

MAGNUM[®] MH850B Helical Piles

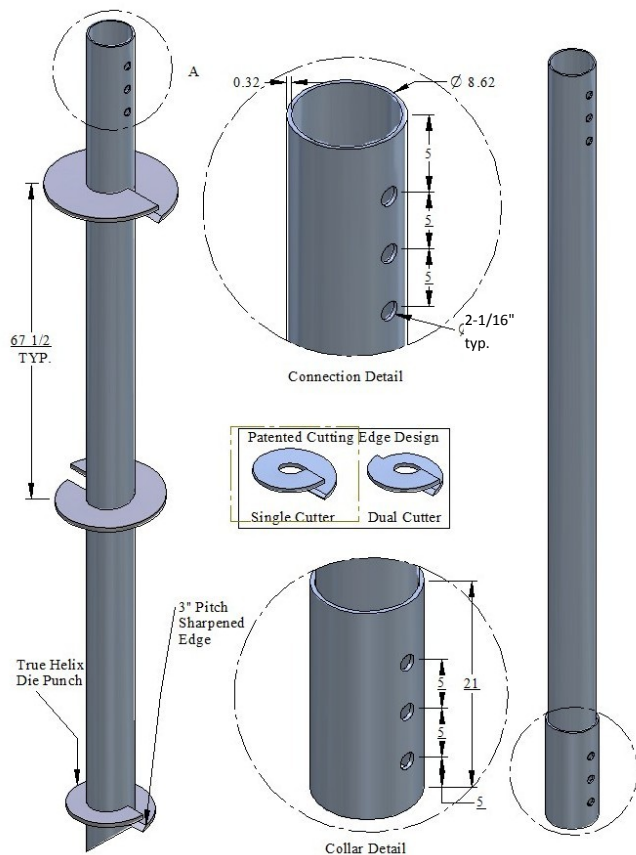
266 Ton Ultimate - 133 Ton Allowable

High-Strength 8.63" Diameter, 0.50" Wall, Round-Shaft with Rigid Coupler & (3) 2" Bolts



Description

Magnum MH850B Helical Piles have 266 tons ultimate capacity and 133 tons working capacity in compression and tension. Lead sections and extensions couple together to extend helical bearing plates to the desired bearing stratum. Round shafts offer increased lateral and buckling resistance compared to solid square shafts. 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	HSS 8.63" x 0.5" wall ASTM A513 65 KSI, or Equivalent
I	New= 105 in ⁴ , Corroded= 95 in ⁴
Ag	New= 12.8 in ² , Corroded= 11.5 in ²
S	New= 24.5 in ³ , Corroded= 22.2 in ³
COUPLING	0.5" Min. Wall Collar
BOLTS	(3) 2" Diameter SAE Grade 5 / ASTM A325
BLADES	0.875" Thick, Helix Die-Pressed ASTM A36, or Better
COATING OPTIONS	Hot-Dip Galvanized (G), Bare Steel (NG), Epoxy Powder Coated (EP)
PROPERTIES	
3.1 ft ⁻¹	Ultimate Capacity-to-Torque Ratio
170,000 ft-lbs	Maximum Installation Torque
STRUCTURAL CAPACITY	
438 Tons	Ultimate Capacity
219 Tons	Allowable Capacity
GEOTECHNICAL CAPACITY BY TORQUE	
266 Tons	Ultimate Compression & Tension
133 Tons	Allowable Comp. & Tension

Lead - MHL850B12016S20S24SNG

Extension - MHE850B12NG

8" Product Line Helical Bearing Plate Specifications & Available Configurations

0.875" Thick; ASTM A36 or Higher
3.00" Blade Pitch
16", 20", 24" 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.

Magnum Piering, Inc.

6082 Schumacher Park Dr.

West Chester, OH 45069

800-822-7437

www.magnumpiering.com

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

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

***Standard Stocking Length**

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" to 1.0" are typical 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.