

Sleipnir | Drillmec G-102



ICELAND DRILLING



SLEIPNIR – MAIN SPECIFICATIONS I

Drillmec G-102

Trailer mounted hydraulic powered topdrive drilling rig, Drillmec - G102.

Geothermal drilling rig. Not suitable for oil and gas drilling.

Pull-Back Capacity, 100.000 kg

Loads, in Transport 30-40

Drilling Crew per shift 6

Rig mechanic 1



SLEIPNIR – MAIN SPECIFICATIONS II

Mast:

Telescopic

Nominal Capacity 100.000 kg

Telescopic section, sliding inside the main base section.

Clear height of mast: 23,8 m

Max. Static hook load capacity: 100.000 kg

Max working height below topdrive: 16 m

Passage through substructure: 825/1100 mm

Clear width to handle BOP's: 1,45 m



SLEIPNIR – MAIN SPECIFICATIONS III

Power swivel:

Power swivel driven by 4 top-head hydraulic motors assembled on a special cradle sliding on mast guide complete with a special patented device that can easily move complete power swivel from well center to mouse hole center controlled by main control panel.

I.D. Full opening: 76 mm (3")

Variable speed: 0-155 rpm

Torque range: 0-3600 daNm

Stroke: 16 m

Max. pull up: 100 ton.

Max. pull down: 20 ton



SLEIPNIR – MAIN SPECIFICATIONS IV

Hydraulic Power Pack:

- a) Engine: Cummins KTTA 19C
Power: 382 kW at 1800 rpm
- b) Hydraulic system:
Axial pistons, variable displacements and gear pumps. Load sensing type.
1500 lt capacity tank. Two oil coolers.
- c) Hydraulic motor series and cylinders complete with all control devices to move all services for rig functionality.
- b) Hydraulic cylinder for pull up/down inside mast structure.



SLEIPNIR – MAIN SPECIFICATIONS V

Mud System:

Mud Pumps:

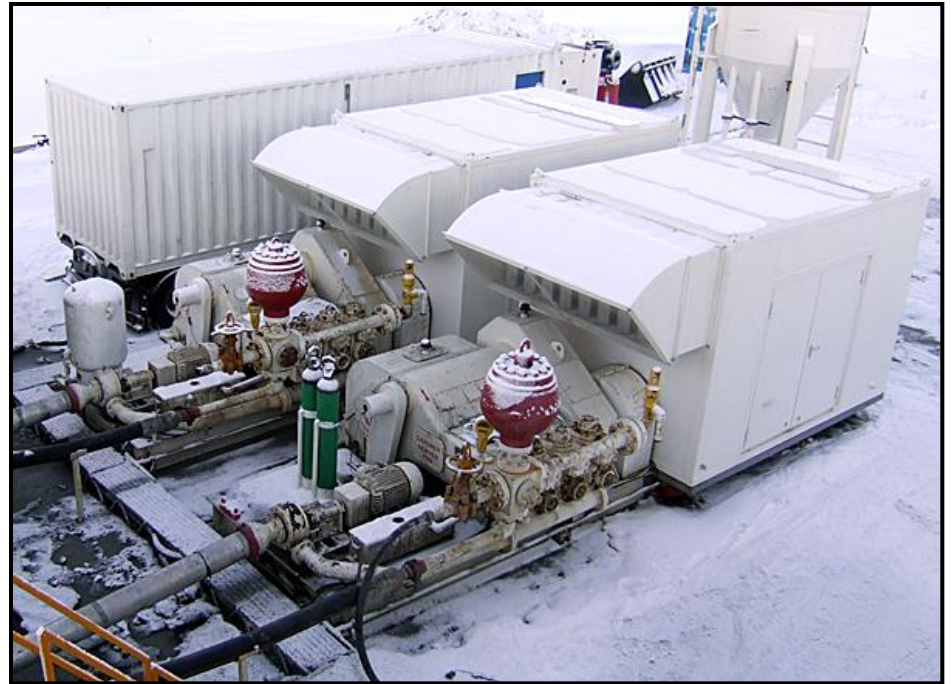
Two mud pumps: Gardner Denver

Model: PZ8 skid mounted triplex pump.
Powered by CAT 3508B engine.

Charge pump: 5x6" MCM centrifugal pump.

Max volume per pump: 36 l/sec
Max pressure per pump: 340 bar

These pumps have been sound silenced.



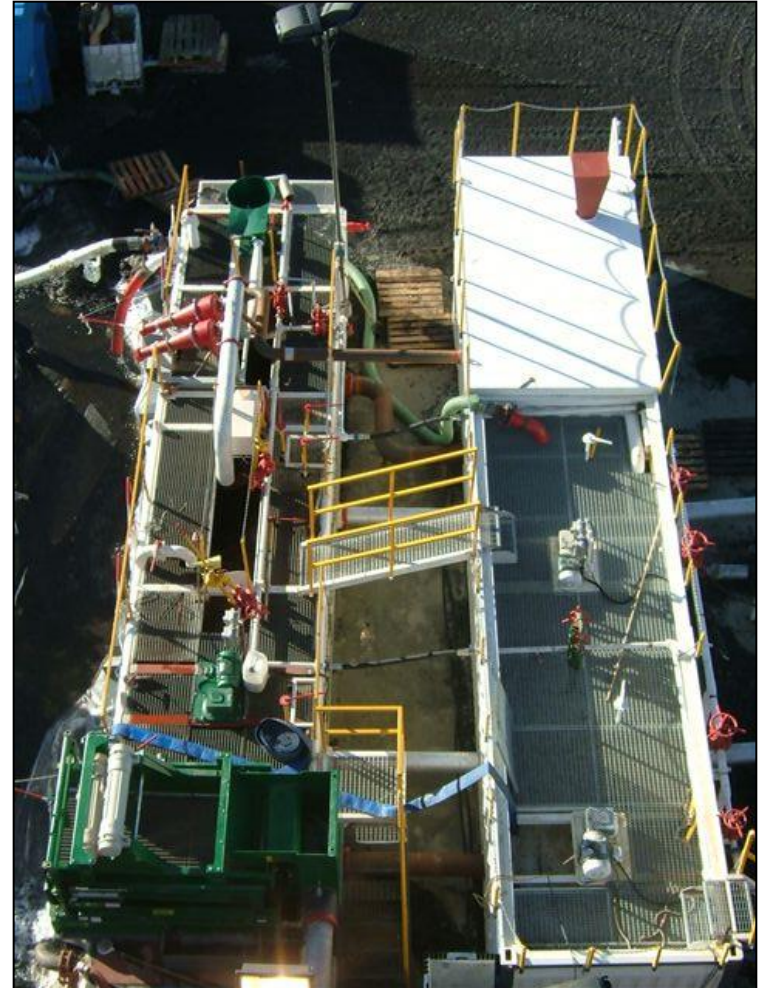
SLEIPNIR – MAIN SPECIFICATIONS V

Mud System:

Total of 2 units with shale shaker and desander rated for 63 l/s. Desilter and Mud-cooler will be installed.

TANK 1: With shale shaker, desander and desilter (to be installed). 3 compartments – Total 37 m³

TANK 2: SUCTION TANK. 2 compartments – Total 30 m³



SLEIPNIR – MAIN SPECIFICATIONS VI

Control Panels:

Main control panel:

Mounted in dog-house with all controls for drilling operations, power engines, mud pumps, make-up and break-out automatic sequences, weight indicator etc.

Side control panel:

To control leveling jacks, rising and lowering of the mast, engine control, emergency stop, rope tensioning device, oil radiator operation.

Electric mobile control panel:

To control jib crane operations.

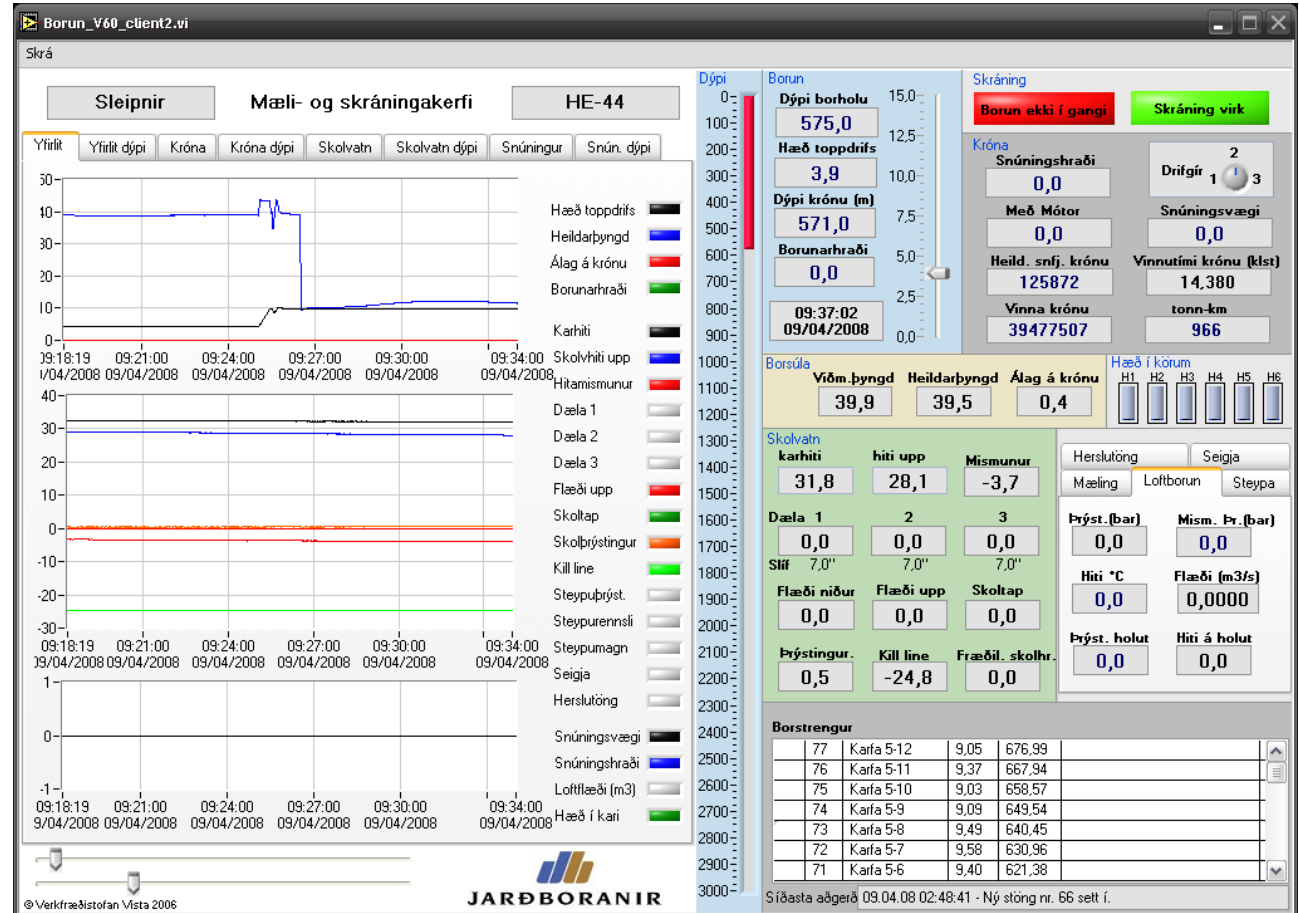


SLEIPNIR – RIG INSTRUMENTATION

Rig Instrumentation:

Automatic recording and monitoring of all major drilling parameters.

All data is stored in a MS-SQL database and via radio link / phone line sent to the office for monitoring and analysis.



SLEIPNIR – MAIN SPECIFICATIONS VII

Drill pipes handling system:

By means of the jib you can take the drill pipe from the vertical container and put it down in the mouse hole.

The power swivel moves out from the well center and places on the vertical of the mouse hole taking the element, lifting and taking it to the well center in order to add it to the drill string.

Hydraulic power tongs:

Operated from drillers panel, to make-up and break-out drill pipe, and 8” drill collars.

Max torque: 7.850 daNm.

Power tongs are moved with to and from well center / up and down with hydraulic cylinder.

Working table:

Complete with master bushing and reducers with internal API cone for slips to hang drill pipes, drill collars and casings.



SLEIPNIR – DRILLSTRING



SLEIPNIR – BOP EQUIPMENT

Size - Type - WP

21 1/4" Rotating Head

21 1/4" Annular – 2000 psi WP

21 1/4" Double Ram - 2000 psi WP

13 5/8" Rotating Head

13 5/8" Annular – 3000 psi WP

13 5/8" Double Ram - 3000 psi WP



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