



Rock drill automatic rod connection principle video

What is rod connection & removal?

Rod connection and removal are crucial aspects of down-the-hole drill operations, directly impacting overall work efficiency and the service life of rock drilling tools.

What is a rod connection & unloading method?

The traditional rod connection and unloading method relies on manual operation, which is not only cumbersome and labor-intensive but also easy to cause damage to the rock drilling tools. However, with the rapid development of automation technology, the rod connection and unloading method of down-the-hole drills is undergoing unprecedented changes.

Why are rock drilling tools difficult to operate?

Fragile rock drilling tools: due to the manual operation's error of manual operation, the push speed is difficult to control accurately, which causes the thread of the rock drilling tools to be damaged due to the rigid transmission force. Inefficiency: complex operation steps and uncertainty of manual control affect the operation efficiency.

What is proportional connecting and unloading rod technology?

With the rapid development of PLC control technology, proportional connecting and unloading rod technology emerged at a historic moment. This technology achieves high automation and intelligence in the rock drilling tool loading and unloading process through the perfect combination of electrical and hydraulic technology.

How do I connect and unload a rod?

During the process of connecting and unloading the rod, the operator only needs to set relevant parameters (such as rotation speed and propulsion speed) through the LCD screen on the remote control console, and the system will automatically complete the rod connecting and unloading operation according to the preset parameters.

How to install a drill rod unloader?

Preparation stage: first, open the clamps above the rod unloader seat. Then, position the drill rod to be connected to the rod unloader, ensuring that the upper and lower drill rods and the swivel head main shaft are all aligned concentrically with the drill rod to be connected.

Discover effective strategies for selecting drill rods in hard rock drilling to enhance efficiency and reduce operational costs. Learn about material selection, optimal rod sizes, and ...

A rock drilling machine with an automatic rod connection device capable of reaching up to 9 meters is



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typically used in mining, tunneling, and geotechnical applications ...

Automatic feed alignment ensures that the desired angle is maintained when drilling -- this is crucial for achieving optimum blasting results. Furthermore, the automatic rod adding system ...

The working principle of the drill rod of the pneumatic rock drill is based on the working principle of the pneumatic rock drill. When compressed ...

High-performance drill machine rods featuring premium materials, innovative flute design, and superior connection systems for optimal drilling efficiency and durability in professional ...

Pneumatic rock drills are fundamental tools in mining, quarrying, and construction for drilling blast holes. While the drill itself delivers the percussive force, optimal performance ...

The main function of the drill rod is to transmit the impact force and torque of the rock drill to the drill bit. So that the drill bit can break the rock and form a hole.

Abstract Rock drilling is widely used in various types of rock engineering. Rock boring is often used in tunneling, underground mining, and nuclear waste depository. This ...

Connects and disconnects rods using a hydraulic or pneumatic actuator. Can thread rods into the drill string or remove them without manual intervention. Synchronization ...

In drilling, drill rods are connected end-to-end to form a drill string, which transmits rotational force and axial load from the drilling rig to the drill bit, enabling penetration into solid ...

By utilizing a hollow anchor bar as the drill rod, the Sinorock self-drilling system eliminates the need for pre-grouting and casing. This innovation simplifies the construction ...

Discover the different components and functions of a rock drill with this comprehensive guide on understanding its inner workings. Learn about ...

Benefits: Increased safety by minimizing worker exposure to moving parts and confined areas. Faster rod handling leads to higher drilling productivity nsiste...

The R25 drill rod, a key component in rock drilling and tunneling, plays a crucial role in ensuring efficiency and precision in demanding environments. Properly connecting these drill rods is ...

Our rods and bits for our Pneumatic Rock Drills can handle all applications: From granite mining, stone quarrying and asphalt drilling to construction. We supply ...



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Speed drill rod Speed drill rod are made by hollow drill steels; We use advanced production technology CNC and hollow drill steel processing by Boring Method ensuring quality reliability, ...

(2). Drill Rod: the hydraulic rock drill mainly uses threaded drill rod, which includes extension drill rod, drifter rod, MF rod. The drill rod is characterized in that the ...

Speed drill rod Speed drill rod are made by hollow drill steels; We use advanced production technology CNC and hollow drill steel processing by Boring ...

Professional-grade rock drill rods featuring premium materials, innovative threading system, and enhanced performance features for optimal drilling efficiency in mining and construction ...

Holds multiple rods in a ready-to-use position. Automatically rotates or indexes to present the next rod for connection. A robotic or hydraulic manipulator that grips, lifts, aligns, ...

In hard rock formations a drill, stem can be added to the drilling process from stopping drilling to starting drilling in about 45 seconds to about a minute.

Large rod magazine - up to 225 m of TD 73 jet drilling rods or 210 m of ELICON 80 rock drilling rods on board Anchoring system for enhanced stability while drilling Hydraulic loading crane ...

Discover the different components and functions of a rock drill with this comprehensive guide on understanding its inner workings. Learn about the various parts that ...

Rock drill is the mechanical drilling equipment that breaks into rock by impacting force primarily and rotating force secondarily. In 1844, the British engineer Brompton invented ...

Pay attention to the position of the steel drill of the rock drill to avoid the automatic fall of the drill rod and hurt people, and close the gas path in ...

Download scientific diagram | Working principle of rock drill. from publication: Research on the Matching of Impact Performance and Collision Coefficient of ...

Connecting R25 drill rods safely and effectively is essential for successful drilling operations. By understanding the design, preparing adequately, following a step-by-step connection process, ...

Welcome to a legacy of reliability and performance. We are the leading suppliers of rock drills, rock drill accessories, machine spares and consumables used in ...



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A rock drilling machine with an automatic rod connection device capable of reaching up to 9 meters is typically used in mining, tunneling, and geotechnical a...

COPROD is a unique patented drilling system for fast and straight drilling in demanding rock. It consists of drilling rigs and drillstrings that combine the high penetration rate of top hammer ...

Rock drilling machine with automatic rod connection device up to 9 meters A rock drilling machine with an automatic rod connection device capable of reaching up to 9 meters is typically used in ...

Publisher Summary This chapter describes the drilling of a well, including the well planning, the main drilling-plant components and the operating procedures, and point out the ...

Explore the working principles and anchoring methods of self-drilling hollow anchor rods in slope, foundation pit, tunnel, and prestressed support applications. Enhance project ...

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