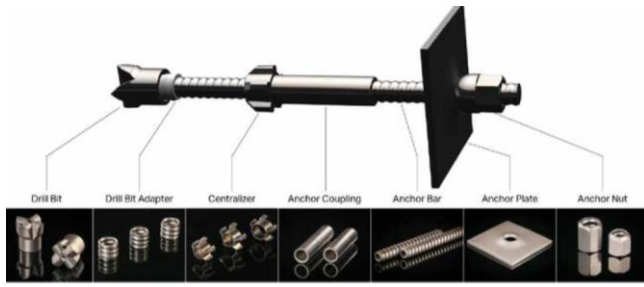


## Self-Drilling Anchors

### DESCRIPTION



Normet Self-Drilling Anchors (SDA) are an injectable bolting system that combines support-hole drilling and permanent reinforcement installation into a single product. SDAs are suited to both single and coupled length configurations and offer rapid installation rates into varied and complex ground conditions, mitigating the need to install temporary support. The installation process is well suited to varying ground conditions, making it easy to ensure consistent, high-quality installations of permanent support across a wide range of ground conditions.

Different types and sizes of bolts are available – classified according to thread type and tensile capacity of the hollow bar.

Description	R-Type	T-Type
Thread Type	ISO metric screw	Trapezoidal
Thread Sizes	R25 – R51	T30 – T127
Outside Dia. (mm)	25 – 51	30 – 127
Ultimate Load (kN)	200 – 925	220 – 3,650
Yield Load (kN)	150 – 740	180 – 2,750
Material	Steel (EN 10083-1)	

Full encapsulation of the SDA in a resin or grout provides long-term corrosion resistance. However, for applications where additional corrosion or chemical resistance is required, additional surface treatments are available in the form of Hot-Dip Galvanizing (HDG) and Epoxy Coating (EC). Alternatively, FRP equivalents can be considered.

### COMPONENTS

- › Drill String Components
  - › Hollow Anchor Bar
  - › Drill Bit
- › Surface Fixtures
  - › Plates (Domed / Flat)
  - › Nuts (Hex / Domed)
- › Accessories
  - › Extension Coupling
  - › Centralizer
  - › Drill Bit Adapter
  - › Adaptor Couplings
  - › Rotary Injection Adapters

### KEY BENEFITS

- › Easy and quick installation
- › Can be used in single-step or two-step applications
- › Eliminates borehole casing in unconsolidated ground
- › Eliminates redrilling works in fractured/broken ground
- › Compatible with both cement grout and pumpable resin systems
- › Suited to high-pressure injection

### TYPICAL APPLICATIONS

Normet Self Drilling Anchors can be used for both temporary and permanent applications in mining, tunnelling and civil construction projects.

- › Radial bolting
- › Face stabilization
- › Spilling / Forepoling
- › Soil nailing
- › Ground consolidation and injection
- › Micropile injection

In squeezing ground or seismically active ground conditions, a dynamic version of the SDA is available in Normet's SDDB (Self-Drilling Dynamic Bolts).

### INSTALLATIONS

The typical application process involves roto-percussion drilling through mechanized or semi-mechanized methods, similar to conventional borehole drilling.

Instead of utilizing a separate drill string, the anchor bolt itself serves this purpose. A single-use drill bit is positioned at the top of the hollow bar, which is then connected to the shank adapter. The hole is drilled using this anchor bolt system, and afterward, the system remains in the hole to function as the anchor bolt. Once drilling is completed, a resin or grout is injected through the bolt, bonding it into the support hole.

This self-drilling configuration is well suited to ground conditions prone to support-hole collapse, whereas installation of the hollow bar without the sacrificial drill bit offers a cost-effective and fast two-step installation alternative in more competent ground.

Centralizers and couplers can be used as necessary for longer anchor applications. After drilling to the desired length, the bolt is secured with an anchor plate and nut.

Grouting is performed either simultaneously with installation or after installation (post-grouting), using a suitable grouting or pumpable resin, such as Normet's TamPur RBG.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.

### TECHNICAL SPECIFICATIONS

*Refer to Quick Reference Sheet*

Normet Self-Drilling Anchors are available in Black, Hot-Dip Galvanized or Dual Coated (HDG + Epoxy Coat).

### PACKAGING

- › SDA Bars are arranged in bundles typically in 50 pcs per bundle depending on size
- › SDA Couplings, nuts and Drill Bits are arranged in cartons placed in Euro-pallets
- › SDA plates are placed in wooden Euro-pallets with max of 800 kg per pallet
- › Special packaging scheme can be customised according to customer request