



DHISERVICES
Formation Evaluation Specialists

TECH_EQT_001 26 Feet ABS Logging Unit

26 Feet ABS Logging Unit

Overview

DHI DrillSense Mud Logging Unit is certified by the American Bureau of Shipping (ABS) to Zone 1 hazardous area and is suitable for use in both offshore and onshore rigs. The cabin is designed and manufactured in Singapore, and all hardware and software are thoroughly tested by our team of highly qualified Manufacturing/Service Engineers before unit deployment. The heart of DHI Logging Unit is the DrillSense Data Acquisition System. Our highly trained rig-site geologists and engineers use the powerful and proven DrillSense software to acquire and store lithological data that is combined with engineering data collected from surface sensors to provide integrated formation evaluation, monitoring of drilling performance and operational safety. We also cater a separate workarea for the company geologist in our spacious cabin.



Features

Pressurization, Fire & Gas Control System

The pressurization, fire and gas control system is a fully controlled system that can be installed in any zone 1 hazardous area, and is designed to monitor the conditions in pressurised logging cabins used in areas made potentially hazardous by the presence of flammable liquids, gases, or vapours. The system comes with an ex-proof pressure switch for monitoring the continuous cabin pressurisation, an ex-proof hydrocarbon gas detector for flammable gas monitoring, and two intrinsically safe smoke detectors for heat and flame detection.

Air Conditioning System

All DHI Logging Cabins are installed with 2 sets of 24,000 btu air-conditioners. These high cooling capacity air-conditioners produce very low noise during operation to provide a pleasant air conditioned environment. They come with honeycomb-structure deodorizing filter to remove odors and electrostatic filter which uses static electricity to remove particles as small as 0.03 micron for a healthy and clean working environment.

DrillSense System

A real-time data acquisition hardware and software system that measure, displays and records the Drilling, Mud and FID Hydrocarbon Analysis systems parameters. DrillSense is based on a compact industrial Ethernet hardware platform and MS Windows .NET/SQL Server software architecture.



DrillSense displays are a combination of alpha-numeric and graphical data items that may be configured by the end user to include analog, digital and calculated parameters. DrillSense is a Windows based, flexible system that allows the operator, through the screen menu, to select and place any one of the 40 parameters at any row position on the screen.

In addition to the primary DrillSense system, a chart recording system displays, playbacks and stores internally on standard compact flash cards all measured analog signal data. DrillSense also allows direct recording of all the measured analog signal on chart recorders independently of the computer system. Calculated values such as Dxc, cost per foot, and lag time can be displayed and/or sent directly to any printer.

Gas Equipments

DHI provides 2 sets of high speed FID chromatograph and 2 sets of FID Total Hydrocarbon Analyzer as standard in all our units. This provides backup for one of the most essential parameters monitored by the mud logging crew.

Technical Specifications

Manufacturer

DHI Services Inc

Model

ABS 26 ft Cabin

Dimensions

L 26ft x W 8ft x H 8ft6in

Weight

Gross Weight : 12 Metric Tons

Nett Weight : 9 Metric Tons

Input Power

380 to 480 VAC, 3 Phase, 50/60 Hz.

Hazardous Location Certification

ABS certified to Zone 1 hazardous area

Load Test

Cabin is load tested to BS EN-12079-1999 Standard

Magnetic Particle Inspection

Lifting Pad Eyes are MPI to ASME-Sec V Specification

Lifting Sling

Lifting sling is examined to BS-1290 Standard.

Lifting sling is also certified to meet the lifting equipment specifications of Singapore MOM Workplace Safety and Health Regulations

Unit Shell

3mm steel walls, 5mm steel top plate

Welding Procedure Specification (WPS)

In accordance with the requirements of AWS D1.1 Structural Welding Code.

Unit Insulation

Fire and water resistant LBS 300 Rock Wool insulation. Non-combustible tested to BS476. Sound absorption tested to ASTM C518-1991.

Airlock

All cabins are fitted with double doors to provide "airlock".

Un-interruptible Power Supply (UPS)

A 3KVA UPS is installed in every cabin to provide un-interruptible data logging in the event of rig power interruption or failure.

Emergency Lightings

2 sets of emergency lightings are installed in every unit to provide lightings at main door and emergency escape door areas during emergency or power loss.