

GEO-TECHNICAL





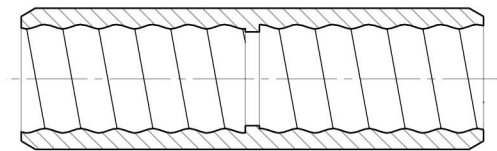
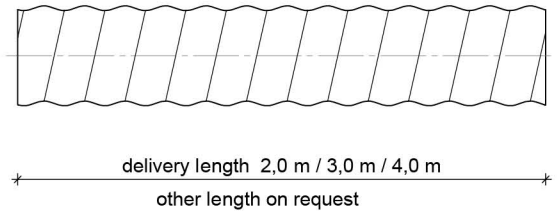
Self Drilling Hollow Bars



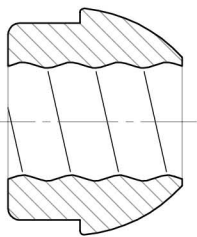
The hollow core bar system consists of three main components, the head, the steel tendon, and a single use drill bit. The steel tendon is a hollow core bar with continuous cold rolled threads throughout the bars 10' (3m) length. The continuous threads are beneficial in the fact that they allow the bar to be cut at any desired length, or joined with our exclusive coupling system to achieve your desired drill depth.

Designed to increase production, the hollow bar system can be simultaneously drilled and grouted into loose or collapsing soils without the need for a temporary casing. In order to insure smooth installation, we supply a large selection of drill bits, allowing our customers to install the hollow core bars in a variety of different soil conditions with most standard drill rig configurations.

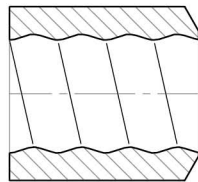
Due to the wide range of cross-sections and bar diameters available, we can design a system for you to carry almost any required load.



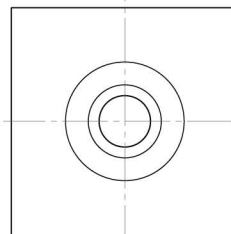
COUPLER H3003-XX



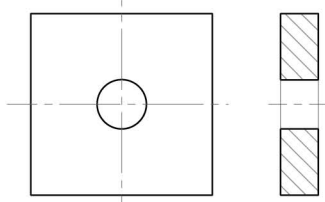
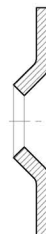
Domed Nut
H2001



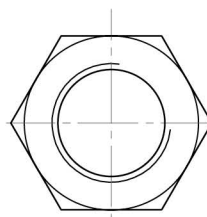
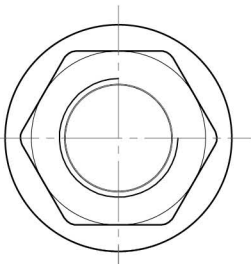
Flat Nut
H2963



Domed Plate



Flat Plate



Dia 32 mm to Dia 51 mm
Cold Rolled Bars
Left Hand thread



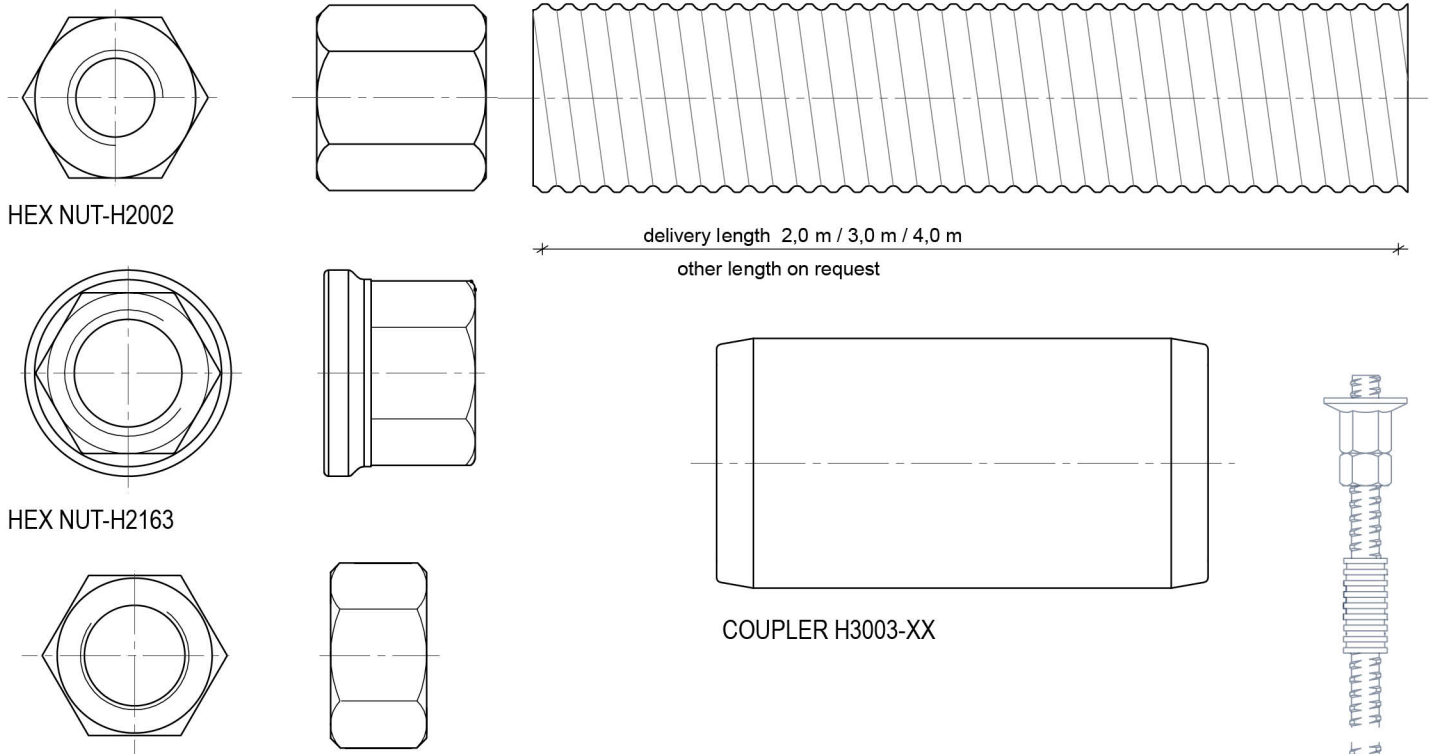
Applications

- Soil Nails
- Micropiles
- Rock Bolts
- Tiedown Anchors
- Tieback Anchors

Simultaneous Drill and Grout Installation

Grout is injected at all points of the borehole as drilling is advanced, permeating the local strata for increased bond performance and producing bulbing between the strata and the hollow bar in the softer sections of the soil.

Self Drilling Hollow Bars

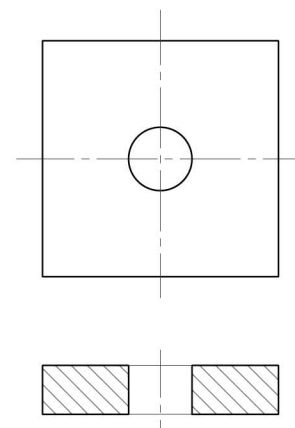


Dia 64 mm to Dia 108 mm
Cold Rolled Bars
Right Hand thread



Advantages

- Simple one-step installation
- Increased production through simultaneous drilling and grouting
- Allows tremie grouting, helping eliminate grout voids
- Can be installed in loose or collapsing soils without the need for a temporary casing to support the borehole
- Allows the use of smaller and less expensive drill rigs
- Can be installed in low overhead areas and sites with limited access
- Improves density of surrounding soils
- Promotes higher skin friction and soil bond due to rough pressure grouted borehole
- Fully threaded throughout the entire length to allow the bars to be cut at any desired length
- Additional corrosion protection can be provided
- Grout swivels can be used to retrofit standard rotary percussion drills



Flat Plate



Self Drilling Hollow Bars



FEATURES:

- Nationally approved system with internal and external quality control
- Well suited to transport and assembly conditions thanks to delivery in parts with couplers
- A wide selection of drill bits allows use in a wide range of soil types
- Simple to adapt to required length on site, e.g. with varying geological conditions by using partial sections with couplers
- Excellent bond between SHS-bar and cement mortar thanks to threaded ribs
- Can be closely matched to the required loads thanks to wide range of cross-sections
- Facilitates rapid construction progress since drilling, installation and injection of the nail are carried out in a single operation

TYPES AVAILABLE:

Temporary nails

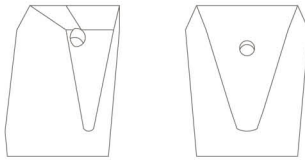
- Temporary nails (service life up to 2 years)

Permanent nails

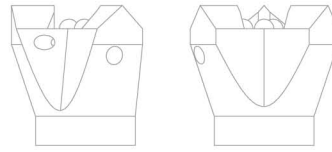
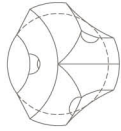
- Permanent nails, untreated, allowing for a soil-dependent corrosion rate (service life up to 50 years)
- Permanent nails, hot-dip galvanised, allowing for a soil-dependent corrosion rate (service life up to 50 years)



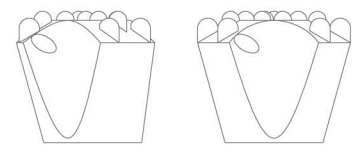
Drill Bits



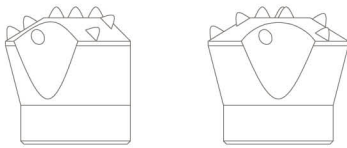
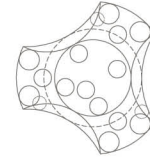
Arc Shaped Drill Bit AC



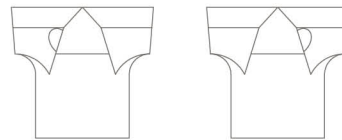
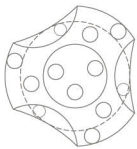
Hardened cross drill bit EY-DC



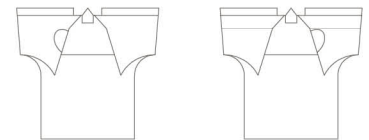
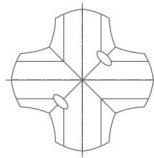
Hardened Button bit ES



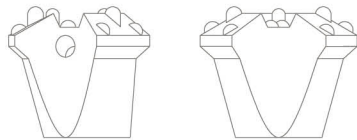
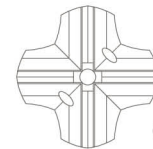
Button bit with TC insert ESS



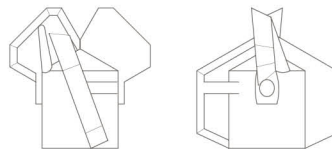
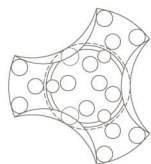
Cross Bit EX



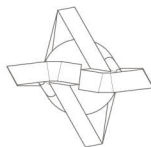
Cross Bit with TC insert EXX



Hardened Button with Drop Center ES-DC



Clay Bit EW



SHS SYSTEM





MICROPILES

Micropiles are small diameter piles; transferring compression, tension, and alternating loads mainly through skin friction to the surrounding ground. This concept of micropiles was developed in the 1950's. The use of continuous threaded bars as single, double, and triple bar micropiles was introduced in the 1970's.

The micropiles comprises of a thread-bar as the principal load carrying element inside a pressure-grouted cement body. This continuous coarse thread-bar allows the micropile to be installed in single sections, or in multiple sections, coupled together to any desired length. Various corrosion protection systems are available to cope with environmental impact and performance life expectations

Micropiles transfer load mainly through skin friction into the surrounding ground. For pressure-grouted micropiles the minimum load transfer length can be presumed to equal an anchors bond length along the drill hole surface

TOP QUALITY

