



MAGNACORE[®]
SELF-DRILLING
ANCHORS

**HOLLOW BAR SELF-DRILLING ANCHORS
FOR LOOSE OR COLLAPSIBLE SOILS**

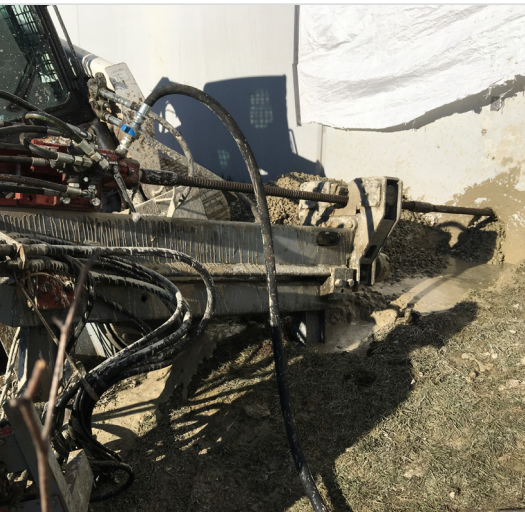
SIMULTANEOUS DRILLING AND GROUTING

Magnacore's Self-Drilling Anchor (SDA) is a hollow bar system that consists of fully threaded steel bar sections, couplers, nuts, and drill bits. The hollow centers of the bars enable this system to simultaneously drill and grout.

The hollow bar serves as a drill rod with a sacrificial bit that is threaded onto the end and is left in place following drilling. The bar is continuously threaded so it can be cut and coupled together anywhere along its length.

During drilling, cement grout is injected into the hollow core of the bar using a grout plant that is connected to the drill rig (see our Magnacore Equipment brochure). The cement grout exits through grout ports in the sacrificial bit, serving as a stabilizer and efficiently flushing the spoils from the borehole. This prevents looser surrounding material from collapsing due to the higher relative density of the grout.

The Magnacore Self-Drilling Anchor is ideal for loose or collapsible soils. The unique, all-in-one installation process gets the job done, while saving time and money.



KEY FEATURES

- Anchor bar simultaneously serves as a drill rod
- Eliminates the need for borehole drilling
- Concurrent drilling and grouting speeds installation
- Can be installed in confined spaces
- Effective in various ground conditions with the use of soil-specific drill bits
- Can be used as a soil nail, tieback anchors, or a micropile
- Hot dipped galvanized material available for corrosive protection

APPLICATIONS

- Slope, embankment, and rock stabilization
- Shoring and excavations
- Foundation underpinning
- Soil retention



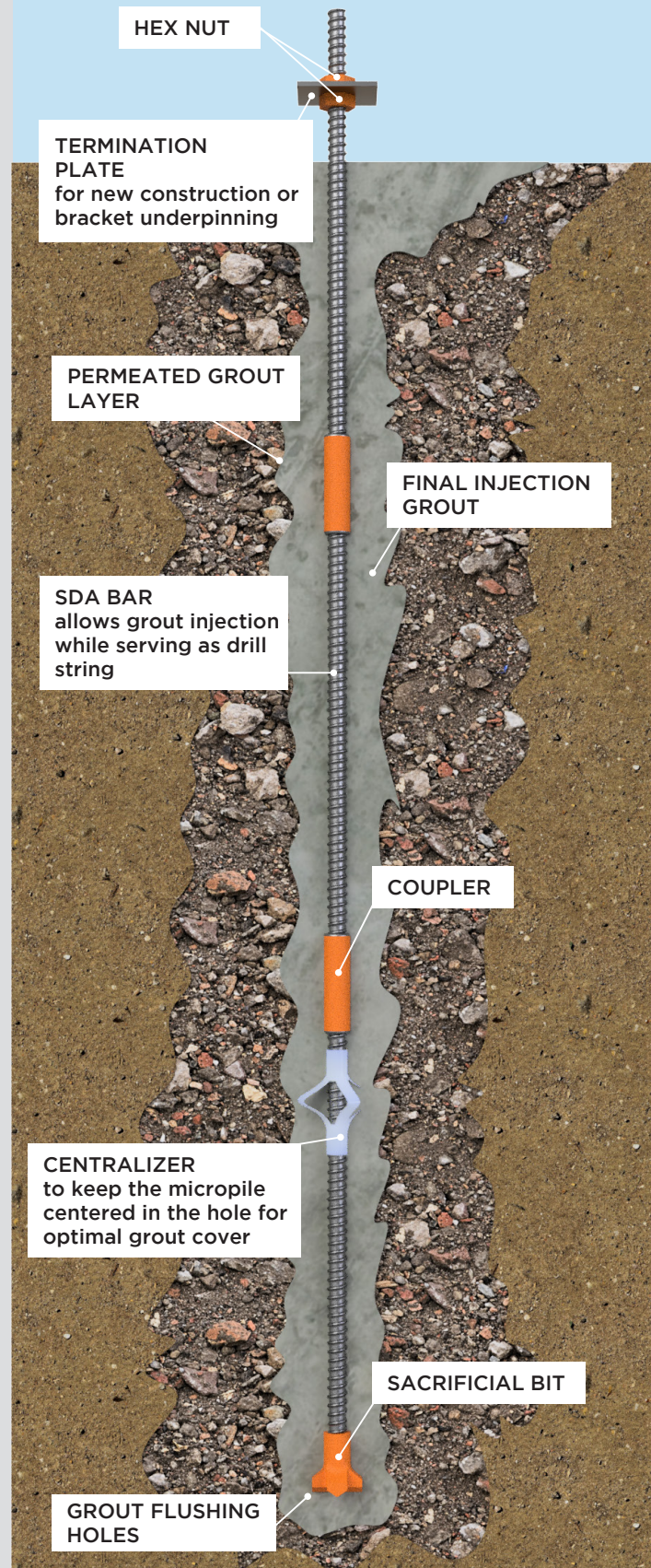
SPECIFICATIONS

All system components, including the hollow bars, sacrificial bits, couplers, hex nuts, and bearing plates are in stock and ready to ship. Our standard bar lengths are 1.5 and 3 meters, but orders can be placed for custom lengths. The standard bar is non-galvanized, though galvanized bars can also be ordered custom. Magnacore is available in both “R” (Round) and “T” (Trapezoidal) thread.

As every project is unique and presents its own challenges, our in-house engineering staff is available to assist with design, load testing, and installation support.

Bar Type	Outer Diameter	Inner Diameter	Area	Weight
MCR32/15	1.26 in (32 mm)	0.59 in (15 mm)	0.79 in ² (510 mm ²)	2.69 lbs/ft (4.00 kg/m)
MCR38/18	1.50 in (38 mm)	0.71 in (18 mm)	1.17 in ² (752 mm ²)	3.96 lbs/ft (5.90 kg/m)
MCR51/29	2.01 in (51 mm)	1.14 in (29 mm)	1.78 in ² (1146 mm ²)	6.05 lbs/ft (9.00 kg/m)
MCT40/20	1.57 in (40 mm)	0.79 in (20 mm)	1.22 in ² (790 mm ²)	4.17 lbs/ft (6.20 kg/m)
MCT40/16	1.57 in (40 mm)	0.63 in (16 mm)	1.42 in ² (917 mm ²)	4.84 lbs/ft (7.20 kg/m)
MCT52/26	2.05 in (52 mm)	1.02 in (26 mm)	1.92 in ² (1236 mm ²)	6.52 lbs/ft (9.70 kg/m)
MCT76/45	2.99 in (76 mm)	1.77 in (45 mm)	3.89 in ² (2510 mm ²)	13.24 lbs/ft (19.70 kg/m)

Bar Type	Ultimate Load (P _u)	Yield Load (P _y)	Ultimate Stress (F _u)	Yield Stress (F _y)
MCR32/15	81 kips (360 kN)	63 kips (280 kN)	102 ksi (706 MPa)	80 ksi (549 MPa)
MCR38/18	124 kips (550 kN)	101 kips (450 kN)	106 ksi (731 MPa)	87 ksi (598 MPa)
MCR51/29	180 kips (800 kN)	142 kips (630 kN)	101 ksi (698 MPa)	80 ksi (550 MPa)
MCT40/20	121 kips (539 kN)	97 kips (430 kN)	99 ksi (682 MPa)	79 ksi (544 MPa)
MCT40/16	148 kips (660 kN)	118 kips (525 kN)	104 ksi (720 MPa)	83 ksi (573 MPa)
MCT52/26	209 kips (929 kN)	164 kips (730 kN)	109 ksi (752 MPa)	86 ksi (591 MPa)
MCT76/45	427 kips (1900 kN)	337 kips (1500 kN)	110 ksi (757 MPa)	87 ksi (598 MPa)



We're here to help!

Contact your Intech business development manager to assist you on your next project. Or, contact Intech Engineering for assistance in designing your next micropile project.

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ANCHORING
SYSTEMS