

U-Bolt Hybrid Truss System

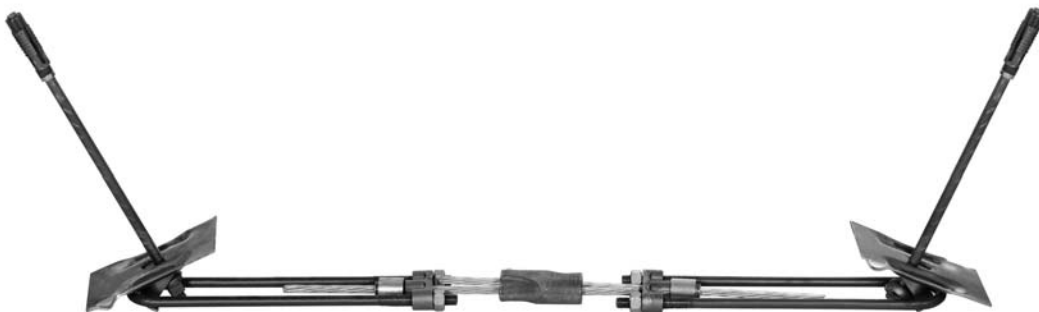
Roof conditions in today's underground mining operations are more challenging than ever before. Weak roof, deep cover and stress fields are but a few of the contributing factors that lead to the increased requirements for added ground control. Trusses, when properly installed, rely on the inherent strength of the strata above support pillars to provide anchorage and compressive forces. Systems have evolved, and currently many systems incorporate high strength cables as a key component to add flexibility and capacity. One such system is Minova's U-Bolt Hybrid Truss System.

- A variety of truss anchors can be used
 - *Double Lok*
 - *Tension Rebar*
 - *Resin Bolt*
- Two configurations of truss shoe assembly
 - *Cast shoe incorporates plate and U-bolt saddle*
 - *2-V angle block that can be used with various flat plates*
- Cable cross-member for strength and flexibility
- Threaded U-bolts for re-tensioning without the need for hydraulic power

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Specifications:

- Truss bolts made from 7/8" Grade 75 material
- Cross-members made from 0.6" (270K) low relaxation, 7-strand cable
- Nominal strength of 30 tons
- Hole diameters – 1", 1-3/8"



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Installation Procedures:

1. Drill hole proper diameter and depth at +/- 45 degree angle
2. Insert proper Minova resin cartridge
3. Insert truss anchor bolt assembly into hole per the recommendations according to the type of bolt
4. Attach U-bolts to the shoe or 2-V angle block
5. Insert cable cross-member into cable connector
6. Insert opposite ends of cable cross-member into U-bolt via the 3 hole block and attach barrels and wedges
7. Tension the system with the hydraulic tensioning unit or a hand pump assembly

Minova USA Inc. Products

Bolts and Plates

Anchoring Products

Pumpable Cementitious Grouts

Airtite® Sealants and Coatings

Chemical Grouts

Manufactured and sold under license from Minova International Limited.



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