

tapered drill rod with 7 and 12 degree optional for mining

Tapered drill rods are forged from high-strength alloy steels, such as 55SiMnMo and 23CrNi3Mo, and offer excellent impact resistance and wear resistance. These tapered drill rods deliver consistent performance under demanding drilling conditions and are widely used in mining, tunneling, and construction applications.

Selection of Tapered Drill Rods

Modern drilling rigs usually use taper angles of 11 degree and 12 degree. For rock drills with lower impact energy and for softer rock formations, a smaller 7 degree taper angle is recommended. If there is bit slippage during the use of 11 degree or 12 degree rods, the 7 degree taper can also be selected.

Features of Tapered Drill Rods

- High strength and excellent wear resistance
- Good rigidity and toughness
- Suitable for hard rock drilling operations
- Easy assembly and disassembly
- Long service life
- Customizable sizes available



Specifications of Tapered Drill Rods

- **Shank type:** hex 22 x 108 mm, hex 22 x 83 mm (optional)
- **Length:** 500mm to 8000mm
- **Taper:** 7 degree or 12 degree (optional)
- **Weight:** 1.5kg to 24.2kg

Usage Instructions

1. Select the appropriate drill rod length and diameter according to the drilling depth and rock hardness.
2. Thread the drill rod into the drill rig and tighten it with a wrench.
3. Attach the drill bit to the end of the rod and secure it with a pin or bolt.
4. Start the drilling operation, and adjust the rotation speed and impact power as needed.

Precautions

- Always select the appropriate length and diameter of the drill rod to prevent bending or breakage during drilling.
- Regularly check the hardness and wear resistance of the drill rod, and replace it when necessary.
- Use suitable lubricants and cooling liquids to extend the service life of the drill rod and reduce heat generated during drilling.
- Store the drill rods in a dry and ventilated place to avoid rust and contamination.

Applications of Tapered Drill Rods

Underground Mining and Construction

Tapered drill rods are widely used in underground mining and construction fields, such as tunneling, ore drilling, geothermal drilling, and water well drilling.

Compatibility

12-degree tapered drill rods are compatible with various drilling machines, including pneumatic rock drills, hydraulic rock drills, top hammer drills, and DTH drills. They are also compatible with leading brands such as Atlas Copco, Sandvik, Tamrock, Furukawa, and Soosan.