

SOFT ROCK MINING / HARD ROCK MINING

GFRP SOLID BOLT SYSTEM

FLEXIBLE AND EASY TO HANDLE ROCKBOLT SYSTEM

DESCRIPTION

GFRP bolting system is a comprehensive rock bolting system with various components that include a plastic nut, GFRP nut, steel nut, plastic plate, GFRP plate, couplings, adapter and injection connection.

The bolt has a high ultimate load and due to its profile, offers a maximum bond strength with all grouting materials. The bolt has a continuous thread and can be trimmed if required.

Available as solid and hollow bolts. Solid bolts can be installed with cement grout or Lokset® resin capsules, while the installation of the hollow rods can be carried out with cement grouts or injection resins.

APPLICATION AND USES

The GFRP rock bolt applications include strata support in mining and tunneling, as well as for slope and face stabilisation. Nuts are available for breakout or thrust applications.

ADVANTAGES

- High tensile strength offering high and immediate load bearing capacity if applied with fast setting resin capsules
- Cutable protecting machinery and equipment preventing damage when drifting and enlarging tunnels
- High corrosion resistance and suitable for permanent support
- High flexibility suitable for applications without couplings in confined locations
- Low weight and easy handling
- Anti-static option

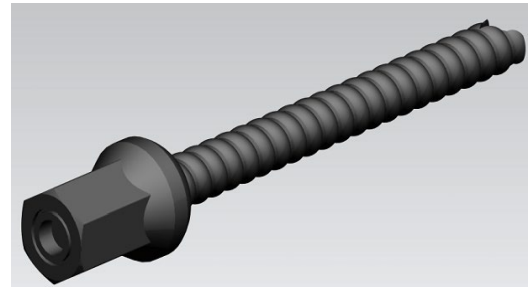


Figure 1 - GFRP Solid Bolt

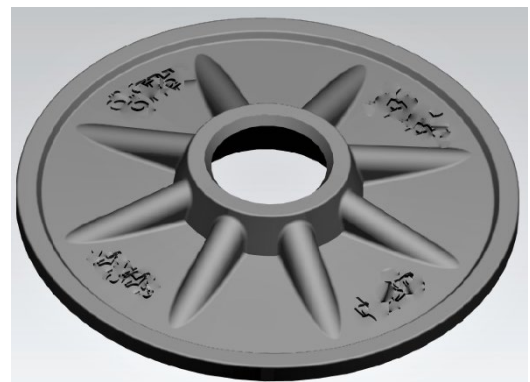


Figure 2 - GRRP Domed Plate

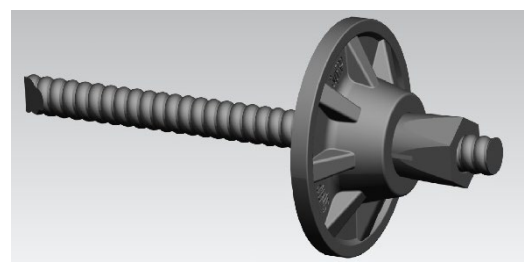


Figure 3 - Bolt Nut Plate Assembly

TECHNICAL DATA

Unit	Solid Bolt									
	S18/150	S20/200	S22/250	S23/270	S24/300	S25/350	S27/400	S30/490	S32/560	
Material	GFRP (Fiberglass + Polymer Resin)									
Outer Diameter (mm)	18	20	22	23	24	25	27	30	32	
Tensile Stress Area (mm ²)	150	200	250	300	300	350	400	510	580	
Ultimate Load (kN)	150	200	250	270	300	350	400	490	560	
Breaking load thread (kN)	Steel Nut L100	-	100	120	-	160	180	200	240	320
	GFRP Nut L70	60	60	70	70	70	70	80	80	90
	GFRP Conical Nut L80	70	80	100	-	160	180	180	200	200
Torsion Resistance (Nm)	60	70	80	-	100	120	150	180	240	
Fibre Content by Weight	75%									
Tensile Modulus (GPa)	50									
Strain at Failure (%)	2									
Weight (kg/m)	0.42	0.56	0.69	0.77	0.76	0.90	1.04	1.30	1.45	

Unit	Value
Material	GFRP (Fiberglass + Polymer Resin)
Outer Diameter (mm)	250
Internal Diameter (mm)	40
Thickness (mm)	32
Weight (g)	900
Compressive Breaking Load (kN)	100

PACKAGING AND TRANSPORTATION

Varies – dependent on bolt size and length

750 plates per pallet

TECHNICAL SUPPORT

We provide technical advisory service by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work. All technical data sheets can be found on www.minovaglobal.com/apac

DISTRIBUTOR

Minova Australia Pty Ltd
George Booth Drive Kurri Kurri, NSW 2327

An ISO 9001:2015 Quality Management Certificated Company



FS 603747

CUSTOMER SERVICE

sales_au@minovaglobal.com

1800 646 682 (1800 Minova)

1300 646 682 (1300 Minova)
+61 2 49395159 (International)

LEARN MORE

Click on the website links to learn more about Minova and their solutions.

[About Minova](#)
[Lokset Resin Capsules](#)
[Anchoring Grouts](#)
[High Volume Output Grouts](#)
[Injection Chemicals](#)
[Sprayed Cements](#)
[Steel and Fibreglass](#)
[Mesh](#)
[Ventilation & Air Control](#)
[Surface to Seam](#)
[UniPass Bolting Technologies](#)
[Pre-Driven Recovery Roadway](#)
[Optimised Ore Recovery](#)

DISCLAIMER

All information contained in this document is provided for informational purposes only and is subject to change without notice. Since Minova cannot anticipate or control the conditions under which this information and its products may be used, each user should review the information in the specific context of the intended application. To the maximum extent permitted by law, Minova specifically disclaims all warranties express or implied in law, including accuracy, non-infringement, and implied warranties of merchantability or fitness for a particular purpose. Minova specifically disclaims, and will not be responsible for, any liability or damages resulting from the use or reliance upon the information in this document.

The Minova Logo is a registered trademark.

© Minova Australia Pty Ltd

® Registered trademark of Minova International Limited