



# Ac-vfd electric land drilling rigs

What is the difference between Electrical Drilling AC VFD and DC SCR?

Electrical drilling AC VFD systems are modern technology and highly effective in helping drilling operations fully optimize the power distribution of their rigs. Electrical drilling DC SCR systems are very robust and used in challenging locations for years.

How does a mechanical drilling rig work?

On mechanical drilling rigs, also called power rigs, the rotary energy of the diesel engines is transferred directly to the drawworks, mud pumps, and rotary table (or top drive) via a system of chains (chain drive) or belts (belt drive), torque converters and clutches.

What are the different drive modes in a drilling rig?

Drilling rigs can be designed with different drive modes: Electric drive (AC or DC), mechanical drive, or a combination of both (compound drive). In the following we briefly introduce each drive mode as well as list their strengths and weaknesses.

Why should you choose AC powered rigs?

Apart from being more energy efficient, AC powered rigs allow the drilling operator to more accurately control the rig equipment, thus enhancing rig safety and reducing drilling time. Efficient energy consumption due to a high power factor (minimum 95%). Precise speed regulation over a wider speed range. Constant high power even at low speed.

How do electric drill rigs work?

Electric generators powered by large diesel engines (the prime movers) generate electricity that move the heavy rig equipment such as the rotary table (or top drive), mud pumps and drawworks. Electric drill rigs are more expensive than mechanical rigs, but offer some nice advantages in return.

How deep can a 750 hp land rig Drill?

In addition, we can also maintain and repair your top drives and supply a highly-skilled drilling crew to operate your rig. With a static hook load of 1,700 kN, our 750 hp land rig is equipped to reach a drill depth of 3000 m (9,840 ft) using 4-1/2" drill pipe. The maximum drill depth with a 5" drill string is 2500 m or 8200 ft.

The "AC" in AC rig stands for "alternating current" - meaning that the electric current that powers the rig frequently reverses direction. The programmability of AC rigs gives ...

3000 HP AC Electric VFD driven Cantilever AMERICAN made Land drilling rig, draw works capacity is actually 4500 hp, 1,700,000 lbs hook load, 156 ft mast derrick, 38 ft rig ...

Rig 41 NOV AC Ideal Walking Land Rig Drawworks: NOV ADS-10SD AC Electric Gear Driven Drawworks



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rated at 2000 H.P. with 1-3/8" Drill Line Primary ...

The ZJ70LDB is a 2000HP land rig designed for high-performance onshore drilling, featuring a compound drive system, versatile VFD motor for stepless rotary table speed control, and ...

The Bentec Variable Frequency Drive can be combined with the Bentec AC motor to create a perfectly aligned configuration able to meet all high power drilling ...

On an AC powered rig, AC generator sets (diesel engine plus AC generator) produce alternating current that is operated at variable speed via a variable ...

Brand new 2000 hp SCR land rig available for sale. Robust and field-proven design. Complete DC rig package including top drive, solid control & and well ...

We offer innovative rig structures, drilling equipment, electric power systems, SCR drives, AC variable frequency drives, and more. The land rigs are equipped with many of the latest in ...

BHL NEW 1500HP AC x 750,000 lbs. HOOK LOAD LAND DRILLING RIG MAST: (N) Model: 142" x 750,000 lbs BHL Self-Elevating Mast Racking Capacity: ...

Power Control Rooms for Drilling Rigs Power Control Rooms come in two main types. VFD controls for AC driven equipment and SCR controls for DC driven ...

Buy and sell oil and gas equipment on Rigzone. Oilfield Equipment, Land Rigs, Offshore Rigs and more. Search the best equipment from oil and gas companies.

This design includes Discovery AC electric drive Drawworks, the most state of the art VFD and AC drive technology, required rotating equipment, high pressure mud systems up to 7500 psi ...

The full-digital AC/VFD drive drilling rigs has been well adopted on the all-weather and all-terrain drilling rigs ranging from 1,000 to 12,000 meters in drilling ...

3 days ago; Land Rigs for Sale OilRigsNow is a broker for new and used land drilling rigs from the USA, Canada, Europe, and China. Many of the current offerings are listed below. ...

Schlumberger variable frequency drives (VFDs) are available in air-cooled and liquid-cooled models designed to control the speed and torque of AC motors ...

Advanced variable frequency drive (VFD) control technologies and integrated PLCs. Driller monitors and operate essential drilling functions from a driller's chair



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Electric Drilling Rigs & Advantages | 2 Different Types ( SCR & VFD ) OIL FIELD WORKER 6.29K subscribers Subscribed

DRAWWORKS Make: GES (Global Energy Services) Model: DS2040-555201 Input Power: 1,600 HP Motors: 1 AC 1500/1830 HP Drilling Line: 1 3/8" ROTARY TABLE Make: American Block ...

Power Control Rooms for Drilling Rigs Power Control Rooms come in two main types. VFD controls for AC driven equipment and SCR controls for DC driven equipment. We recommend ...

B. Hoisting Equipment 1. Drawworks : 1 : Baoji : JC-50D - Type : Electric, stepless speed, adjustment ; Single driven shaft chain transmission, single drum, with lebus groove - Rating : ...

Beside this we can provide full range of onshore and offshore drilling rigs, work over rigs, oilfield equipment, coiled tubing units, wire line units, nitrogen units, drill pipes, ...

BHEL offers four variants of AC-SCR rigs with drilling depths covering shallow & deep formations. The Rig package can be standard package or custom built to suit to individual customer ...

Our land drilling rig systems give you an edge in today's most challenging drilling environments. Learn more about our high-tech drilling rig systems.

This 450 Ton Land Drilling Rig is a high-performance unit designed for operations in Europe, the Middle East, and UAE markets. Equipped with VFD/PLC electric drive and a ...

Electric drilling rigs use electric generators powered by diesel engines to generate electricity to power rig equipment like the rotary table, mud pumps, and ...

Variable Frequency Drive Bentec Variable Frequency Drive is an own-developed adjustable AC motor drive system for drilling machinery. Available Power ...

AC VFD-2000 HP RIG UPTO 6100 MTS BHEL make AC VFD 2000 HP Rigs are designed for drilling depths up to 6100 meters. These rigs are equipped latest state of art technology ...

Variable Frequency Drives (VFDs) play a crucial role in controlling the speed and torque of electrical motors in various applications, including drilling systems. When it comes to ...

Features: Model ZJ70/4500DB, 2000HP, VFD drive land drilling rig is designed to drill and complete oil and gas wells with a depth below. The rig naming and ...

The main rig movers are diesel engine driven AC generators with enough power for operating the rig. The power drive system available in SCR (AC-SCR-DC) ...



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This includes information on electrical drilling AC VFD systems and electrical drilling DC SCR systems. Lean on the team at Parker Wellbore to gain the knowledge and expertise needed to ...

The Difference Between Direct Current and Alternating Current Drilling Rig Electric Drive System May 24, 2016 Petroleum electric control system is generally divided into two categories,one is ...

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