



# Shaft sinking drill rigs

What infrastructure is needed for shaft sinking operations?

Access roads, utilities, and infrastructure necessary for construction activities are established to support the shaft sinking operations. Excavation and Support: Excavation of the shaft begins with the use of specialized drilling equipment, such as raise boring machines or shaft sinking rigs.

What is shaft sinking?

This method involves excavating a vertical or inclined shaft from the surface down to the desired depth where mining activities will take place. Shaft sinking plays a pivotal role in enabling safe and efficient transportation of personnel, equipment, and ore between the surface and underground workings. Process of Shaft Sinking

What equipment is required for a shaft sinking job?

Under miscellaneous equipment may be listed that required for framing shaft timber, for pouring concrete linings (concrete mixer, steel or wooden forms, and pipe, hose, or buckets for lowering concrete), and equipment for special shaft-sinking jobs.

What is shaft sinking Thyssen mining?

shaft sinking Thyssen Mining | Shaft Sinking Thyssen Mining has been sinking shafts worldwide for over 100 years. Whether it's using conventional drill and blast methods or innovative mechanized systems, Thyssen Mining's techniques continue to excel and grow as technology advances and safety standards increase.

Who is shaft sinking?

Innovation and creative construction in Shaft Sinking. We have been delivering creative underground shaft and access solutions to the international market for water and wastewater management and hydropower development for over 40 years, the mining industry for more than 30 years and power / utility providers for more than 20 years.

How is a shaft excavated?

Excavation and Support: Excavation of the shaft begins with the use of specialized drilling equipment, such as raise boring machines or shaft sinking rigs. Initially, a pilot hole may be drilled to guide subsequent excavation phases.

Herrenknecht was selected as a partner to design a new type of shaft boring system, capable of sinking 2,000 meter depths at three times the rate of conventional shaft sinking methods. In ...

Application of SDD rigs Herrenknecht's Slant Directional Drilling rigs (SDD) combine the advantages of two drilling methods that have proven themselves for years. With the specially ...

Shaft sinking companies are showing an increasing interest in the use of shaft drill rigs equipped with high



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performance hydraulic rock drills. ...

The operations of this hydraulic drilling equipment are driven by two 90kW motors, including rotation, drilling, feed. Huatai offers 3 types of hydraulic shaft ...

Our global dealer network and factory experts are available to partner with you to select all your shaft sinking equipment, raise boring tools, development and bolting drill jumbos, drifters, ...

Technical specifications Herrenknecht's Vertical Shaft Sinking Machine (VSM) has been designed with a flexible and compact jobsite set-up for the reliable construction of vertical shafts in ...

Based on feedback from our valued customers, the Komatsu shaft sinking jumbo and mucker duo were designed to efficiently meet your mining operational needs while controlling capital costs. ...

Shaft sinking has a cost which is related significantly to the dimensions of the shafts and the geology of the formation being drilled through. It also depends on the intensity with which the ...

Conventional shaft-sinking is a construction method to sink shaft by the directly adopting drilling-blasting process, without taking special measures in advance. It is suitable for ...

Shaft boring is a special shaft sinking method that uses a drilling rig to drill the shaft. On the ground, a large-diameter drilling machine is first used to drill a well into the strata, and ...

Pioneering Underground Technologies For more than 45 years, Herrenknecht has been engaged in the tunnelling business and is the global market leader providing innovative ...

The technology allows for rapid conventional shaft construction in hard rock with high occupational safety for the drilling crew. It can be used for a variety of applications both in ...

The shafts were placed 28 meters apart measured from centre to centre. To ensure that the skin to skin pillars between the shafts remained regular and to minimise any deflection, the pilot ...

The special methods are: 1. The Piling System 2. Caisson Methods 3. Freezing Method 4. Cementation Process 5. Drilled Shafts. Method # 1. The Piling System: This method is known ...

Excavation and Support: Excavation of the shaft begins with the use of specialized drilling equipment, such as raise boring machines or shaft ...

The team was able to boast the sinking of both shafts without a lost-time accident being recorded in either of the shaft barrels. The shaft system was designed to produce 3 million tonnes of run ...



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The technical literature is replete with descriptions of and data on shaft sinking equipment, methods and costs. The subject of shaft sinking has been discussed at some ...

This document discusses the process of vertical shaft sinking using conventional drilling and blasting methods. It covers various aspects of the shaft sinking ...

The Shaft Boring Roadheader (SBR) was developed for the mechanized sinking of blind shafts in soft to medium-hard rock with up to 120 MPa. For the efficient excavation of the rock, the SBR ...

Successful in shaft sinking for over 130 years Since our incorporation in 1888 Deilmann-Haniel has safely and successfully sunk more than 560 shafts, 200 of which are freeze shafts, with a ...

Shaft sinking companies are showing an increasing interest in the use of shaft drill rigs equipped with high performance hydraulic rock drills. Therefore Deilmann-Haniel Mining ...

We understand flexibility in your fleet is important, so the ZS02 jumbo is engineered to accommodate small to large shaft sizes. Plus, the multiple-boom configuration can help ...

To address the low rock-breaking efficiency of milled-tooth rolling cutters used for shaft sinking via drilling methods in the Jurassic strata of Western China, this study conducted ...

Top hammer drilling -- efficient and powerful hydraulic drifters designed by a leader in the drilling industry, Montabert, makes the ZS02 a powerful and efficient workhorse that optimizes your ...



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