

# Inflatable Bolts

After drilling support holes in the rock, Roofbolts are inserted and inflated with high pressure water, expanding to the shape of the hole. This frictional resistance provides the user with immediate support and a safe working environment.



**Hydrabolt**  
Knowing you're safe at the face

**X-Pandabolt**

**ManziBolt**  
Knowing you're safe at the face

**RS-Bolt**

**The Hydrabolt** incorporates a non-return valve to prevent the water from being released. This system provides unparalleled grip.

**The X-Pandabolt** releases water pressure after installation which is suitable for specific mining conditions where it is better for the bolt to not remain pressurised.

**The RS-Bolt** is a modified Hydrabolt or X-Pandabolt which is bent at an angle. This allows the bolt to be installed by the "push-straighten-push" method in low stoping widths.

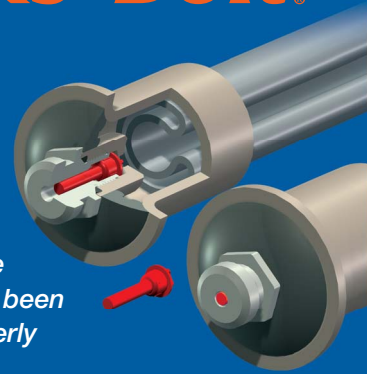
**The ManziBolt** has been specifically developed for use in typical hydropower mine shafts without the requirement to intensify the water pressure.

The load indicator provides a visual method of verifying correct installation. By popping forward, the load indicator confirms that the Roofbolt has been correctly installed and its colour identifies the length of the installed Roofbolt.

**Corrosion Protection Coating** – Roofbolts can be supplied with a Thermal Zinc Diffusion coating which has been proved in both laboratory and underground environments to provide significant protection from the corrosive elements typically found in underground mines.

- Quick and easy to install
- Not affected by blasting vibrations
- Hydrabolt retains its pressure even if the button is blasted off
- Load indicator shows when pressurised
- Patented non-return valve which limits "spring-back" giving increased pull-out resistance
- Load indicator colour shows length of Roofbolt
- Safe remote installation
- Wide expansion range
- Load distributed evenly over entire length of hole
- No resin or grout required
- No parts to lose in transport
- Not susceptible to rock strength
- Immediate support

The visible load indicator shows that the Hydrabolt has been installed properly

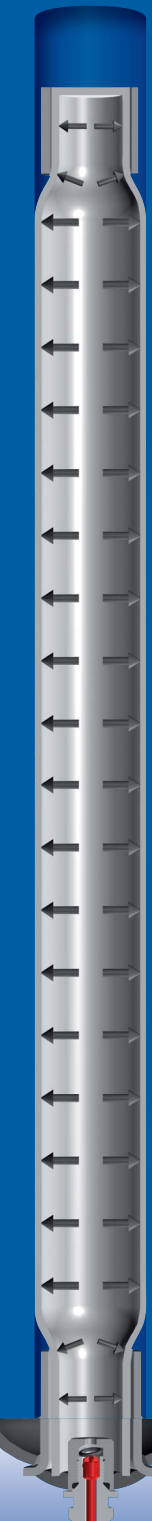


Hydrabolt retains pressure, even if the button is blasted off

0.9 m	1.0 m	1.2 m	1.5 m	1.6 m	1.8 m	1.9 m	2.1 m	2.4 m	3.0 m
Hydrabolt									
X-Pandabolt									
ManziBolt									

The colour of the load indicator identifies the length of the roofbolt

Corrosion protection with Thermal Zinc Diffusion Coating



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