



## Rig Streicher VDD 370.2

### Super Single with Automatic Pipe Handling System

#### Travelling Block

Integrated hydraulically driven Carriage System, whereby the load forces are transferred to the mast via a rack and pinion system. Mounted on the carriage are six hydraulically driven units (engine and gearbox), which are directly engaged via gear wheels into the gear racks that integrated into the mast.

The drive units are equipped with an advanced brake/lock system to prevent any uncontrolled movement of the top drive carriage in case of hydraulic power break down or electric failure.

#### Tubular handling Equipment

##### Pipehandler:

- Tubular size: 2 ½" to 20" up to Range III
- Maximum working load: 29,4 kN (6.609 lbs)

##### Iron Roughneck:

- Manufacturer: Maritime Hydraulics AS
  - Model: MH 4160
  - Pipe capacity: 2 ¾" – 9 ½"
- Maximum Make-up Torque: 85.000 Nm (62692 ft.lbf)  
Maximum Break-Out Torque: 105.000 Nm (77443 ft.lbf)

#### Trip time:

- Up to 400 m/h

#### Power Generation

- 1x 1400 kVA Generator. MTU Diesel Engine Type 12 V 4000G23, 1205 kW (1616 hp). AC Generator: Marelli M8B500 SD/4
- 1x 800 kVA Generator. MTU Diesel Engine Type 16 V 2000, 792 kW (1062 hp). AC Generator: AVK
- Optional: converter unit to connect the rig to the grid

#### Hydraulic System

- 1 Power Pack for the top drive and the iron roughneck
- 1 Power Pack to operate the pipe handler

#### Data Acquisition System

- Comprehensive system to acquire and digitally store all relevant drilling and operating parameters. Remote diagnostic system for drilling unit

#### Fuel/Water Storage

- 1 fresh water tank, capacity 60 m<sup>3</sup> (377 bbl)
- 1 fuel tank, capacity 20 m<sup>3</sup> (125 bbl) with automatic refill system for mud pumps and generators

#### Optional

- Casing Drilling

#### Maximum Depth

- 5000 m (16.400 ft)

#### Mast

- Welded Box type with two integrated gear racks
- Clear working height: 18 m (59 ft)
- Maximum working load: 3.700 kN (831.793 lbf)
- Standard working load: 3.300 kN (741.870 lbf)
- Overall height: 23 m (75,44 ft)
- Overall height with substructure: 31 m (101,7 ft)
- Mast is adjustable up to 8° from the vertical

#### Substructure

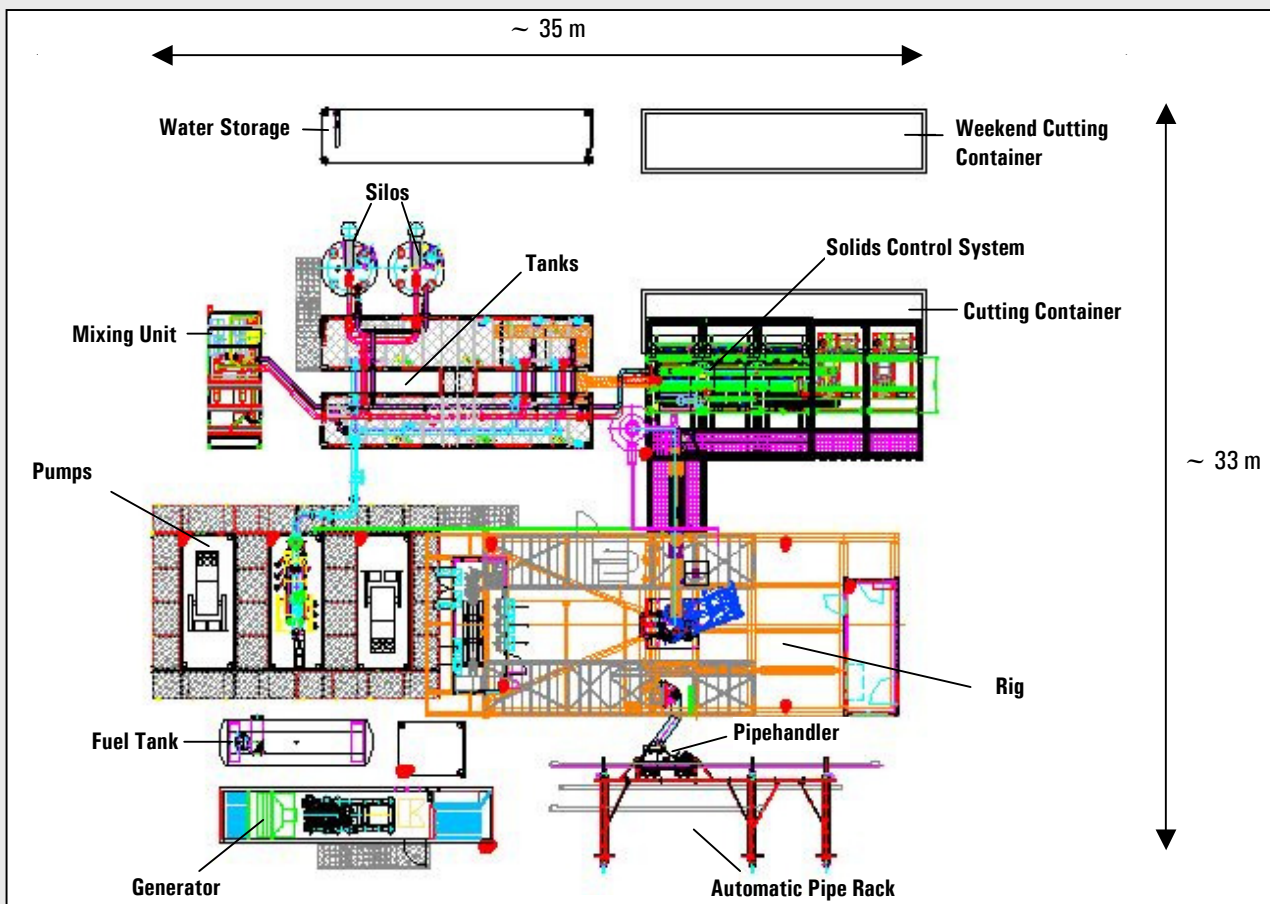
- 6 Modules in 40' container size (3 modules each side)
- Foot print: 8 x 12,2 m (26,25 x 40 ft)
- Substructure opening: 3,12 m (10,24 ft)
- Height to bottom edge of Rotary Table support: 7,7 m (25,26 ft)
- Preventer stack lifting system: 2 x 196 kN (2 x 44.063 lbf)

#### Rotary Table

- Maximum table opening: 957 mm (37 ½")
- Maximum static load capacity: 3.700 kN (831.793 lbf)
- Maximum RPM: 10
- Maximum torque: 45.000 Nm (33.190 ft.lbf)

#### Top Drive

- Integrated in the mast carriage system
- Manufacturer: Max Streicher GmbH & Co KG aA
- Maximum static capacity: 3.700 kN (831.793 lbf)
- Maximum Torque: 85000 Nm (62.692 ft.lbf)
- Maximum RPM: 190
- Maximum circulating pressure: 350 bar (5.000 psi)



### Mud Pumps

- 5 METAX MP7M
- 7" stroke, 5", 5 1/2" and 6" piston
- Input Power for each Pump: Deutz, Model BF 8M 1015CP,
- 441 kW (592 hp)
- 1 Centrifugal Precharge Pump, 55 kW (74 hp)

### Mud System

#### Active Tanks:

- Total Volume: max. 140 m<sup>3</sup> (880 bbl)

#### Solids Control System:

- 1 Derrick Flo-Line Primer
- 3 Derrick FLC 2000 4 Panel high speed linear shakers
- 2 Derrick DE 1000-FHD Centrifuges
- 2 Moineau pumps Bornemann EH 1500 to feed the centrifuges
- Solids Control System Tank, 4 compartments, total volume: 59 m<sup>3</sup>
- Optional Hydrocyclones

#### Pill Tank:

- 1 Tank with 2 compartments, integrated in the mud tank
- Volume: 2 x 9,5 m<sup>3</sup> (2 x 60 bbl)

#### Mud Storage Tanks:

- 2 Tanks (1 x 59 m<sup>3</sup>, 1 x 40 m<sup>3</sup>)
- 2 Silos, 30 m<sup>3</sup> each (2 x 188 bbl)

#### Mixing Unit:

- 1 Tank with 2 compartments. Volume: 2 x 6 m<sup>3</sup> (2 x 38 bbl)
- 1 Hopper
- 2 Mixing and Transfer Pumps Magnum, 55 kW (74 hp)

#### Optional:

- Baritesilo with its own Hopper and Weighing Equipment

### Air System

- 1 compressor Atlas Copco GA 30C. 3,5 m<sup>3</sup> (0,55 bbl)/min at 13 bar (188 psi)

### Blow Out Prevention Equipment

#### Stack Configuration (alternative in 13 5/8" available):

- 1 Shaffer Annular Preventer, 16 3/4", 350 bar (5000 psi)
- 1 Cameron Double U 16 3/4" 700 bar (10.000 psi) with 4 x 3 1/16" outlets, Rams for 3 1/2" and 5" Drill Pipe, Shear Rams, other Ram-Sizes optional

#### Accumulator:

- Manufacturer: Koomey
- Model: Type 202000 – 3S (alternative complete Typ 80)
- Working Pressure: 207 bar (3.000 psi)
- Bottles: 10 accumulator bottles precharged to 69 bar (1000 psi)
- 1 remote control

#### Degasser:

- Poor Boy Degasser, optional Vacuum Degasser

#### Choke Manifold:

- Rated Working Pressure: 350 bar (5.000 psi) (alternative 700 bar)
- Inner Diameter: 3 1/16"
- 1 manually adjustable Choke Valve
- 1 remotely adjustable Choke Valve
- 1 remote control

### Miscellaneous Equipment

- 1 Fork Lift Truck
- 1 Multi-purpose vehicle with telescopic arm, quick changing system, working platforms, winch, forks and additional arm
- 1 Workshop (20' Container)
- 2 Storage Container (20')
- 1 Sanitary Container (20')
- 1 Command Centre Container (20')
- 2 Crew Cabins (20')

### Drill pipe

- will be provided according to client specific actions