

**COAL MINING**

**COAL BOLT**

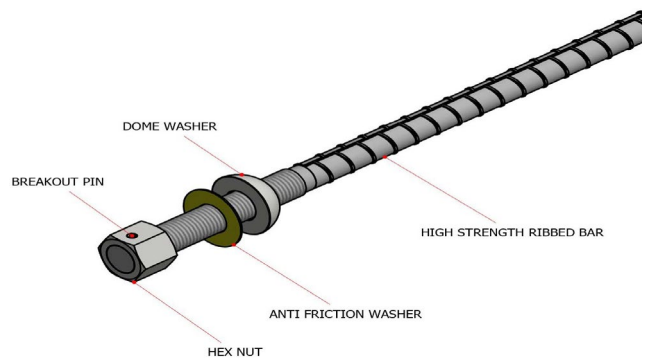
**FULLY ENCAPSULATED ROOF & RIB BOLT**

**DESCRIPTION**

Coal bolts are manufactured with a rolled M24 x 3.0 mm pitch right hand thread and a ribbed surface profile for high load transfer and easy resin application. Supplied complete with an anti-friction washer, dome washer and hexagonal 36 mm drive nut.

Available in either standard “S” mild steel grade or extra high tensile “X”. X steel grade provides greater potential performance in conditions subject to stress corrosion cracking.

Multiple lengths, diameters, pin configurations are available.



**APPLICATION AND USES**

Coal Bolts have been developed for use in point anchored or fully encapsulated roof and rib bolting applications. Primary use in coal mining operations. Recommended for use in 27 – 29 mm diameter holes. For >30mm diameter holes it is recommended to use Minova Secura bolt range.

**ADVANTAGES**

- Proven historical performance
- Point anchored or fully encapsulated roof & rib bolting applications
- Extensive quality-controlled manufacturing
- Enhanced resin mixing and load transfer.

**TECHNICAL DATA**

**Mechanical Properties**


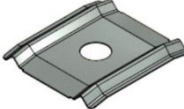
Typical Properties	M24 X Grade	M24 S Grade
Nominal Rib Height Diameter (mm)	24	24
Nominal Cross-Sectional Area of the Bar (mm <sup>2</sup> )	370	370
Yield Stress (Strength MPa)	650	340
<sup>1</sup> Yield Force Diameter (MT)	24.6	12.8
Tensile Stress (Strength MPa)	890	490
<sup>2</sup> Tensile Force Typical (MT)	33.7	18.6
Elongation (%) 5D	19	27
Mass per metre – Bar (kg/m)	3	3

<sup>1</sup> Yield Force and <sup>2</sup>Tensile Force values are calculated on the nominal cross-sectional area of the bar, as provide by the steel supplier

**Plates**

Minova can supply a comprehensive range of plates for use with Coal bolts.

Plates most typically used with Coal bolts are:

Plate Name	Dimensions (mm)	
Crown Plate	150 x 150 x 5	
Strata Plate	280x300x1.8	

**Lokset® Resin Capsule**

The Lokset system consists of an easily handled cartridge filled with a reinforced polyester resin in one compartment and a catalysed mastic filler in the other, separated by a physical barrier. The rotation of the bolt during installation ruptures the capsule, shreds the skin and mixes the two components causing a chemical reaction and transforming the resin mastic into a solid anchor.

The mixed resin fills the annulus around the bolt. Standard “point” anchorage will be firmly interlocked with the substrate and bolt within minutes. The setting time of the resin components can be controlled. A combination of fast and slow setting cartridges makes it possible to simultaneously anchor, grout and tension the rock bolt.

Refer to the technical data sheet at [www.minovaglobal.com/apac](http://www.minovaglobal.com/apac)



**PACKAGING AND TRANSPORTATION**

Packaged in bundles of 50 with the option to plastic wrap and strap washer, nuts and threads. Bundles of 60 are also available where required. Individual bolt lengths are visually identifiable by a coloured dome washer on each bolt

**Product Standards**

	M24 X Grade	M24 S Grade
Steel Bar	HSAC840 Equivalent	AS/NZS 3679.1-300
Galvanizing	AS4680	AS4680
Bar Straightness	AS 1442-1991	AS 1442-1991

**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.minovalglobal.com/apac](http://www.minovalglobal.com/apac)

**MANUFACTURER**

**Minova Australia Pty Ltd**

An ISO 9001:2015 Quality Management Certificated Company



FS 603747

**ADDITIONAL INFORMATION**

Minova Australia offers a comprehensive range of products, all of which have been developed after extensive research and testing on a global scale via our international network of operations. These products include:

- Resin anchor systems
- High yield grouts and foams
- Monolithic chock systems
- High performance cable bolt grouts
- Polyurethane resin systems
- Sprayable coatings for ventilation control
- Water stop grouts
- Ventilation formwork systems including: Meshblock and Tecmesh
- Grout mixers and batchers both air and hydraulically operated
- Contract Installations
- Flexible membranes for strata support and waterproofing applications

## **CUSTOMER SERVICE**

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## **LEARN MORE**

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

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[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](#)

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