

Drilling Operation Intelligent Control System

This drilling operation intelligent control system is an advanced solution for monitoring and controlling drilling processes. It features an ergonomic operator chair with integrated control panels and multiple display screens for real-time data visualization.



System Overview

Advanced Drilling Control

This intelligent control system is designed to optimize drilling operations through a highly integrated, ergonomic interface. Featuring a specialized driller's chair and a four-display setup, the system ensures continuous and redundant operations for enhanced safety. It integrates multiple intelligent software modules to facilitate complex drilling procedures and improve overall operational efficiency.

Key Features

Integrated Intelligent Modules

- Auto-bit control
- Anti-stick-slip vibration system (antiStickSlip)
- Sliding drilling control system (SlidePilot)
- ZMS regional management system

Operational Capabilities

Real-time data visualization, Brake function control, Mode selection, Drag load management, Detailed data logging

Monitoring Parameters

Real-time Monitoring Metrics

0 Ton

Hook Load

0 m/s

Hook Speed

0 m

Hook Height

Safety Limits & Indicators

- High travel stop limits
- Low travel stop limits
- Load limits
- Brake pressure indicators

Hardware Configuration

Display Configuration

4 displays

Interface Design

Ergonomic driller's chair with integrated control panels