



IDEAL Group Helical Piles, Tiebacks & Anchors		Ultimate Capacity Based Upon Torque (kips - kN) (1) (2)	Helix Bearing Plate Grade & Thickness (in - mm)	Section Coupling Method	Building Code Certifications
<b>Round Corner Square Bar (RCS)</b>					
Model 134	1.75 in - 44.5 mm ASTM A576 Grade 1530M Yield Strength = 90 ksi (min)	Comp = 110 kips - 489 kN Ten = 100 kips - 445 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm 0.500 in - 12.7 mm 0.625 in - 15.9 mm	(1) 0.875 in - 22.23 mm ASTM A490 Bolt	None
Model 200	2.00 in - 50.8 mm ASTM A576 Grade 1530M Yield Strength = 90 ksi (min)	Comp = 150 kips - 667 kN Ten = 150 kips - 667 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm 0.500 in - 12.7 mm 0.625 in - 15.9 mm	(1) 1.125 in - 25.40 mm ASTM A490 Bolt	None
<b>Round Shaft</b>					
Model 238	O.D. = 2.375 in - 60.3 mm Wall = .190 in - 4.8 mm API / Structural Grade 80 ksi Yield Strength = 80 ksi (min)	Comp = 50 kips - 222 kN Ten = 50 kips - 222 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm 0.500 in - 12.7 mm	(2) 0.75 in - 19.1 mm ASTM A325 Bolts	None
Model 278	O.D. = 2.875 in - 73.0 mm Wall = 0.217 in - 5.5 mm API / Structural Grade 80 ksi Yield Strength = 80 ksi (min)	Comp = 85 kips - 378 kN Ten = 80 kips - 355 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm 0.500 in - 12.7 mm 0.625 in - 15.9 mm	(2) 0.75 in - 19.1 mm ASTM A325 Bolts	None
Model 278	O.D. = 2.875 in - 73.0 mm Wall = 0.276 in - 7.0 mm API / Structural Grade 80 ksi OR ASTM A500 Grade ST80 Yield Strength = 80 ksi (min)	Comp = 100 kips - 444 kN Ten = 90 kips - 400 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm 0.500 in - 12.7 mm 0.625 in - 15.9 mm	(2) 0.75 in - 19.1 mm ASTM A325 Bolts	None
Model 312	O.D. = 3.50 in - 88.9 mm Wall = 0.254 in - 6.5 mm API / Structural Grade 80 ksi Yield Strength = 80 ksi (min)	Comp = 105 kips - 467 kN Ten = 90 kips - 400 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm 0.500 in - 12.7 mm 0.625 in - 15.9 mm	(2) 0.75 in - 19.1 mm ASTM A490 Bolts	None
Model 312	O.D. = 3.50 in - 88.9 mm Wall = 0.300 in - 7.6 mm API / Structural Grade 80 ksi OR ASTM A500 Grade ST80 Yield Strength = 80 ksi (min)	Comp = 112 kips - 498 kN Ten = 90 kips - 400 kN	ASTM A572 Grade 50 0.375 in - 9.5 mm 0.500 in - 12.7 mm 0.625 in - 15.9 mm 0.750 in - 19.1 mm	(2) 0.75 in - 19.05 mm ASTM A490 Bolts	None
Model 512	O.D. = 5.50 in - 139.7 mm Wall = 0.304 in - 7.7 mm API / Structural Grade 80 ksi Yield Strength = 80 ksi (min)	Comp = 160 kips - 611 kN Ten = 120 kips - 534 kN	ASTM A572 Grade 50 0.500 in - 12.7 mm 0.625 in - 15.9 mm 0.750 in - 19.1 mm 0.875 in - 22.2 mm 1.000 in - 25.4 mm	(2) 1.00 in - 25.4 mm ASTM A325 Bolts	Not applicable
Model 700	O.D. = 7.00 in - 177.8 mm Wall = 0.408 in - 10.4 mm API / Structural Grade 80 ksi Yield Strength = 80 ksi (min)	(2)	ASTM A572 Grade 50 0.500 in - 12.7 mm 0.625 in - 15.9 mm 0.750 in - 19.1 mm 0.875 in - 22.2 mm 1.000 in - 25.4 mm	Project Specific	Not applicable
Model 858	O.D. = 8.625 in - 219.1 mm Wall = 0.322 in - 8.2 mm ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 0.625 in - 15.9 mm 0.750 in - 19.1 mm 0.875 in - 22.2 mm 1.000 in - 25.4 mm 1.250 in - 31.8 mm	Project Specific	Not applicable
Model 1034	O.D. = 10.75 in - 273.1 mm Wall = 0.365 in - 9.3 mm ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 0.750 in - 19.1 mm 0.875 in - 22.2 mm 1.000 in - 25.4 mm 1.250 in - 31.8 mm 1.500 in - 38.1 mm	Project Specific	Not applicable



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Model 1234	O.D. = 12.75 in - 323.9 mm Wall = 0.625 in - 15.9 mm ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 0.750 in - 19.1 mm 0.875 in - 22.2 mm 1.000 in - 25.4 mm 1.250 in - 31.8 mm 1.500 in - 38.1 mm	Project Specific	Not applicable
Model 1600	O.D. = 16.00 in - 406.4 mm Wall = 0.312 in - 7.9 mm ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 0.875 in - 22.2 mm 1.000 in - 25.4 mm 1.250 in - 31.8 mm 1.500 in - 38.1 mm 1.750 in - 44.5 mm	Project Specific	Not applicable
Model 1800	O.D. = 18.00 in - 457.2 mm    Wall = .625 in - 15.9 mm ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 1.000 in - 25.4 mm 1.250 in - 31.8 mm 1.500 in - 38.1 mm 1.750 in - 44.5 mm	Project Specific	Not applicable
Model 2000	O.D. = 20.00 in - 508.0 mm Wall = 0.375 in - 9.5 mm ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 1.000 in - 25.4 mm 1.250 in - 31.8 mm 1.500 in - 38.1 mm 1.750 in - 44.5 mm	Project Specific	Not applicable
Model 2400	O.D. = 24.00 in - 609.6 mm Wall = Dependent on Avail. ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 1.000 in - 25.4 mm 1.250 in - 31.8 mm 1.500 in - 38.1 mm 1.750 in - 44.5 mm 2.000 in - 50.8 mm	Project Specific	Not applicable
Model 3000	O.D. = 30.00 in - 762.0 mm Wall = Dependent on Avail. ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 1.000 in - 25.4 mm 1.250 in - 31.8 mm 1.500 in - 38.1 mm 1.750 in - 44.5 mm 2.000 in - 50.8 mm	Project Specific	Not applicable
Model 3600	O.D. = 36.00 in - 914.4 mm Wall = Dependent on Avail. ASTM A500 Grade C Yield Strength = 50 ksi (min)	(2)	ASTM A572 Grade 50 1.000 in - 25.4 mm 1.250 in - 31.8 mm 1.500 in - 38.1 mm 1.750 in - 44.5 mm 2.000 in - 50.8 mm	Project Specific	Not applicable

(1) The values shown only address torque correlated soil capacity. Other mechanical limit states of the pile/anchor, its couplers, and its connections to the structure (brackets) may also govern the design capacity. Refer to the manufacturer's technical manual for further information."

(2) Large diameter helical piles develop capacity by a combination of both end-bearing and skin friction. The ultimate pile capacity is calculated based on the site-specific soil profile on a case-by-case basis. Load tests are often recommended for larger shaft sizes to identify a site-specific torque correlation factor (Kt), to determine the pile displacement versus load, and to verify the helical pile configuration.