

# 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 hole at proper diameter and depth.
2. Make depth 2" longer than the bolt.
3. Insert Mechanical Bolt and Bearing Plate to within 1/16" to 1/8" of roofline.
4. Rotate bolt using drill pre-set to proper torque. Bearing Plate should be tight against roof.

### Specifications:

Bar Diameter & Grade	Min Yield	Min Tensile	Borehole	Installation Torque
5/8" Gr75	17,000 lbs	22,600 lbs	1", 1-3/8"	125 - 250
3/4" Gr75	25,100 lbs	33,400 lbs	1-3/8"	175 - 300
7/8" Gr75	34,700 lbs	46,200 lbs	1-3/8"	250 - 375





## Minova USA Inc. Products

**Bolts and Plates**

**Anchoring Products**

**Pumpable Cementitious Grouts**

**Airtite® Sealants and Coatings**

**Chemical Grouts**

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