



DRILLING TECHNOLOGY

- Super Single Rig (Range III)
- Modular Design
- CSC Certified Modules for Worldwide Container Ship Transportation
- Small Footprint
- Fast Moving
- Low Noise Emission
- Skidding
- Certified Functional Safety and Anti-Collision-System
- Hands-Off Technology
- Automated Pipehandling System
- Inclination Range 10° – 90°



SLANTED DRILLING RIG

SDD 200



SDD 200 Super Single Rig – Automated Pipehandling System

Hydraulic Top Drive

Top drive (rotary unit) and hoisting system (carriage) are integrated in a carriage system. The carriage system is moved along the mast by a rack and pinion system. Carriage loads and torque are transferred via the racks and the mast. The top drive is equipped with a specially designed brake/lock system which prevents uncontrolled movement even if the lines or hoses fail or the hydraulic system breaks down.

Max. Drilling Length

- ~13,123 ft (4,000 m) – Depending on Well Design

Mast

- Welded Box Type with Two Integrated Gear Racks on the Sides
- Clear Working Length: 59.06 ft (18 m)
- max. Hook Load: 200 short tons (181 metric tonnes)
- Inclination Range: 10° – 90°
- max. Overall Height incl. Substructure: 108 ft (33.0 m) (at 90 °)

Substructure

- STREICHER Box-on-Box System
- Total: 0 up to 6 Modules
- Footprint: 26.3 ft x 19.7 ft (8 m x 6 m)
- Substructure Inner Clearance: 9.9 ft (3 m)
- Height to Bottom Edge of Rotary Beams: Depends on Substructure
- Quick Connectors for Module Stacking

Bowl Table

- STREICHER Bowl Table
- Table Opening: 37 ½" (952.5 mm)
- max. Load: 200 short tons (181 metric tonnes)

Top Drive

- STREICHER Hydraulic Top Drive
- max. Hoisting Capacity: 200 short tons (181 metric tonnes)
- max. Pushing Force: 55.1 short tons (50 metric tonnes)
- Continuous Torque: 40,590 ft-lbs. (55,000 Nm)
- Intermittent Torque: 44,280 ft-lbs. (60,000 Nm)
- max. Speed Rating: 200 rpm
- max. Hoisting Speed: 164 ft/min (50 m/min)
- max. Circulation Pressure: 5,000 psi (345 bar)

Tubular Handling Equipment

Pipehandler

- Tubular Sizes: 2 ½" to 20", up to Range III (max. 48 ft/14.6 m)
- Without Modifications or Adjustment Work for Diameter Changes
- Fully Automated in Sequences

Make Up/Break Out Tong

- Tubular Sizes: 4 ¼" to 16", up to Range III (max. 48 ft/14.6 m)
- max. Make-up Torque: 88,560 ft-lbs. (120,000 Nm)
- max. Break-out Torque: 151,290 ft-lbs. (205,000 Nm)
- max. Spinning Speed: 100 rpm
- max. Spinning Torque: 1,697 ft-lbs. (2,300 Nm)



Power Generation

- Generator Set: 3 x 1,065 kVA
- STREICHER AC-Drive and Monitoring System (ACDM)
- Integrated Day Tank + Automated Fuel Supply
- Converter Unit to Connect Rig to Grid

Hydraulic System

- 2 Redundant Hydraulic Power Units for Top Drive, Hoisting System and for all Auxiliary Equipment (Pipehandler, Elevator, Auxiliary Crane, Auxiliary Winch etc.)

Data Acquisition System

- Comprehensive System to Acquire and Digitally Store all Relevant Drilling and Operating Parameters
- Remote Diagnostic System

Mud System

Mud Pumps

- 3 x 750 hp (3 x 560 kW) AC-Drive (VFD Controlled)
- Module Includes Charge Pump, Suction- and High-Pressure Dampener, Low- and High-Pressure Piping and Valves

Mud Tanks

- Overall Tank Capacity: 503.181 bbls (140 m³)
- Suction Tank: 188.7 bbls (30 m³)
- Mix Tank: 94.3 bbls (15 m³)
- Pill Tank: 31.4 bbls (5 m³)
- Intermediate Tank: 379.0 bbls (60 m³)
- Mixing Unit Integrated in One Tank Module

Mud Treatment

- 2 Shale Shakers
- 1 Flo-Divider
- 1 Mud/Gas Separator

Additional Options

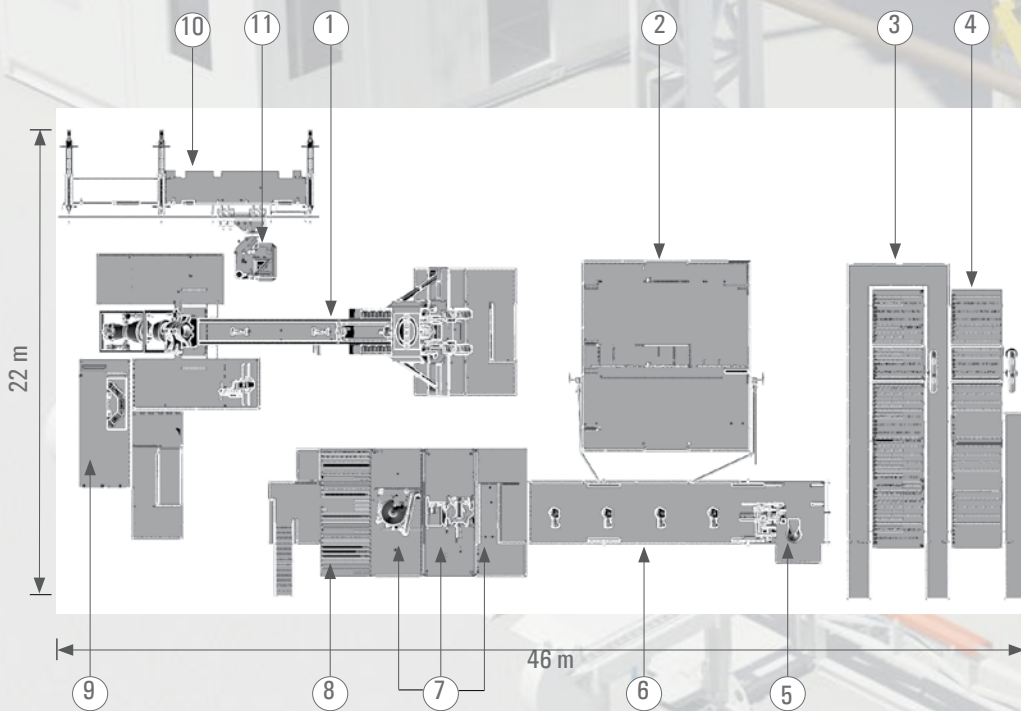
- Torque and Load Measurement with an Instrumented Top-Drive Sub
- Sound Proofing of Generator Packages
- Optional Fast Moving Transport System
- Third Party Inspections and Certificates
- Vacuum Degasser
- Centrifuges
- Well Control System
- Downhole Equipment
- Different Type of Tong System
- Casing Drilling Equipment
- Additional Mud Pumps
- Mud Cleaner
- Modules Oilfield Skid or Trailer Mounted
- Auxiliary Winch
- Preventer Stack Lifting System
- STREICHER Hydraulic Rotary Table

Applied Standards and Regulations

- Machinery directive 2006/42/EC (CE – declaration of conformity)
- Pressure Equipment Directive 97/23/EC
- Explosion Proof Equipment Directive 94/9/EC (ATEX)
- Low Voltage Equipment 2006/95/EC
- Electromagnetic Compatibility 2004/108/EC
- Functional Safety IEC 61508
- Drilling and Well Servicing Structures API Spec. 4F
- Drilling and Production Hoisting Equipment API Spec. 8C
- GOST



Footprint



Rig Component

1. Mast
2. Mud Pumps
3. AC-Drive and Monitoring System (ACDM)
4. Generators
5. Mixing Unit
6. Mud Tanks
7. Solids Control Unit
8. Cutting Box
9. Driller's Cabin
10. Pipe Feeder
11. Pipehandler