



Steel & GFRP Self-Drilling Rock-Bolt

One-step installation: drilling, grouting, anchoring



Dextra

About Steel Self-Drilling Rock-Bolt

GEOTEC Steel Self-Drilling Rock-Bolt is a rock-bolting system based on a fully coarse threaded steel hollow bar.

- Especially recommended for roof and wall bolting applications
- Suitable for most ground conditions. It does not require to pre-drill a hole, therefore making it usable even in soft rock conditions
- Installation with grout. The hollow steel anchor rod also acts as a grouting pipe to ease set up. For non-grouting applications, please refer to Mechanical Anchor or Expandable Friction Bolts
- Suitable for temporary applications

Key benefits

- Fast installation for high productivity
- Dual anchorage: punctual + full encapsulation

Product features

- **3 in 1 concept:** acts as a drilling rod, anchor bar and grouting pipe
- Optimum bonding and load transfer
- Splicing system to adjust to custom lengths
- Standard sacrificial drill bits for every ground conditions

Standards

Design

- BS EN 1997-1
- BS EN 1537

Test

- BS 7861-1

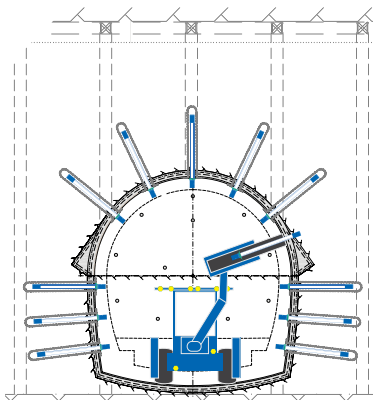
Applications

Tunneling

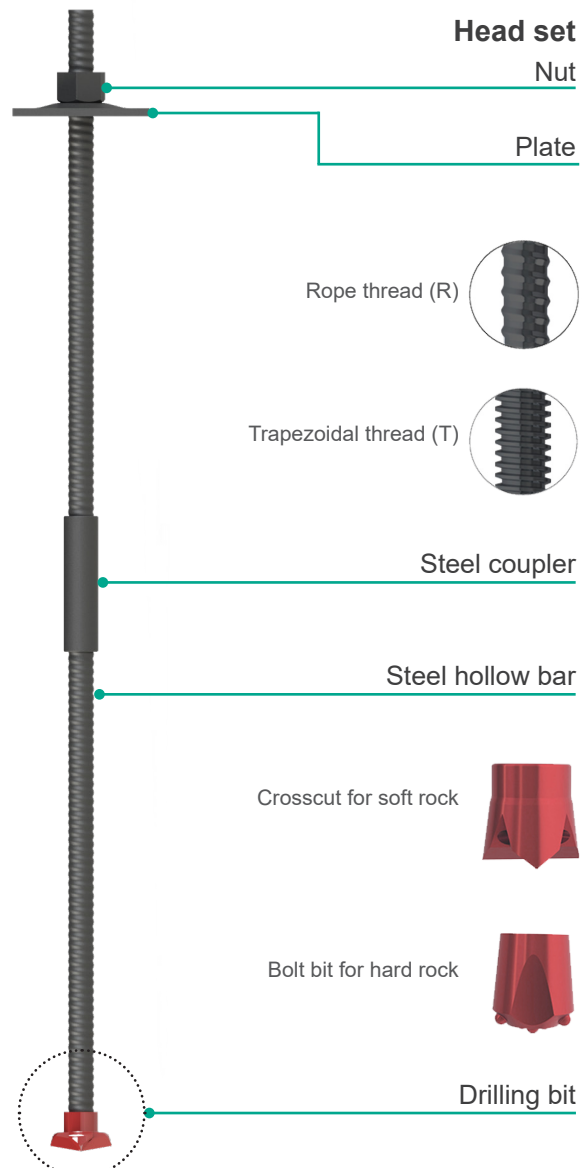
- Radial bolting
- Face stabilization
- Portal preparation

Ground engineering

- Slope stabilization
- Soil Nailing
- Micropiling



Roof bolting / Rib bolting



Fully Threaded Steel Hollow Bar

Product Type	Thread Direction	Linear Weight (kg/m)	Pitch (mm)	ID (mm)	OD (mm)	Yield Load (kN)	Ultimate Load (kN)
R25	Left	2.00	12.7	15	25	150	200
R32N	Left	2.60	12.7	21.5	32	230	280
R32S	Left	2.90	12.7	18.5	32	280	360
R32SS	Left	3.20	12.7	17	32	330	400
R38N	Left	4.20	12.7	23	38	400	500
R51L	Left	5.00	12.7	34	51	450	550
R51N	Left	7.00	12.7	31	51	630	800
T30N	Left	3.00	13	14	30	260	320
T40N	Left	5.90	13	26	40	430	540
T40L	Left	5.00	13	22	40	525	660
T76N	Left	15.60	13	52	76	1200	1600

Steel Self-Drilling Rock-Bolt accessories

Product Type	Plate			Nut		Coupler	
	Size L x W (mm)	Thickness (mm)	Hole Dia. (mm)	SW (mm)	Height (mm)	OD (mm)	Length (mm)
R25N	150 x 150	8	30	41	35	36	150
R32N	200 x 200	10	35	N/A	N/A	42	160
R32S	200 x 200	10	35	47	65	42	190
R32SS	200 x 200	12	35	46	65	42	190
R38N	200 x 200	12	41	50	60	52	220
R51L	200 x 200	30	60	N/A	N/A	N/A	N/A
R51N	200 x 200	40	60	75	70	63	200
T30	200 x 200	8	36	46	35	38	105
T40	200 x 200	12	54	65	50	57	140
T76	250 x 250	40	80	100	80	97	220

About GFRP Hollow Bar

GEOTEC GFRP Self Drilling Rock-Bolt is a rock-bolting system based on a fully coarse thread GFRP hollow bar.

It is especially recommended for the following applications:

- Face bolting
- Soft and loose ground conditions. It does not require to pre-drill a hole, and it is perfectly usable in soft conditions
- Installation with grout. The hollow GFRP bar acts as a grouting pipe to ease set up
- Temporary or permanent applications

Standards

Design

- BS EN 1997-1
- BS EN 1537

Test

- BS 7861-1

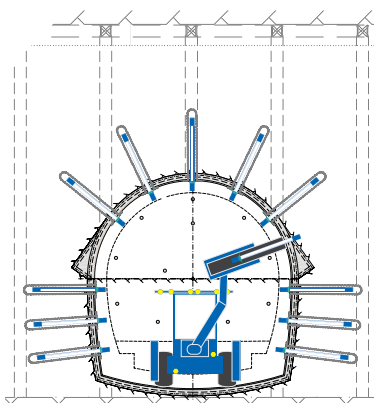
Applications

Tunneling

- Face stabilization
- Portal preparation

Ground engineering

- Slope stabilization
- Soil Nailing



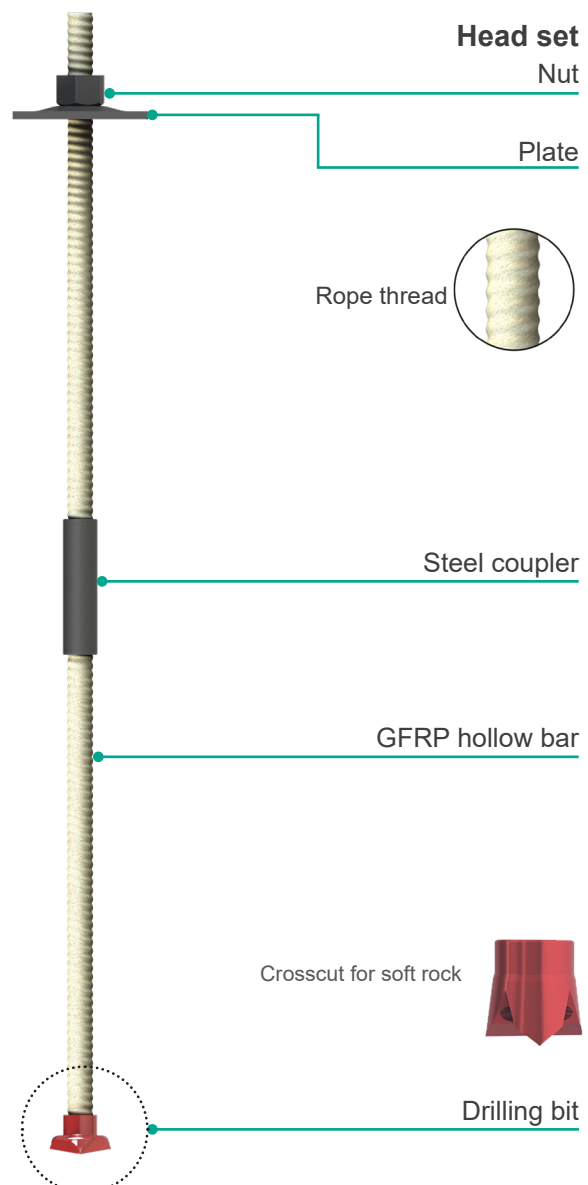
Roof bolting / Rib bolting

Key benefits

- Fast installation for high productivity
- Dual anchorage: punctual + fully encapsulation
- Cuttable material, will not damage excavation machine
- Suitable for corrosive environments

Product features

- **3 in 1 concept:** acts as a drilling rod, anchor bar and grouting pipe
- Optimum bonding and load transfer
- Splicing system adjustable to custom lengths
- Sacrificial cross-cut drill bits for soft/loose ground conditions






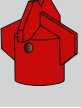



Fully Threaded GFRP Hollow Bar

Product Type	Thread Direction	Linear Weight (kg/m)	Pitch (mm)	ID (mm)	OD (mm)	Ultimate Load (kN)	Torsion (N·m)
R32	Left	1.20	12.7	15	25	365	300
R38	Left	1.52	12.7	20	38	500	420

GFRP Self-Drilling Rock-Bolt accessories

Product type	Plate			Nut		Coupler		
	L x W x H (mm)	Hole Dia. (mm)	Head Breaking Load (kN)	SW (mm)	Length (mm)	OD (mm)	Length (mm)	Load (kN)
R32	150 x 150 x 10	1.40	180	46	100	42	200	180
R38	150 x 150 x 10	3.00	250	55	100	48	200	250

Sacrificial Drill Bits

Drill Bits			
Images	Bit Type	Rock Condition	Bar type
	EC	Loose to dense soil/sand, including bands of soft rock	Steel
	ES	TC button bit for weak rock formations	Steel
	ESS	TC button bit for medium rock formations	Steel
	EW	Hardened cross bit for loose to medium dense ground conditions	Steel
	EX	Loose to dense soil/sand, including bands of soft rock	Steel/GFRP
	EXX	Medium to strong fractured rock formations	Steel
	EY	Weak cemented soil/sands and weak fractured rock & plain concrete	Steel



Shimla bypass T15 & T49, India



USBRL T49, India



High-speed rail, Belgrade, Serbia



Shimla bypass T15 & T49, India



USBRL T49, India



High-speed rail, Belgrade, Serbia

Commercial presence
in more than
55 countries



**HEADQUARTERS
THAILAND**
Dextra Manufacturing Co.,Ltd.
Tel: (66) 2 021 3800

CHINA
Dextra Building Products (Guangdong) Co.,Ltd.
Tel: (86) 20 2261 9901

HONG KONG
Dextra Pacific Ltd.
Tel: (852) 2511 8236

EUROPE
Dextra Europe SARL
Tel: (33) 1 45 53 70 82

MIDDLE EAST
Dextra Middle East FZE
Tel: (971) 4886 5620

INDIA
Dextra India Pvt.,Ltd.
Tel: (91) 22 2839 2694

NORTH AMERICA
Dextra America Inc.
Tel: (1) 206 742 6020

LATIN AMERICA
Dextra Latam
Tel: (507) 831 1422

BRAZIL
Dextra do Brasil
Tel: (55) 119 7577 8112