



Blast Hole Drilling Tools

Product Overview











At Joy Global, everything starts with a **singular focus** on mining.

Our unique business model in the mining industry, centered on a **direct service** approach, allows our customers to deal directly with our company representatives, in an intimacy model with no middleman or dealership operations intermediating discussions.

Our **experienced people** and high quality services are close to the mines to provide better decisions and solutions.

Joy Global is continually investing in research and development in order to deliver **technology** products that will revolutionize mining.

Our resources are committed to developing methods and solutions focused on higher productivity and reliability and safer operations.

Blast Hole Drilling Tools

Joy Global has designed and introduced a variety of rotary blast hole tools to meet the increasing drilling needs of our customers. All of our blast hole tools are designed to provide top performance and value: less rig maintenance, more productivity and lower operating costs.

Blast Hole Drill Steel

Joy blast hole drill steel, both fabricated and integral, is tailored to the particular drill. Our fabricated drill steel features tool joints made from alloy steel and is inspected by ultrasonic means as part of our quality processes. Wrench slots or flats are milled to suit the requirements of the drill. All rotary-shouldered connections are kemplated to protect against galling during the break-in period. Heavy wall construction and optional hard-facing result in longer life and lower operating costs.

Our integral drill steel is made from premium quality alloy steel bars. Bores are trepanned to sizes that result in the correct balance for the selected rotary shouldered connection. Integral drill steel is available step-bored to reduce weight while concentricity and axial alignment of the connections to the drill steel are held to close tolerance. Application of tungsten carbide hard-facing is available to protect both fabricated and integral steel from abrasion and erosion. Joy Global representatives are available to study your needs and assist you in selecting the proper drill steel and rotary connections for your particular application.

Swivel Mount Shock Sub

The swivel mount shock sub is a resilient coupling used between the drill and the drill pipe on top-drive machines. Our swivel mount shock subs are designed to reduce both axial and torsional vibrations and effectively dampen the shock loads created by the action of the bit. Shock and vibratory energy transferred between drill and bit are absorbed through a series of rubber-bonded segments.

Benefits include: increased penetration rate, longer bit life, reduced noise levels and lower drill maintenance costs.

Stabilizers

Model 63-B stabilizers and welded blade stabilizers lead Joy Global's complete line of blast hole stabilizers. The model 63-B stabilizer is the original roller stabilizer specially designed for blast hole drilling. Positioned directly behind the bit, the model 63-B stabilizer centralizes and stabilizes the bit providing smooth rotation, reduced vibration and more effective drilling. Air is circulated through the rollers, cooling and cleaning the hardened bearing surfaces, maximizing wear life. The result is better penetration rates, higher productivity and lower overall cost.

Joy welded blade stabilizers are manufactured with a body of alloy steel and can be supplied with straight or spiral ribs. Ribs are steel wear bars welded to the body and covered with a hard metal overlay or tungsten carbide inserts. Joy welded blade stabilizers are extremely effective in wet or dry, soft and medium formations. Our stabilizers have been designed for increased life and reduced operating costs.

Rotary Deck Bushing

Rotary deck bushings are engineered and manufactured to withstand the harshest drilling conditions. Available in both standard and heavy-duty versions, the standard series deck bushing is best suited for drills which operate with steel below 203 mm (8 inches). Joy Global recommends heavy-duty rotary deck bushings for drills operating with steel larger than 203 mm (8 inches). All rotary deck bushings offer the advantages of long life and reduced drill vibration.

Portable Makeup/Break Out Tool

The Joy portable makeup/break out tool can service all of the drills in a mining operation. The makeup/break out tool assists the user in making connections between drill pipe(s) and bit sub at the correct value, thus eliminating the need for welding.

The Joy makeup/breakout wrench allows for quick and easy dismantling and assembly of the drill string.

- Capable of torquing 219 to 365 mm (8.625 to 14.375 inch) drill pipe
- Maximum 244,047 Nm (180,000 ft-lbs) of torque at 20,684 kPa (3000 psi)
- Designed to suit any available power supply

Contact your Joy Global service representative for more information on Blast Hole Drilling Tools

or visit

www.joyglobal.com



Joy Global worldwide locations





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