

## SWAGED TYPE STEEL TUBULAR POLES - 410-SP-Mpa AS PER IS : 2713 (PART II) - 1980

Designation	Over All Length L	Planting Depth	Load Applied from Top at	Height above ground H	Length of Sections			Outside Diameter and Thickness of Sections			Approx. Weight of Pole	Breaking Load	Crippling Load	Working Load		Load for Permanent Set not Exceeding 13 mm	Load for Temporary Deflection of 157.5 mm
					Bottom h3	Middle h2	Top h1	Bottom h3	Middle h2	Top h1				Col 14 2	Col 13 2.5		
					(6) (m)	(7) (m)	(8) (m)	(9) (mm)	(10) (mm)	(11) (mm)				(12) (kg)	(13) (kg)		
410SP-2	7	1.25	0.3	5.75	4	1.5	1.5	114.3 x	88.9 x 4.05	76.1x3.25	73	3100 (316)	2240 (224)	1100 (112)	1240 (126)	1510 (154)	941 (96)
410SP-3	7	1.25	0.3	5.75	4	1.5	1.5	114.3 x	88.9 x 4.85	76.1x3.25	85	3630 (370)	2580 (263)	1280 (131)	1450 (148)	1760 (180)	1090 (111)
410SP-4	7.5	1.25	0.3	6.25	4.5	1.5	1.5	224.3 x	88.9 x 3.25	76.1x3.25	67	2350 (240)	1670 (170)	1320 (135)	941 (96)	1150 (117)	627 (64)
410SP-5	7.5	1.25	0.3	6.25	4.5	1.5	1.5	114.3 x	88.9 x 4.05	76.1x3.25	79	2760 (281)	1960 (200)	981 (100)	1100 (112)	1340 (137)	745 (76)
410SP-6	7.5	1.25	0.3	6.25	4.5	1.5	1.5	114.3 x	88.9 x 4.85	76.1x3.25	93	3320 (339)	2360 (241)	1180 (120)	1330 (136)	1620 (165)	873 (89)
410SP-7	7.5	1.25	0.3	6.25	4.5	1.5	1.5	139.7 x	114.3 x 3.65	88.9x3.25	97	4330 (442)	3080 (314)	1540 (157)	1740 (177)	2110 (215)	1400 (143)
410SP-8	7.5	1.25	0.3	6.25	4.5	1.5	1.5	139.7 x	114.3 x 3.65	88.9x3.25	103	4630 (472)	3280 (335)	1650 (168)	1850 (189)	2250 (229)	1480 (151)
410SP-9	7.5	1.25	0.3	6.25	4.5	1.5	1.5	139.7 x	114.3 x 3.65	88.9x3.25	110	5100 (520)	3620 (369)	1810 (185)	2040 (208)	2480 (253)	1600 (163)
410SP-10	8	1.25	0.3	6.5	4.5	1.75	1.75	114.3 x	88.9 x 3.25	76.1x3.25	70	2260 (230)	1600 (163)	804 (82)	902 (92)	1110 (112)	520 (53)
410SP-11	8	1.25	0.3	6.5	4.5	1.75	1.75	114.3 x	88.9 x 4.05	76.1x3.25	83	2730 (278)	1930 (197)	971 (99)	1090 (111)	1320 (135)	618 (63)
410SP-12	8	1.5	0.3	6.5	4.5	1.75	1.75	114.3 x	88.9 x 4.85	76.1x3.25	97	3190 (325)	2270 (231)	1130 (115)	1270 (130)	1550 (158)	725 (74)
410SP-13	8	1.5	0.3	6.5	4.5	1.75	1.75	139.7 x	114.3 x 3.65	88.9x3.25	101	4160 (424)	2950 (301)	1480 (151)	1670 (170)	2020 (206)	1180 (120)
410SP-14	8	1.5	0.3	6.5	4.5	1.75	1.75	139.7 x	114.3 x 4.50	88.9x3.25	111	4440 (453)	3160 (322)	1580 (161)	1770 (181)	2160 (220)	1280 (131)
410SP-15	8	1.5	0.3	6.5	4.5	1.75	1.75	139.7 x	114.3 x 4.50	88.9x3.25	119	4890 (499)	3470 (354)	1740 (177)	1960 (200)	2380 (243)	1380 (140)
410SP-16	8.5	1.5	0.3	7	5	1.75	1.75	114.3 x	88.9 x 3.25	76.1x3.25	75	2090 (213)	1480 (151)	745 (76)	834 (85)	1020 (104)	432 (44)
410SP-17	8.5	1.5	0.3	7	5	1.75	1.75	114.3 x	88.9 x 4.05	76.1x3.25	89	2520 (257)	1790 (182)	893 (91)	1010 (103)	1230 (125)	510 (52)
410SP-18	8.5	1.5	0.3	7	5	1.75	1.75	114.3 x	88.9 x 4.85	76.1x3.25	104	2950 (301)	2100 (214)	1050 (107)	1180 (120)	1430 (146)	598 (61)
410SP-19	8.5	1.5	0.3	7	5	1.75	1.75	139.7 x	114.3 x 3.65	88.9x3.25	109	3844 (392)	2730 (278)	1360 (139)	1540 (157)	1800 (191)	961 (98)
410SP-20	8.5	1.5	0.3	7	5	1.75	1.75	139.7 x	114.3 x 3.65	88.9x3.25	115	5110 (419)	2910 (297)	1460 (140)	1650 (168)	2000 (204)	1010 (103)
410SP-21	8.5	1.5	0.3	7	5	1.75	1.75	139.7 x	114.3 x 4.50	88.9x3.25	129	4530 (462)	3220 (328)	1620 (164)	1810 (185)	2210 (225)	1130 (115)
410SP-22	8.5	1.5	0.3	7	5	1.75	1.75	165.1 x	139.7 x 4.50	114.3 x 3.65	141	5450 (5556)	3870 (395)	1930 (197)	2180 (222)	2650 (270)	1730 (176)
410SP-23	8.5	1.5	0.3	7	5	1.75	1.75	165.1 x	139.7 x 4.50	114.3 x 3.61	148	5840 (596)	4150 (423)	2080 (212)	2330 (238)	2840 (290)	1820 (186)
410SP-24	8.5	1.5	0.3	7	5	1.75	1.75	165.1 x	139.7 x 4.50	114.3 x 3.65	158	6450 (658)	4580 (467)	2340 (234)	2579 (263)	3140 (320)	1970 (201)
410SP-25	9	1.5	0.3	7.5	5	2	2	114.3 x	88.9 x 3.25	76.1x3.25	78	1940 (198)	1380 (141)	686 (70)	775 (79)	941 (96)	333 (34)
410SP-26	9	1.5	0.3	7.5	5	2	2	114.3 x	88.9 x 4.05	76.1x3.25	92	2340 (239)	1670 (170)	834 (85)	941 (96)	1140 (116)	402 (41)
410SP-27	9	1.5	0.3	7.5	5	2	2	114.3 x	88.9 x 4.85	76.1x3.25	108	2750 (280)	1950 (199)	971 (99)	1100 (112)	1330 (136)	461 (47)
410SP-28	9	1.5	0.3	7.5	5	2	2	139.7 x	114.3 x 3.65	88.9x3.25	113	3580 (365)	2540 (259)	1270 (130)	1430 (146)	1740 (177)	745 (76)
410SP-29	9	1.5	0.3	7.5	5	2	2	139.7 x	114.3 x 4.50	88.9x3.25	125	3820 (390)	2728 (277)	1350 (138)	1530 (156)	1860 (190)	814 (83)
410SP-30	9	1.5	0.3	7.5	5	2	2	139.7 x	114.3 x 4.50	88.9x3.25	133	4220 (430)	2990 (305)	1500 (153)	1690 (172)	2050 (209)	882 (90)
410SP-31	9	1.5	0.3	7.5	5	2	2	165.1 x	139.7 x 4.50	114.3 x 3.65	147	5070 (517)	3600 (367)	1800 (184)	2030 (207)	2460 (251)	1360 (139)
410SP-32	9	1.5	0.3	7.5	5	2	2	165.1 x	139.7 x 4.50	114.3 x 3.65	154	5430 (554)	3850 (393)	1930 (197)	2180 (222)	2640 (269)	1430 (146)
410SP-33	9	1.5	0.3	7.5	5	2	2	165.1 x	139.7 x 4.50	114.3 x 3.65	154	6000 (612)	4270 (435)	2130 (217)	2410 (245)	2910 (297)	1540 (157)
410SP-34	9.5	1.8	0.6	7.7	5	2.25	2.25	139.7 x	114.3 x 4.50	88.9 x 3.25	122	3630 (370)	2580 (263)	1280 (131)	1450 (148)	1760 (180)	745 (76)
410SP-35	9.5	1.8	0.6	7.7	5	2.25	2.25	139.7 x	114.3 x 4.50	88.9 x 3.25	129	3880 (396)	2760 (281)	1390 (142)	1550 (158)	1880 (192)	784 (80)
410SP-36	9.5	1.8	0.6	7.7	5	2.25	2.25	139.7 x	114.3 x 4.50	88.9 x 3.25	137	4280 (436)	3040 (310)	1520 (155)	1710 (174)	2080 (212)	833 (85)
410SP-37	9.5	1.8	0.6	7.7	5	2.25	2.25	165.1 x	139.7 x 4.50	114.3 x 3.65	153	5150 (525)	3660 (373)	1820 (186)	2060 (210)	2500 (255)	1300 (133)
410SP-38	9.5	1.8	0.6	7.7	5	2.25	2.25	165.1 x	139.7 x 4.50	114.3 x 3.65	160	5510 (562)	3910 (399)	1960 (200)	2210 (225)	2680 (273)	1370 (140)
410SP-39	9.5	1.8	0.6	7.7	5	2.25	2.25	165.1 x	139.7 x 4.50	114.3 x 3.65	170	6090 (621)	4320 (441)	2160 (220)	2430 (248)	2960 (302)	1480 (151)

410SP-42	10	1.8	0.6	8.2	5.2	2.4	2.4	139.7 x	114.3 x 4.50	88.9 x 3.25	144	3990 (407)	2830 (289)	1410 (144)	1600 (163)	1940 (198)	677 (69)
410SP-43	10	1.8	0.6	8.2	5.2	2.4	2.4	165.1 x	139.7 x 4.50	114.3 x 3.65	160	4810 (490)	3410 (348)	1710 (174)	1920 (196)	2330 (238)	1060 (108)
410SP-44	10	1.8	0.6	8.2	5.2	2.4	2.4	165.1 x	139.7 x 4.50	114.3 x 3.65	168	5150 (525)	3660 (373)	1820 (186)	2060 (210)	2500 (255)	1120 (114)
410SP-45	10	1.8	0.6	8.2	5.2	2.4	2.4	165.1 x	139.7 x 4.50	114.3 x 3.65	178	5690 (580)	4040 (412)	2020 (206)	2280 (232)	2760 (282)	1200 (122)
410SP-46	10	1.8	0.6	8.2	5.2	2.4	2.4	193.7 x	165.1 x 4.50	139.7 x 4.50	208	7210 (735)	5120 (522)	2560 (261)	2880 (294)	3500 (357)	1850 (189)
410SP-47	10	1.8	0.6	8.2	5.2	2.4	2.4	193.7 x	165.1 x 4.50	139.7 x 4.50	221	7910 (807)	5620 (573)	2800 (286)	3170 (323)	3840 (392)	1990 (203)
410SP-48	10	1.8	0.6	8.2	5.2	2.4	2.4	193.7 x	165.1 x 4.50	139.7 x 4.50	233	8620 (879)	6120 (624)	3060 (312)	3450 (352)	4190 (427)	2110 (215)
410SP-49	11	1.8	0.6	9.2	5.6	2.7	2.7	139.7 x	114.3 x 4.50	88.9 x 3.25	140	3000 (306)	2130 (217)	1070 (109)	1200 (122)	1460 (149)	412 (42)
410SP-50	11	1.8	0.6	9.2	5.6	2.7	2.7	139.7 x	114.3 x 4.50	88.9 x 3.25	147	3210 (327)	2280 (232)	1140 (116)	1280 (131)	1560 (159)	431 (44)
410SP-51	11	1.8	0.6	9.2	5.6	2.7	2.7	139.7 x	114.3 x 5.40	88.9 x 3.25	164	3530 (360)	2510 (256)	1260 (128)	1410 (144)	1720 (175)	480 (49)
410SP-52	11	1.8	0.6	9.2	5.6	2.7	2.7	165.1 x	139.7 x 4.50	114.3 x 3.65	175	4250 (433)	3010 (307)	1510 (154)	1700 (173)	2060 (210)	726 (74)
410SP-53	11	1.8	0.6	9.2	5.6	2.7	2.7	165.1 x	139.7 x 4.50	114.3 x 3.65	183	4550 (464)	3230 (329)	1620 (165)	1820 (186)	2220 (226)	765 (78)
410SP-54	11	1.8	0.6	9.2	5.6	2.7	2.7	165.1 x	139.7 x 4.50	114.3 x 3.65	194	5030 (513)	3570 (364)	1780 (182)	2010 (205)	2440 (249)	814 (83)
410SP-55	11	1.8	0.6	9.2	5.6	2.7	2.7	193.7 x	165.1 x 4.50	139.7 x 4.50	227	6370 (650)	4530 (462)	2260 (231)	2550 (260)	3100 (316)	1270 (130)
410SP-56	11	1.8	0.6	9.2	5.6	2.7	2.7	193.7 x	165.1 x 4.50	139.7 x 4.50	241	6990 (713)	4820 (502)	2480 (253)	2790 (285)	3400 (347)	1370 (140)
410SP-57	11	1.8	0.6	9.2	5.6	2.7	2.7	193.7 x	165.1 x 4.85	139.7 x 4.50	256	7620 (777)	5410 (552)	2710 (276)	3050 (311)	3710 (378)	1470 (150)
410SP-58	12	2	0.6	10	5.8	3.1	3.1	165.1 x	139.7 x 4.50	114.3 x 3.65	186	3880 (396)	2760 (281)	1380 (141)	1550 (158)	1880 (192)	539 (55)
410SP-59	12	2	0.6	10	5.8	3.1	3.1	165.1 x	139.7 x 4.50	114.3 x 3.65	197	4160 (424)	2950 (301)	1480 (151)	1670 (170)	2020 (206)	569 (58)
410SP-60	12	2	0.6	10	5.8	3.1	3.1	165.1 x	139.7 x 4.50	114.3 x 3.65	208	4600 (469)	3270 (333)	1630 (166)	1840 (188)	2240 (228)	598 (61)
410SP-61	12	2	0.6	10	5.8	3.1	3.1	193.7 x	165.1 x 4.50	139.7 x 4.50	245	5820 (594)	4140 (422)	2070 (211)	2330 (238)	2830 (289)	951 (97)
410SP-62	12	2	0.6	10	5.8	3.1	3.1	193.7 x	165.1 x 4.50	139.7 x 4.50	259	6390 (652)	4540 (463)	2270 (231)	2560 (261)	3110 (317)	1010 (103)
410SP-63	12	2	0.6	10	5.8	3.1	3.1	193.7 x	165.1 x 4.85	139.7 x 4.50	277	6960 (710)	4940 (504)	2470 (252)	2709(284)	3390 (345)	1090 (111)
410SP-64	12	2	0.6	10	5.8	3.1	3.1	219.1 x	193.7 x 4.85	165.1 x 4.50	292	7490 (764)	5320 (542)	2660 (271)	3000 (306)	3640 (371)	1460 (140)
410SP-65	12	2	0.6	10	5.8	3.1	3.1	219.1 x	193.7 x 4.85	165.1 x 4.50	313	8530 (871)	6060 (618)	3030 (309)	3410 (348)	4150 (423)	1610 (164)
410SP-66	12	2	0.6	10	5.8	3.1	3.1	219.1 x	193.7 x 4.85	165.1 x 4.50	322	8980 (916)	6370 (560)	3190 (325)	3590 (366)	4360 (445)	1660 (169)
410SP-67	13	2	0.6	11	5.8	3.6	3.6	193.7 x	165.1 x 4.50	139.7 x 4.50	261	5270 (590)	3740 (381)	1870 (191)	2110 (215)	2560 (261)	677 (69)
410SP-68	13	2	0.6	11	5.8	3.6	3.6	193.7 x	165.1 x 4.85	139.7 x 4.50	281	5790 (590)	4110 (419)	2050 (209)	2310 (236)	2810 (287)	735 (75)
410SP-69	13	2	0.6	11	5.8	3.6	3.6	193.7 x	165.1 x 5.40	139.7 x 4.50	302	6300 (642)	4470 (456)	2240 (228)	2520 (257)	3060 (312)	794 (81)
410SP-70	13	2	0.6	11	5.8	3.6	3.6	219.1 x	193.7 x 4.85	165.1 x 4.50	312	6780 (691)	4820 (491)	2400 (245)	2710 (276)	3300 (336)	1060 (108)
410SP-71	13	2	0.6	11	5.8	3.6	3.6	219.1 x	193.7 x 4.85	165.1 x 4.50	333	7720 (787)	5480 (559)	2740 (279)	3090 (315)	3750 (382)	1160 (118)
410SP-72	13	2	0.6	11	5.8	3.6	3.6	219.1 x	193.7 x 4.85	165.1 x 4.50	343	8120 (828)	5770 (588)	2880 (294)	3250 (331)	3940 (402)	1190 (121)
410SP-73	14.5	2	0.6	12.5	6.5	4	4	193.7 x	165.1 x 4.85	139.7 x 4.50	312	5050 (515)	3590 (366)	1790 (183)	2020 (206)	2450 (250)	500 (51)
410SP-74	14.5	2	0.6	12.5	6.5	4	4	193.7 x	165.1 x 5.40	139.7 x 4.50	336	5500 (561)	3900 (561)	1950 (199)	2200 (224)	2680 (273)	539 (55)
410SP-75	14.5	2	0.6	12.5	6.5	4	4	219.1 x	193.7 x 4.85	165.1 x 4.50	370	6750 (688)	4790 (488)	2390 (244)	2700 (275)	3780 (334)	775 (79)
410SP-76	14.5	2	0.6	12.5	6.5	4	4	219.1 x	193.7 x 4.85	165.1 x 4.50	380	7100 (724)	5040 (514)	2520 (257)	2840 (290)	3450 (352)	794 (81)
410SP-77	16	2.3	0.6	13.7	7	4.5	4.5	193.7 x	165.1 x 4.85	139.7 x 4.50	341	4590 (468)	3260 (332)	1630 (166)	1830 (187)	2230 (227)	363 (37)
410SP-78	16	2.3	0.6	13.7	7	4.5	4.5	193.7 x	165.1 x 5.40	139.7 x 4.50	367	5000 (510)	3550 (362)	1780 (181)	2000 (204)	2430 (248)	392 (40)
410SP-79	16	2.3	0.6	13.7	7	4.5	4.5	219.1 x	193.7 x 4.85	165.1 x 4.50	405	6130 (625)	4350 (444)	2180 (222)	2450 (250)	2980 (304)	569 (58)
410SP-80	16	2.3	0.6	13.7	7	4.5	4.5	219.1 x	193.7 x 4.85	165.1 x 4.50	416	6440 (657)	4570 (466)	2280 (233)	2580 (263)	3130 (319)	568 (60)