

# Electronic control of energy storage workover rig

Product introduction Environmental protection: &quot;zero emission&quot; of workover operation; Worry-free power consumption: make full use of the grid power of well site pumping unit to realize continuous operation while charging; Safe and efficient: integrated design, PLC control, automatic monitoring, linkage and interlocking; High automation: one-button automatic pipe transport, automatic pipe ...

KERUI XJ650 RIG WORKOVER - Free download as PDF File (.pdf), Text File (.txt) or view presentation slides online. This document provides information about Kerui Drilling Equipment including: - Kerui Drilling Equipment is a global supplier of professional drilling solutions headquartered in China. - They design and manufacture various series of offshore and ...

A kind of electricity-saving energy storage drives pulling type workover rig ... workover rig electric energy storage box connection electricity Prior art date 2017-06-06 Legal status (The legal status is an assumption and is not a legal conclusion. Google has not performed a legal analysis and makes no representation as to the accuracy of ...

A wealth of workover systems to extend the production life of any oil and gas well, from an oilfield services expert. Find your optimal workover solution today. ... Contact Us; Careers; Investors; BKR; Featured Solutions. Energy Transition Energy technology to help the industry advance on the path to net-zero ... Carbon Capture, Utilization ...

The invention provides an alternating current bus electronic control system of an electric workover rig. The alternating current bus electronic control system comprises an energy storing battery, a bidirectional direct current/direct current (DC/DC) converter, a pulse-width modulation (PWM) grid-tied current converter, a super capacitor, a one-way DC/DC converter, a frequency converter ...

Here are the key features of workover rigs: Key Features: Components: Workover rigs typically include a hoisting system, a control panel, and various tools for well intervention. Unlike drilling rigs, they may use a smaller, more compact design. Mobility: Workover rigs are often truck-mounted or trailer-mounted, allowing for easier ...

A super-capacitor energy storage type electric workover rig comprises an automotive chassis special for the workover rig, wherein an air compressor, a hydraulic station, an electric control chamber, a derrick and a workover operating room are installed on the automotive chassis special for the workover rig, the rear end of the derrick is hinged to the top of an inverted triangle ...

Briefing: Electric energy storage workover rig is an integration of application network and electronic

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technology, super capacitor energy storage and guy line technology, with optimized workover dynamic output and reasonable matching grid power compensation. Compared with conventional diesel workover rig, the energy saving rate of electric energy storage workover rig ...

On the other hand, workover rigs play a vital role in maintaining and servicing existing wells, ensuring their continued productivity and longevity. When evaluating the choice between a drilling rig and a workover rig, factors such as the scope of work, well condition, project timeline, and cost implications must be carefully considered.

**Abstract:** In view of the demand for the electrification of workover equipment and the limited popularization of common electric workover rigs, a workover rig was developed with electric energy storage by lithium iron phosphate battery. The problems such as the control of the grid and electrical energy storage, battery management, safety in the oil and gas environment, ...

The new workover rig combines frequency control with super capacitor energy storage technology. Under the condition of low voltage distribution (50 kVA/400 V) of the existing pumping unit, the super capacitor is used as the energy storage component to charge during the workover interval of the workover rig and discharge during lifting, so as to ...

Electric Control System of Drilling Rig. Driller Control System. Integrated drilling instrument. Single Column Mooring System. Offshore Equipment - Subsea Steel Structure. Drill pipe. ... Electricity Energy Storage Workover Rig. Electric Workover Rig. Covering an ...

In response, workover rig manufacturers have made significant advancements in designing rigs that are more environmentally friendly and safe. One key area of innovation is the development of lightweight and modular rigs. Traditionally, workover rigs were large and heavy, requiring significant time and effort to assemble and disassemble.

The utility model relates to a remote intelligent control system of a workover rig, namely, the intelligent operation of the workover jig is realized through a remote intelligent control program. A programmable program controller is connected with a brake control unit, a drum clutch control unit, a diesel oil throttle control unit, a drum absolute value encoder, a travelling block hook ...

the energy efficiency of individual DPS-powered rigs by introducing energy storage systems (Fig. 1). The use of energy storage systems in well drilling will reduce the costs of powering self-contained facilities due to the following benefits: 1. Capital costs of powering drilling rigs are reduced with removal of one or two 1 MW DPS (of 4-5 typically

**Product features .** Efficient: Integrated automatic equipment and unified control to ensure accurate movement and smooth connection. Fast moving design reduce around 60% transport unit. And the installation time is only

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2 hours.. Safe: Adopt VFD electric drive and PLC control system, the control is accurate, sensitive and timely feedback,. Automated monitoring and warning can be ...

Workover Rig is known as the Workover the different types of rigs include the offshore and onshore Rig that range from 150 horsepower to 1000 horsepower. Workover rigs have a surface depth that is equipped with diesel engines and transmissions and is available from 8000 ft to 30000 ft. Workover rigs contain a full line of drilling packages.

A kind of double power vehicle-mounted workover rig order to the transmission efficiency overcoming the existence of existing diesel well workover equipment is low, fuel consumption cost is high, the problems such as environment pollution is serious, and the deficiency that single electric power workover rig power is little, operating efficiency is low, chassis vehicle driver's ...

The conventional oil workover rig generally adopts Diesel Driven, and energy consumption is big, and efficient is low, and causes environmental pollution. Electric workover rig has the energy utilization rate height, consumes for a short time, and advantages such as environmental protection have become the developing direction of workover rig power set, and the conveying ...

A kind of electric energy-stored workover rig of wide speed regulating range is used for oil well repairing operation, including transmission system, electric-control system and liquid air-channel system, wherein: Transmission system includes sequentially connected variable-frequency motor, shaft coupling, gearbox, transmission shaft, right angle gear box, winch, traveling ...

In this paper, an advanced energy-saving petroleum machinery, the hydraulic energy-recovering workover rig, is researched. The equipped power of this rig is only one third of an ordinary rig, and this rig can also recover and reuse the potential energy which is released by the pipestring when lowered. The special working theory of this rig is introduced. An energy ...

The utility model provides an electronic workover rig of super capacitor energy storage formula, includes and installs air compressor machine, hydraulic pressure station, electric control chamber, derrick and well workover control chamber on workover rig special automobile chassis, the workover rig special automobile chassis, the derrick rear end with fall articulated linking to ...

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