	Sez.-B-B	2.70	24.44	24.74	-2335.56	645.41	45.00	194.00	0.13	219.38	16.00	4.02	455.28	455.54	1551.37	0.09	0.03

## Parete n. 125

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
Oriz.	30.00	5.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Verifiche su sezioni orizzontali



## Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <cm>	Xi <cm>	Xf <cm>	N <daN>	My <daNm>	Nu <daN>	MRdy <daNm>	Sic.
17	SLU	Diff.	0.00	0.00	11.16	-73196.30	14298.80	-73196.30	93224.40	6.520
17	SLU	Diff.	1.45	0.00	11.16	-44534.80	-34385.20	-44534.80	-90157.20	2.622
17	SLU	Diff.	1.45	0.00	10.23	-36320.30	-34707.90	-36320.30	-82400.70	2.374
17	SLU	Diff.	1.52	0.00	10.23	14684.70	-10366.50	14684.70	-76018.60	7.333
17	SLU	Diff.	1.52	0.00	10.23	14684.70	-10366.50	14684.70	-76018.60	7.333
17	SLU	Diff.	2.17	0.00	1.90	-8393.55	3129.81	-8393.55	15652.10	5.001

## Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <cm>	Xi <cm>	Xf <cm>	N <daN>	My <daNm>	Nu <daN>	M'ydy <daNm>	Sic.
13	SND	Diff.	0.00	0.00	11.16	-40718.70	25089.00	-40718.70	79790.20	3.180
13	SND	Diff.	1.45	0.00	11.16	-24571.30	-55955.40	-24571.30	-77941.80	1.393
13	SND	Diff.	1.45	0.00	10.23	-17873.90	-55837.00	-17873.90	-71151.40	1.274
13	SND	Diff.	1.52	0.00	10.23	42018.90	-21505.20	42018.90	-64179.20	2.984
13	SND	Diff.	1.52	0.00	10.23	42018.90	-21505.20	42018.90	-64179.20	2.984
13	SND	Diff.	2.17	0.00	1.90	-3167.73	3883.70	-3167.73	13371.10	3.443

## Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <cm>	Xi <cm>	Xf <cm>	N <daN>	My <daNm>	$\sigma_c$ <daN/cm <sup>2</sup> >	$\sigma_f$ <daN/cm <sup>2</sup> >	
18	SLE	R	Diff.	0.00	0.00	11.16	-52602.70	10324.60	11.38	240.19
20	SLE	Q	Diff.	0.00	0.00	11.16	-47845.90	8778.51	9.58	188.90
18	SLE	R	Diff.	1.45	0.00	11.16	-31560.20	-24525.10	28.85	1089.42
20	SLE	Q	Diff.	1.45	0.00	11.16	-27214.80	-20935.70	24.63	928.36
18	SLE	R	Diff.	1.45	0.00	10.23	-25841.90	-24742.80	31.68	1232.94
20	SLE	Q	Diff.	1.45	0.00	10.23	-21551.90	-21156.50	27.09	1057.78
18	SLE	R	Diff.	1.52	0.00	10.23	9025.75	-7423.91	9.46	481.31
20	SLE	Q	Diff.	1.52	0.00	10.23	7061.06	-6679.09	8.52	425.88
18	SLE	R	Diff.	1.52	0.00	10.23	9025.75	-7423.91	9.46	481.31
20	SLE	Q	Diff.	1.52	0.00	10.23	7061.06	-6679.09	8.52	425.88
18	SLE	R	Diff.	2.17	0.00	1.90	-5932.93	2215.73	15.01	465.06
20	SLE	Q	Diff.	2.17	0.00	1.90	-5247.11	1879.05	12.71	387.30

## Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <cm>	Xi <cm>	Xf <cm>	N <daN>	My <daNm>	c <mm>	s <mm>	K3	$s_{sm}$ <mm>	$\Phi$	$A_s$ <cm <sup>2</sup> >	$A_c$ eff <cm <sup>2</sup> >	$\sigma_s$ <daN/cm <sup>2</sup> >	$\sigma_{sr}$ <daN/cm <sup>2</sup> >	$\epsilon_{sm}$	$W_k$ <mm>	
20	SLE	Q	Diff.	0.00	0.00	11.16	-47845.90	8778.51	45.00	149.00	0.13	214.79	12.00	78.04	12354.20	188.89	1866.55	0.04	0.01
19	SLE	F	Diff.	0.00	0.00	11.16	-49205.00	9220.26	45.00	149.00	0.13	214.79	12.00	78.04	12354.20	203.49	1899.18	0.04	0.01
20	SLE	Q	Diff.	1.45	0.00	11.16	-27214.80	-20935.70	45.00	149.00	0.13	218.40	12.00	78.04	12354.20	928.24	2973.13	0.18	0.07
19	SLE	F	Diff.	1.45	0.00	11.16	-28456.30	-21961.30	45.00	149.00	0.13	218.42	12.00	78.04	12354.20	974.26	2974.11	0.19	0.07
20	SLE	Q	Diff.	1.45	0.00	10.23	-21551.90	-21156.50	45.00	149.00	0.13	219.55	12.00	78.04	12325.80	1057.78	3028.89	0.21	0.08
19	SLE	F	Diff.	1.45	0.00	10.23	-22777.60	-22181.10	45.00	149.00	0.13	219.51	12.00	78.04	12325.80	1107.82	3027.00	0.22	0.08
20	SLE	Q	Diff.	1.52	0.00	10.23	7061.06	-6679.09	45.00	149.00	0.14	228.59	12.00	78.04	12325.80	425.88	3474.14	0.08	0.03
19	SLE	F	Diff.	1.52	0.00	10.23	7622.40	-6891.90	45.00	149.00	0.14	228.78	12.00	78.04	12325.80	441.71	3483.82	0.09	0.03
20	SLE	Q	Diff.	1.52	0.00	10.23	7061.06	-6679.09	45.00	149.00	0.14	228.59	12.00	78.04	12325.80	425.88	3474.14	0.08	0.03
19	SLE	F	Diff.	1.52	0.00	10.23	7622.40	-6891.90	45.00	149.00	0.14	228.78	12.00	78.04	12325.80	441.71	3483.82	0.09	0.03
20	SLE	Q	Diff.	2.17	0.00	1.90	-5247.11	1879.05	45.00	149.00	0.13	213.43	12.00	14.70	2294.45	387.30	2566.30	0.08	0.03
19	SLE	F	Diff.	2.17	0.00	1.90	-5443.06	1975.24	45.00	149.00	0.13	213.43	12.00	14.70	2294.45	409.51	2575.71	0.08	0.03

## Parete n. 126

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm <sup>2</sup> >	Fctk <daN/cm <sup>2</sup> >	Fcd <daN/cm <sup>2</sup> >	Fctd <daN/cm <sup>2</sup> >	Tp	Fyk <daN/cm <sup>2</sup> >	Fyd <daN/cm <sup>2</sup> >
Oriz.	30.00	5.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Verifiche su sezioni orizzontali

## Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <cm>	Xi <cm>	Xf <cm>	N <daN>	My <daNm>	Nu <daN>	MRdy <daNm>	Sic.
17	SLU	Diff.	0.00	0.00	15.87	-69620.50	-140.27	-7837400.00	-88519.90	>100
17	SLU	Diff.	1.08	0.00	15.87	-57884.70	2046.51	-57884.70	87050.30	42.536
17	SLU	Diff.	2.17	0.00	15.87	-42345.40	-121.68	-7837400.00	-85104.30	>100
17	SLU	Diff.	2.17	0.00	12.24	-35867.00	-1606.25	-35867.00	-65893.10	41.023
17	SLU	Diff.	2.70	0.00	12.24	-29542.00	5754.00	-29542.00	65100.90	11.314

## Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <cm>	Xi <cm>	Xf <cm>	N <daN>	My <daNm>	Nu <daN>	M'ydy <daNm>	Sic.
9	SND	Diff.	0.00	0.00	15.87	-41110.10	5959.64	-41110.10	71728.70	12.036
13	SND	Diff.	1.08	0.00	15.87	-34352.00	4542.24	-34352.00	70917.50	15.613



5	SND	Diff.	2.17	0.00	15.87	-18498.00	-1125.38	-18498.00	-68987.30	61.301
1	SND	Diff.	2.17	0.00	12.24	-17493.00	-2127.78	-17493.00	-53472.20	25.131
13	SND	Diff.	2.70	0.00	12.24	-15308.70	5262.84	-15308.70	53205.30	10.110

## Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	$\sigma_c$ <daN/cm <sup>2</sup> >	$\sigma_f$ <daN/cm <sup>2</sup> >
18	SLE R	Diff.	0.00	0.00	15.87	-51022.20	497.17	1.22	17.32
20	SLE Q	Diff.	0.00	0.00	15.87	-45516.40	218.07	1.00	14.57
18	SLE R	Diff.	1.08	0.00	15.87	-41751.70	1763.54	1.54	19.50
20	SLE Q	Diff.	1.08	0.00	15.87	-36440.40	1483.66	1.32	16.80
18	SLE R	Diff.	2.17	0.00	15.87	-29858.50	-27.84	0.61	9.11
20	SLE Q	Diff.	2.17	0.00	15.87	-25252.60	-30.25	0.52	7.73
18	SLE R	Diff.	2.17	0.00	12.24	-25445.20	-1041.36	1.20	15.23
20	SLE Q	Diff.	2.17	0.00	12.24	-22117.80	-915.88	1.05	13.29
18	SLE R	Diff.	2.70	0.00	12.24	-20579.80	4036.80	4.79	128.89
20	SLE Q	Diff.	2.70	0.00	12.24	-17252.40	3705.80	4.48	131.13

## Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cm <sup>2</sup> >	A <sub>c eff</sub> <cm <sup>2</sup> >	$\sigma_s$ <daN/cm <sup>2</sup> >	$\sigma_{sr}$ <daN/cm <sup>2</sup> >	ε <sub>sm</sub>	Wk <mm>
20	SLE Q	Diff.	2.70	0.00	12.24	-17252.40	3705.80	45.00	168.00	0.13	223.37	12.00	1.13	188.06	131.13	3067.35	0.03	0.01
19	SLE F	Diff.	2.70	0.00	12.24	-18203.10	3800.37	45.00	168.00	0.13	223.37	12.00	1.13	188.06	130.44	3001.99	0.03	0.01

## Parete n. 127

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm <sup>2</sup> >	Fctk <daN/cm <sup>2</sup> >	Fcd <daN/cm <sup>2</sup> >	Fctd <daN/cm <sup>2</sup> >	Tp	Fyk <daN/cm <sup>2</sup> >	Fyd <daN/cm <sup>2</sup> >
Oriz.	30.00	5.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

## Verifiche su sezioni orizzontali

## Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	MRdy <daNm>	Sic.
17	SLU	Diff.	0.00	0.00	1.70	-6240.42	786.51	-6240.42	10435.10	13.268
17	SLU	Diff.	0.72	0.00	1.70	-6244.83	-636.92	-6244.83	-10435.60	16.384
17	SLU	Diff.	1.45	0.00	1.70	-5043.14	262.06	-5043.14	10303.80	39.318

## Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	M'ydy <daNm>	Sic.
1	SND	Diff.	0.00	0.00	1.70	-2162.46	1355.28	-2162.46	8417.93	6.211
9	SND	Diff.	0.72	0.00	1.70	-3578.93	-1402.70	-3578.93	-8587.22	6.122
9	SND	Diff.	1.45	0.00	1.70	-2654.56	1105.81	-2654.56	8477.30	7.666

## Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	$\sigma_c$ <daN/cm <sup>2</sup> >	$\sigma_f$ <daN/cm <sup>2</sup> >
18	SLE R	Diff.	0.00	0.00	1.70	-4299.65	550.94	3.96	52.61
20	SLE Q	Diff.	0.00	0.00	1.70	-4123.09	547.06	3.98	56.99
18	SLE R	Diff.	0.72	0.00	1.70	-4394.15	-443.74	2.94	31.01
20	SLE Q	Diff.	0.72	0.00	1.70	-3912.43	-344.54	2.22	24.82
18	SLE R	Diff.	1.45	0.00	1.70	-3469.77	185.33	1.33	16.42
20	SLE Q	Diff.	1.45	0.00	1.70	-2988.06	48.23	0.73	10.10

## Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	c <mm>	s <mm>	K3	S <sub>rm</sub> <mm>	Φ	A <sub>s</sub> <cm <sup>2</sup> >	A <sub>c eff</sub> <cm <sup>2</sup> >	$\sigma_s$ <daN/cm <sup>2</sup> >	$\sigma_{sr}$ <daN/cm <sup>2</sup> >	ε <sub>sm</sub>	Wk <mm>
20	SLE Q	Diff.	0.00	0.00	1.70	-4123.09	547.06	45.00	168.00	0.13	223.37	12.00	1.13	188.06	56.99	1565.93	0.01	0.00
19	SLE F	Diff.	0.00	0.00	1.70	-4173.53	548.17	45.00	168.00	0.13	223.37	12.00	1.13	188.06	55.71	1537.30	0.01	0.00
20	SLE Q	Diff.	0.72	0.00	1.70	-3912.43	-344.54	45.00	168.00	0.13	223.37	12.00	1.13	188.06	8.37	532.38	0.00	0.00
19	SLE F	Diff.	0.72	0.00	1.70	-4050.06	-372.89	45.00	168.00	0.13	223.37	12.00	1.13	188.06	11.28	625.54	0.00	0.00

## Parete n. 132

## Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
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	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	5.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	MRdy <daNm>	Sic.
17	SLU	Diff.	0.00	0.00	14.17	-46426.90	-7160.20	-46426.90	-77026.10	10.758
17	SLU	Diff.	1.35	0.00	14.17	-34796.40	-1519.30	-34796.40	-75569.20	49.739
17	SLU	Diff.	2.70	0.00	14.17	-17443.60	140.57	-6997860.00	73394.00	>100

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	M'ydy <daNm>	Sic.
9	SND	Diff.	0.00	0.00	14.17	-25046.40	-5050.16	-25046.40	-62603.00	12.396
1	SND	Diff.	1.35	0.00	14.17	-18829.10	1458.58	-18829.10	61843.80	42.400
1	SND	Diff.	2.70	0.00	14.17	-8608.56	110.21	-8608.56	60596.00	>100

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	$\sigma_c$ <daN/cmq>	$\sigma_f$ <daN/cmq>
18	SLE R	Diff.	0.00	0.00	14.17	-34916.30	-4124.86	3.54	40.61
20	SLE Q	Diff.	0.00	0.00	14.17	-33090.60	-2549.59	1.99	23.10
18	SLE R	Diff.	1.35	0.00	14.17	-25728.70	-576.25	0.83	11.21
20	SLE Q	Diff.	1.35	0.00	14.17	-23577.50	37.76	0.55	8.12
18	SLE R	Diff.	2.70	0.00	14.17	-12022.80	97.97	0.31	4.48
20	SLE Q	Diff.	2.70	0.00	14.17	-9407.21	85.73	0.25	3.55

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	c <mm>	s <mm>	K3	$s_{rm}$ <mm>	$\Phi$	$A_s$ <cmq>	$A_{c\ eff}$ <cmq>	$\sigma_s$ <daN/cmq>	$\sigma_{sr}$ <daN/cmq>	$\epsilon_{sm}$	Wk <mm>
20	SLE Q	Diff.	0.00	0.00	14.17	-33090.60	-2549.59	45.00	168.00	0.13	223.37	12.00	1.13	188.06	3.13	274.66	0.00	0.00
19	SLE F	Diff.	0.00	0.00	14.17	-33612.30	-2999.66	45.00	168.00	0.13	223.37	12.00	1.13	188.06	9.80	579.49	0.00	0.00

Pisa, 8 novembre 2018

Ing. Stefano Carani



## 1. VERIFICA SOLAI

### 1.1. SOLAIO PIANO TIPO

Di seguito si riporta la verifica del solaio del piano tipo (zona residenziale) su luce di calcolo massima di 5,70 m.

Per la combinazione di carico si assume quella allo SLU con coefficienti 1,3 per i pesi propri strutturali (G1), 1,5 per i permanenti non strutturali (G2), 1,5 per gli accidentali (Q).

Tenuto conto dei valori riportati nell'analisi dei carichi si ottiene un carico uniformemente distribuito pari a:

$$1,3 \times G1 + 1,5 \times G2 + 1,5 \times Q = 13,31 \text{ kN/mq}$$

Tenuto conto che l'interasse dei travetti è pari a 50 cm si ottiene un carico uniformemente distribuito pari a:

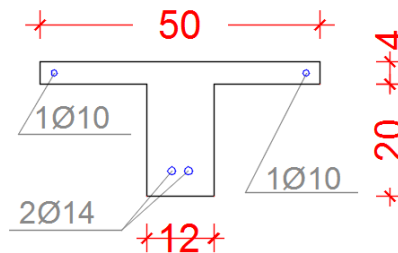
$$q = 13,31 \text{ KN/mq} \times 0,5 = 6,66 \text{ kN/m}$$

Ipotizzando uno schema di vincolo a parziale incastro, a favore di sicurezza si pone

$$\begin{aligned} M+ \text{ max} &= q l^2 / 10 = 21,64 \text{ kNm} \\ M- \text{ max} &= q l^2 / 14 = 15,46 \text{ kNm} ; \\ T \text{ max} &= q l / 2 = 18,98 \text{ kN} \end{aligned}$$

- Mezzeria

### solaio 20+4 MEZZERIA



Assumendo una armatura composta da 2Ø14 inferiori e 2Ø10 superiori si ha:

Sezione: Sezione a T - Dati geometrici della sezione

Base superiore <m>	= 0.12
Altezza parte sup. <m>	= 0.20
Base inferiore <m>	= 0.50
Altezza parte inf. <m>	= 0.04

#### Simbologia

Caso = Caso di verifica  
CC = Numero della combinazione delle condizioni di carico elementari  
TCC = Tipo di combinazione di carico  
SLU = Stato limite ultimo  
SLU S = Stato limite ultimo (azione sismica)  
SLE R = Stato limite d'esercizio, combinazione rara



SLE F = Stato limite d'esercizio, combinazione frequente  
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente  
 SLD = Stato limite di danno  
 SLV = Stato limite di salvaguardia della vita  
 SLC = Stato limite di prevenzione del collasso  
 SLO = Stato limite di operatività  
 SLU I = Stato limite di resistenza al fuoco  
 SND = Stato limite di salvaguardia della vita (non dissipativo)  
 N = Sforzo normale  
 My = Momento flettente intorno all'asse Y  
 Mz = Momento flettente intorno all'asse Z  
 Nu = Sforzo normale ultimo  
 M'ydy = Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y  
 M'ydz = Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Z  
 MRdy = Momento resistente allo stato limite ultimo intorno all'asse Y  
 MRdz = Momento resistente allo stato limite ultimo intorno all'asse Z  
 Rott. = Tipo di rottura  
 1-2 = Rott. acciaio:  $\epsilon_y = \epsilon_{yd}$ ,  $\epsilon_c < \epsilon_{cu}$   
 2-3 = Rott. cls:  $\epsilon_y < \epsilon_{yd}$ ,  $\epsilon_c = \epsilon_{cu}$   
 3-4 = Rott. cls:  $\epsilon_{co} < \epsilon_c < \epsilon_{cu}$   
 $\alpha$  = Angolo asse neutro a rottura  
 Sic. = Sicurezza a rottura  
 Ty = Taglio in dir. Y  
 Tz = Taglio in dir. Z  
 bw = Larghezza membratura resistente al taglio  
 Asw = Area armatura trasversale  
 Af tesa = Area di ferro tesa  
 Vsdu = Taglio agente nella direzione del momento ultimo  
 Vrdu = Taglio ultimo assorbibile dal solo calcestruzzo  
 Tipo = Tipo di verifica effettuata  
 Sez. = Numero della sezione  
 B = Base  
 b = Base inferiore  
 H = Altezza  
 h = Altezza parte inf.  
 Cf = Copriferro  
 Cls = Tipo di calcestruzzo  
 Fck = Resistenza caratteristica cilindrica a compressione del calcestruzzo  
 Fctk = Resistenza caratteristica a trazione del calcestruzzo  
 Fcd = Resistenza di calcolo a compressione del calcestruzzo  
 Fctd = Resistenza di calcolo a trazione del calcestruzzo  
 Tp = Tipo di acciaio  
 Fyk = Tensione caratteristica di snervamento dell'acciaio  
 Fyd = Resistenza di calcolo dell'acciaio

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf <cm>	Cls	Fck <daN/cm <sup>2</sup> >	Fctk <daN/cm <sup>2</sup> >	Fcd <daN/cm <sup>2</sup> >	Fctd <daN/cm <sup>2</sup> >	Tp	Fyk <daN/cm <sup>2</sup> >	Fyd <daN/cm <sup>2</sup> >
12	T	12.00	50.00	20.00	4.00	3.70	C28/35	290.50	19.84	131.69	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	$\alpha$ <grad>	Sic.
1		SLU	0.00	2164.00	0.00	-2.61	2279.01	0.00	1-2	180.00	1.053

**Verifiche stato limite ultimo per sollecitazioni taglianti**

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cm <sup>2</sup> >	Af tesa <cm <sup>2</sup> >	Vsdu <daN>	Vrdu <daN>
1	0.00	0.00	0.12	0.00	3.08	0.00	1917.50

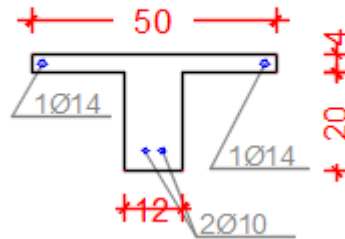
**Verifiche principali**

Caso	Tipo
1	SLU Mz cost - min. sic.



- Appoggi

## solaio 20+4 APPOGGI



Assumendo una armatura composta da 2 $\phi$ 10 inferiori e 2 $\phi$ 14 superiori si ha:

## Sezione: Sezione a T - Dati geometrici della sezione

Base superiore <m>	= 0.12
Altezza parte sup. <m>	= 0.20
Base inferiore <m>	= 0.50
Altezza parte inf. <m>	= 0.04

## Simbologia

Caso	=Caso di verifica
CC	=Numero della combinazione delle condizioni di carico elementari
TCC	=Tipo di combinazione di carico
	SLU = Stato limite ultimo
	SLU S = Stato limite ultimo (azione sismica)
	SLE R = Stato limite d'esercizio, combinazione rara
	SLE F = Stato limite d'esercizio, combinazione frequente
	SLE Q = Stato limite d'esercizio, combinazione quasi permanente
	SLD = Stato limite di danno
	SLV = Stato limite di salvaguardia della vita
	SLC = Stato limite di prevenzione del collasso
	SLO = Stato limite di operatività
	SLU I = Stato limite di resistenza al fuoco
	SND = Stato limite di salvaguardia della vita (non dissipativo)
N	=Sforzo normale
My	=Momento flettente intorno all'asse Y
Mz	=Momento flettente intorno all'asse Z
Nu	=Sforzo normale ultimo
M'ydy	=Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
M'ydz	=Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Z
MRdy	=Momento resistente allo stato limite ultimo intorno all'asse Y
MRdz	=Momento resistente allo stato limite ultimo intorno all'asse Z
Rott.	=Tipo di rottura
	1-2 = Rott. acciaio: $\epsilon_y = \epsilon_{yd}$ , $\epsilon_c < \epsilon_{cu}$
	2-3 = Rott. cls: $\epsilon_y < \epsilon_{yd}$ , $\epsilon_c = \epsilon_{cu}$
	3-4 = Rott. cls: $\epsilon_{c0} < \epsilon_c < \epsilon_{cu}$
$\alpha$	=Angolo asse neutro a rottura
Sic.	=Sicurezza a rottura
Ty	=Taglio in dir. Y
Tz	=Taglio in dir. Z
bw	=Larghezza membratura resistente al taglio
Asw	=Area armatura trasversale
Af tesa	=Area di ferro tesa
Vsdu	=Taglio agente nella direzione del momento ultimo
Vrdu	=Taglio ultimo assorbibile dal solo calcestruzzo
Tipo	=Tipo di verifica effettuata
Sez.	=Numero della sezione
B	=Base
b	=Base inferiore
H	=Altezza
h	=Altezza parte inf.
Cf	=Copriferro
Cls	=Tipo di calcestruzzo
Fck	=Resistenza caratteristica cilindrica a compressione del calcestruzzo



Fctk = Resistenza caratteristica a trazione del calcestruzzo  
 Fcd = Resistenza di calcolo a compressione del calcestruzzo  
 Fctd = Resistenza di calcolo a trazione del calcestruzzo  
 Tp = Tipo di acciaio  
 Fyk = Tensione caratteristica di snervamento dell'acciaio  
 Fyd = Resistenza di calcolo dell'acciaio

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
12T		12.00	50.00	20.00	4.00	3.70	C28/35	290.50	19.84	131.69	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	$\alpha$ <grad>	Sic.
1		SLU	0.00	-1546.00	0.00	1.34	-2275.27	0.00	2-3	0.00	1.472

**Verifiche stato limite ultimo per sollecitazioni taglianti**

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Af tesa <cmq>	Vsdu <daN>	Vrdu <daN>
1	0.00	1898.00	0.12	0.00	3.08	1898.00	2002.43

**Verifiche principali**

Caso	Tipo
1	SLU Mz cost - min. sic., SLU Taglio - min. sic. c.a.

## 1.2. SOLETTA SCALA

Di seguito si riporta la verifica della soletta della scala di comunicazione tra i vari piani della struttura in elevazione, su luce di calcolo 5,20 m.

Per la combinazione di carico si assume quella allo SLU con coefficienti 1,3 per i pesi propri strutturali (G1), 1,5 per i permanenti non strutturali (G2), 1,5 per gli accidentali (Q).

Tenuto conto dei seguenti valori dei carichi (così come riportati nella "Relazione di Calcolo"):

**Permanenti strutturali (G1)**

- peso proprio soletta (s=18 cm) + gradini in c.a. 6,50 kN/m<sup>2</sup>  
**Totale carichi permanenti strutturali** **6,5 kN/m<sup>2</sup>**

**B1) Permanenti non strutturali (G2)**

- pavimento 0,70 kN/m<sup>2</sup>  
 - sottofondo s= 4 cm 0,72 kN/m<sup>2</sup>  
 - intonaco 0,30 kN/m<sup>2</sup>  
**Totale carichi permanenti non strutturali** **1,80 kN/m<sup>2</sup>**

**C1) Variabili (Q)**

- Sovr. d'esercizio tipo C2 **4,00 kN/m<sup>2</sup>**

si ottiene un carico uniformemente distribuito pari a:

$$1.3 \times G1 + 1,5 \times G2 + 1,5 \times Q = 17,15 \text{ kN/mq}$$

Tenuto conto che la larghezza della scala è pari a 130 cm si ottiene un carico uniformemente distribuito pari a:

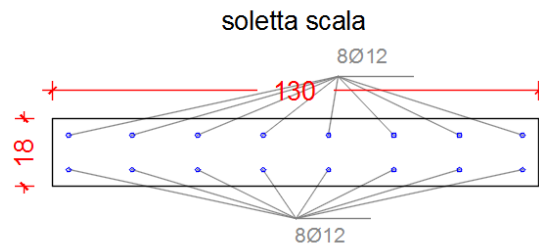
$$q = 18,35 \text{ KN/mq} \times 1,30 = 22,30 \text{ kN/m}$$

Ipotizzando uno schema di vincolo a parziale incastro, a favore di sicurezza si pone



$$M+ \max = q l^2 / 12 = 50,25 \text{ kNm}$$
$$M - m_x = q l^2 / 14 = 43,07 \text{ kNm} ;$$
$$T \max = q l / 2 = 57,98 \text{ kN}$$

- Mezzeria



Assumendo una armatura composta da 8Ø12 superiori e inferiori si ha:

**Sezione: Rettangolare - Dati geometrici della sezione**

Base <m>	= 1.30
Altezza <m>	= 0.18

**Simbologia**

Caso	=Caso di verifica
CC	=Numero della combinazione delle condizioni di carico elementari
TCC	=Tipo di combinazione di carico
	SLU = Stato limite ultimo
	SLU S = Stato limite ultimo (azione sismica)
	SLE R = Stato limite d'esercizio, combinazione rara
	SLE F = Stato limite d'esercizio, combinazione frequente
	SLE Q = Stato limite d'esercizio, combinazione quasi permanente
	SLD = Stato limite di danno
	SLV = Stato limite di salvaguardia della vita
	SIC = Stato limite di prevenzione del collasso
	SLO = Stato limite di operatività
	SLU I = Stato limite di resistenza al fuoco
	SND = Stato limite di salvaguardia della vita (non dissipativo)
N	=Sforzo normale
My	=Momento flettente intorno all'asse Y
Mz	=Momento flettente intorno all'asse Z
Nu	=Sforzo normale ultimo
M'ydy	=Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
M'ydz	=Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Z
MRdy	=Momento resistente allo stato limite ultimo intorno all'asse Y
MRdz	=Momento resistente allo stato limite ultimo intorno all'asse Z
Rott.	=Tipo di rottura
	1-2 = Rott. acciaio: $\epsilon_Y = \epsilon_{Yd}$ , $\epsilon_C < \epsilon_{Cu}$
	2-3 = Rott. cls: $\epsilon_Y < \epsilon_{Yd}$ , $\epsilon_C = \epsilon_{Cu}$
	3-4 = Rott. cls: $\epsilon_{C0} < \epsilon_C < \epsilon_{Cu}$
$\alpha$	=Angolo asse neutro a rottura
Sic.	=Sicurezza a rottura
Ty	=Taglio in dir. Y
Tz	=Taglio in dir. Z
bw	=Larghezza membratura resistente al taglio
Asw	=Area armatura trasversale
Af tesa	=Area di ferro tesa



Vsdu =Taglio agente nella direzione del momento ultimo  
 Vrdu =Taglio ultimo assorbibile dal solo calcestruzzo  
 Tipo =Tipo di verifica effettuata  
 Sez. =Numero della sezione  
 B =Base  
 H =Altezza  
 Cf =Copriferro  
 Cls =Tipo di calcestruzzo  
 Fck =Resistenza caratteristica cilindrica a compressione del calcestruzzo  
 Fctk =Resistenza caratteristica a trazione del calcestruzzo  
 Fcd =Resistenza di calcolo a compressione del calcestruzzo  
 Fctd =Resistenza di calcolo a trazione del calcestruzzo  
 Tp =Tipo di acciaio  
 Fyk =Tensione caratteristica di snervamento dell'acciaio  
 Fyd =Resistenza di calcolo dell'acciaio

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez. Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
13R	130.00	18.00	3.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	$\alpha$ <grad>	Sic.
1	SLU		0.00	5025.00	0.00	0.00	5112.49	0.00	2-3	180.00	1.017

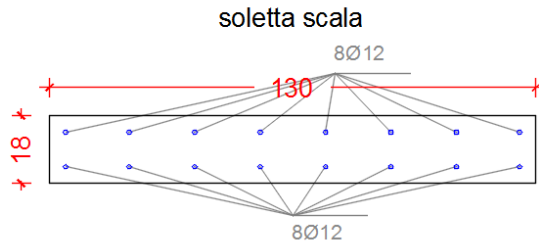
**Verifiche stato limite ultimo per sollecitazioni taglianti**

Caso	Ty <daN>	Tz <daN>	bw <m>	Asw <cmq>	Af tesa <cmq>	Vsdu <daN>	Vrdu <daN>
1	0.00	0.00	1.30	0.00	9.05	0.00	11137.60

**Verifiche principali**

Caso	Tipo
1	SLU N cost - min. sic.

- Appoggi



Assumendo una armatura composta da 8Ø12 superiori e inferiori si ha:

**Sezione: Rettangolare - Dati geometrici della sezione**

Base <m>	= 1.30
Altezza <m>	= 0.18

**Simbologia**

Caso =Caso di verifica  
 CC =Numero della combinazione delle condizioni di carico elementari  
 TCC =Tipo di combinazione di carico  
 SLU = Stato limite ultimo  
 SLU S = Stato limite ultimo (azione sismica)  
 SLE R = Stato limite d'esercizio, combinazione rara  
 SLE F = Stato limite d'esercizio, combinazione frequente  
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente  
 SLD = Stato limite di danno  
 SLV = Stato limite di salvaguardia della vita  
 SLC = Stato limite di prevenzione del collasso





SLO = Stato limite di operatività  
 SLU I = Stato limite di resistenza al fuoco  
 SND = Stato limite di salvaguardia della vita (non dissipativo)  
 N = Sforzo normale  
 My = Momento flettente intorno all'asse Y  
 Mz = Momento flettente intorno all'asse Z  
 Nu = Sforzo normale ultimo  
 M'ydy = Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y  
 M'ydz = Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Z  
 MRdy = Momento resistente allo stato limite ultimo intorno all'asse Y  
 MRdz = Momento resistente allo stato limite ultimo intorno all'asse Z  
 Rott. = Tipo di rottura  
     1-2 = Rott. acciaio:  $\epsilon_y = \epsilon_{yd}$ ,  $\epsilon_c < \epsilon_{cu}$   
     2-3 = Rott. cls:  $\epsilon_y < \epsilon_{yd}$ ,  $\epsilon_c = \epsilon_{cu}$   
     3-4 = Rott. cls:  $\epsilon_{c0} < \epsilon_c < \epsilon_{cu}$   
 $\alpha$  = Angolo asse neutro a rottura  
 Sic. = Sicurezza a rottura  
 Ty = Taglio in dir. Y  
 Tz = Taglio in dir. Z  
 bw = Larghezza membratura resistente al taglio  
 Asw = Area armatura trasversale  
 Af tesa = Area di ferro tesa  
 Vsdu = Taglio agente nella direzione del momento ultimo  
 Vrdu = Taglio ultimo assorbibile dal solo calcestruzzo  
 Tipo = Tipo di verifica effettuata  
 Sez. = Numero della sezione  
 B = Base  
 H = Altezza  
 Cf = Copriferro  
 Cls = Tipo di calcestruzzo  
 Fck = Resistenza caratteristica cilindrica a compressione del calcestruzzo  
 Fctk = Resistenza caratteristica a trazione del calcestruzzo  
 Fcd = Resistenza di calcolo a compressione del calcestruzzo  
 Fctd = Resistenza di calcolo a trazione del calcestruzzo  
 Tp = Tipo di acciaio  
 Fyk = Tensione caratteristica di snervamento dell'acciaio  
 Fyd = Resistenza di calcolo dell'acciaio

**Caratteristiche delle sezioni e dei materiali utilizzati**

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm <sup>2</sup> >	Fctk <daN/cm <sup>2</sup> >	Fcd <daN/cm <sup>2</sup> >	Fctd <daN/cm <sup>2</sup> >	Tp	Fyk <daN/cm <sup>2</sup> >	Fyd <daN/cm <sup>2</sup> >
13R		130.00	18.00	3.60	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

**Stato limite ultimo - Verifiche a flessione/pressoflessione**

Caso	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	Rott.	$\alpha$ <grad>	Sic.
1		SLU	0.00	4307.00	0.00	0.00	5112.49	0.00	2-3	180.00	1.187

**Verifiche stato limite ultimo per sollecitazioni taglianti**

Caso	Ty <daN>	Tz <daN>	bw <cm>	Asw <cm <sup>2</sup> >	Af tesa <cm <sup>2</sup> >	Vsdu <daN>	Vrdu <daN>
1	0.00	5798.00	1.30	0.00	9.05	5798.00	11137.60

**Verifiche principali**

Caso	Tipo
1	SLU N cost - min. sic., SLU Taglio - min. sic. c.a.