

**SOIL - CHANCE HELICAL PILE AND ANCHOR - LOAD CAPACITY CHART**  
( A Feasibility Assessment Tool)

SOIL PROPERTIES		SHAFT SIZE mm (INCHES)	TORQUE RATING FT-LBS (Nm)	FACTORED COMPRESSION CAPACITY		FACTORED TENSION CAPACITY	
"N" VALUE COHESIVE	"N" VALUE NON-COHESIVE			SLS kN (KIPS)	ULS kN (KIPS)	SLS kN (KIPS)	ULS kN (KIPS)
25 - 35	25 - 30	SS5 38 (1-1/2)	5,500 (7 500)	120 (27.5)	147(33)	60 (13)	80 (17)
35 - 45	30 - 35	SS 175 44 (1-3/4)	11,000 (14 900)	245 (55)	300 (66)	135 (30)	150 (33)
50 - 60	40 - 50	SS200 51 (2)	16,000 (21 700)	360 (80)	430 (96)	165 (37)	215 (48)
65 - 100	55 - 100	SS225 57 (2-1/4)	23,000 (31 200)	510 (115)	615 (138)	240 (53)	310 (69)
20 - 25	15 - 20	RS2875.203 73 (2-7/8)	5,500 (7 500)	100 (22)	120 (26)	50 (11)	60 (13)
25 - 30	20 - 25	RS3500.300 89 (3-1/2)	13,000 (17 600)	205 (46)	245 (55)	100 (22)	120 (27)

- NOTE: 1. "N" Values or Blow Count from the Standard Penetration Test per ASTM D-1586
2. The above table is given as a guideline only and capacity of Chance Helical Pile/Anchor may vary depending on but not limited to water table elevation and changes to that elevation, changing soil conditions, soil layer thicknesses.
3. Achievable capacities could be higher or lower than stated in the table depending:
- i. Site specific conditions
  - ii. Onsite testing verification
  - iii. Above listed factors
  - iv. Helical Pulldown Micropiles can achieve higher capacities in compression. Onsite testing should be performed to verify additional pile capacity.
  - v. This chart is to be used for preliminary design activities only. Capacities to be verified on a site specific basis by a registered professional engineer.
4. "N" values lower or higher than shown in the table please contact EBS Engineering and Construction for helical pile load capacities.
5. Assume a 5 metre depth and a 2 - 4 helix configuration with diameters ranging from 100 mm to 350 mm.

