Material Specifications

a. Central Shaft Steel

i. Round Hollow Shaft

Mechanical Properties

Minimum Yield Strength: 55ksi
Minimum Tensile Strength: 75ksi

Shaft Size

2-7/8”o.d. (.217” w.t)
3-1/2”o.d. (.254” w.t)

Torque Rating

2-7/8”o.d. (.217” w.t) – 8,000ft-lbs.
3-1/2”o.d. (.254” w.t) – 11,000ft-lbs.

Torque to Capacity Ratio

2-7/8”o.d. (.217” w.t) – 9 ft1 (recommended)
3-1/2”o.d. (.254” w.t) – 7 ft1 (recommended)

Ultimate Mechanical Capacity

2-7/8”o.d. (.217” w.t) – 80,000lbs.
3-1/2”o.d. (.254” w.t) – 120,000lbs.

ii. Solid Square Shaft

Mechanical Properties

Minimum Yield Strength: 90 ksi
Minimum Tensile Strength: 120 ksi

Shaft Size

1-1/2” x 1-1/2”
1-3/4” x 1-3/4”

Torque Rating

1-1/2” x 1-1/2” – 7,000ft-lbs.
1-3/4” x 1-3/4” – 10,000ft-lbs.

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Torque to Capacity Ratio

1-1/2" x 1-1/2" – 10 ft \(^2\) (recommended)
1-3/4" x 1-3/4" – 10 ft \(^2\) (recommended)

Ultimate Mechanical Capacity

1-1/2" x 1-1/2" – 80,000 lbs.
1-3/4" x 1-3/4" – 100,000 lbs.

b. Helices

i. Minimum Yield Strength: 50ksi
ii. Diameter: 8 inch - 16 inch
iii. Pitch: 3 inch or 6 inch
iv. Thickness: 3/8 inch or 1/2 inch

c. Finish

i. Galvanized or bare steel
ii. All galvanized steel per ASTM A123/153

d. Hardware

i. Grade 5 or equivalent for 2 - 7/8" or 3 - 1/2" piles, and 3/8" x 4 - 1/2" and 7/8" x 5 - 1/2" Respectively.
ii. Grade 8 or equivalent for 1-1/2" or 1 - 3/4" pile, and 3/4" x 3 - 1/2" and 7/8" x 4 - 1/2" Respectively.

e. Bracket

i. All steel plate 36 ksi min. Yield.

Exclusive Products: Members of:

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