

MAGNUM[®] MH150S Helical Piles

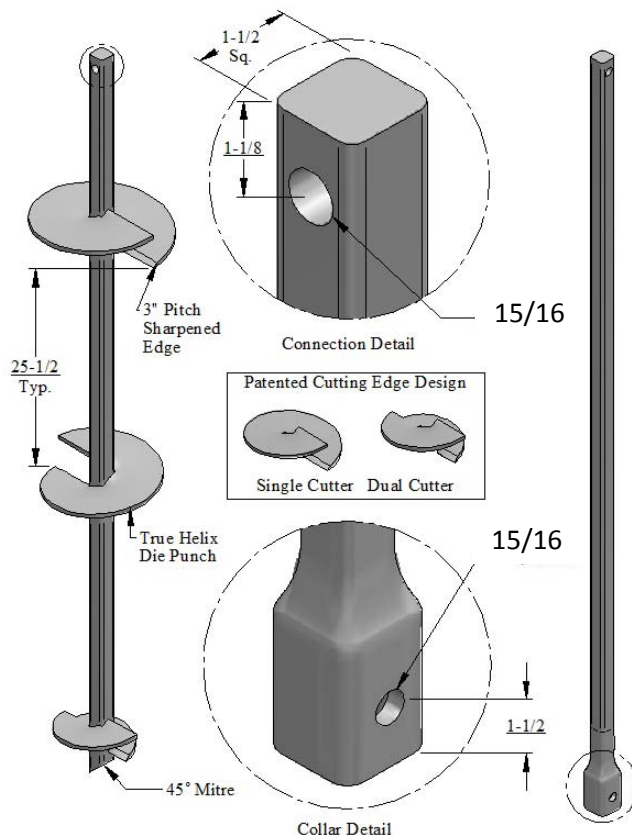
33 Ton Ultimate - 16 Ton Allowable

High-Strength 1.5" x 1.5", Round-Corner Square Shaft with Forged Upset Coupler & (1) 7/8" Bolt



Description

Magnum MH150S Helical Piles have 33 tons ultimate capacity and 16 tons working capacity in compression (fully braced conditions only) and in tension. Square shaft helical piles are ideally suited for anchoring/tension applications. Lead sections and extensions couple together to extend helical bearing plates to the desired bearing stratum. Structural capacity calculations are based on average life expectancy of over 75 years for most soil conditions. Patented Magnum Dual-Cutting Edge helical bearing plates (DCE) enhance penetration through dense soils with occasional cobbles and debris. Custom lengths and helix configurations are available upon request. See Magnum Technical Reference Manual for additional information including design tools, prescriptive specifications and example plans.



STEEL SPECIFICATIONS	
SHAFT	RCSS 1.5" x 1.5" ASTM A572 Grade 80 KSI, or Equivalent
I	New= 0.42 in ⁴ , Corroded= 0.37 in ⁴
Ag	New= 2.25 in ² , Corroded= 2.10 in ²
S	New= 0.56 in ³ , Corroded= 0.51 in ³
COUPLING	0.25" Min. Wall Forged Upset Collar
BOLTS	(1) 7/8" Diameter SAE J429 Grade 8 Zinc Coated to ASTM B695/F1941
BLADES	0.5" Thick, Helix Die-Pressed ASTM A36 Grade 50 ksi, or Better
COATING OPTIONS	Galvanized (G), Bare Steel (NG), Epoxy Powder Coated (EP)

PROPERTIES	
10 ft ⁻¹	Ultimate Capacity-to-Torque Ratio
6,500 ft-lbs	Maximum Installation Torque
STRUCTURAL CAPACITY	
33 Tons	Ultimate Capacity
16 Tons	Allowable Capacity
GEOTECHNICAL CAPACITY BY TORQUE	
33 Tons	Ultimate Compression & Tension
16 Tons	Allowable Comp. & Tension

Drawing above shows an example pile lead and extension section. Section lengths and number of helices vary with project requirements and soil conditions.

1.5" Square-Shaft Product Line Helical Bearing Plate Specifications & Available Configurations

0.5" Thick; ASTM A36, Grade 50 ksi or Higher
3" Blade Pitch
8", 10", 12", & 14" Diameter
Standard Circular Helix, or
Patented Dual Cutting Edge Helix
Sharpened Edges - All Helix

All Magnum Steel & Products Made in U.S.A.

U.S. Patents 6,058,662 and 5,234,287; Other Patents Pending.

Note: Helical piles shall be installed to appropriate depth into suitable bearing stratum as determined by geotechnical engineer or local practice. Capacity by torque is based on advancing pile to maximum installation torque. A minimum factor of safety of 2.0 is recommended for determining allowable capacity from correlations with final installation torque. Deflections of 0.5" are common at allowable capacity. A higher factor of safety may be required for smaller deflections. For tension capacity, helical bearing plates must be deeply embedded. Load tests are recommended when practical.

Magnum Piering, Inc.

6082 Schumacher Park Dr.

West Chester, OH 45069

800-822-7437

www.magnumpiering.com

*3 ft. Lead or Extension - up to 2 helical bearing plates

*5 ft. Lead or Extension - up to 2 helical bearing plates

*7 ft. Lead or Extension - up to 3 helical bearing plates

***Standard Stocking Length**