

**CONVENTIONAL SYSTEMS**

**MECHANICAL BOLT**

The Mechanical Bolt provides support by the suspension method. The mine roof is effectively suspended by anchoring the different layers of strata together. Anchorage is accomplished with the assistance of an expansion shell. The Mechanical Bolt is tensioned during installation, which sets the expansion shell against the borehole wall. Mechanical Bolts are offered with a standard expansion shell or bail style expansion shell.



**INSTALLATION PROCEDURES**

1. Drill borehole at proper diameter and depth.
2. Make borehole depth 2” longer than the bolt.
3. Insert Mechanical Bolt and Bearing Plate to roofline or rock surface.
4. Rotate bolt using drill pre-set to proper torque. Bearing Plate should be tight against roof.

**SPECIFICATIONS**

Bar Diameter & Grade	Min Yield, lbs	Min Tensile, lbs	Borehole Diameter (typical)*	Installation Torque, ft-lbs
5/8” Gr75	17,000	22,600	1”, 1-3/8”	125 - 225
3/4” Gr75	25,100	33,400	1-3/8”	150 - 275
7/8” Gr75	34,700	46,200	1-3/8”	225 - 350

\*Note: Borehole diameter determined by expansion shell dimensions and requirements. The installation torque can be highly variable depending on final bolt configuration (hardened and anti-friction washers, etc.) Please consult Minova technical representatives for your site-specific conditions and applications.

### APPROVALS AND CERTIFICATES



an ISO 9001:2015  
Quality Management System Certified Company.

### DISCLAIMER

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### ADDITIONAL DOCUMENTATION

If further information is required consult Minova Americas website: [www.minovaglobal.com/americas/](http://www.minovaglobal.com/americas/).

- Steel Bolts, Plates, Other Steel Articles Safety Data Sheet (SDS)
- Minova Guide to Rock Bolting
- Minova Chemicals, Polymers & Steel Application Guide

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