

1000HP ZJ40/2250CZ Truck Mounted Mechanical Drilling Rig

General Description

- Hook load: 500,000 lbs, 250 US ton (2250KN) with 10 lines
- Mast type: 125' two section telescoping type that is raised using hydraulic cylinders.
- Substructure type: Six leg foldable type, single section, swing up with screw jacks to secure in position, with rotary table base and setback base independent of each other.
- Depth rating: 4 ½" Drill pipe: 13,300 ft (4000M), 5" DP 10,500 ft (3200M)
- Wind speed: No hook load & set back full of drill pipe: 68 mph (110 km/h)
- Rotary beam capacity: 505,820 lbs, 250 US ton (2250KN)
- Setback capacity: 269,770lbs, 135 US ton (1200KN)
- Rig floor height: 19.7 ft (6M)
- Clear height below rotary beams: 16 ft (4.9M)
- Rotary table size: 27.5"
- Drill line size: 1 ¼ in (32mm)
- Draw works: JC28/11H 1000hp (735KW), disc brake with Parmac-V-80 auxiliary brake. With 5 speed transmission
- Catheads: 2 ea, Mounted in mast section, rated at 22,480 ft lbs straight pull
- Winches: 2 x hydraulic winches Model YJ3B and YJ5B & 2 x air winches one monkey board and one at end of cat walk
- Martin Decker RigSense 2.0 drilling instrumentation system
- Gaitronics rig site communications system
- Mathey wireline unit complete with Totco 8 and 16 degree survey equipment
- Operating temperature: -20°C to +55°C (cold weather or desert modifications on request)

Top Drive

- TDS and drive unit: Tesco 250 HXI 700 (hydraulic) or 250 EMI 400 (electric) Top Drive System complete with electrical and hydraulic control systems, power unit, Guide rail, shipping containers, spares, tools and operation manuals

Power Package Rig and Carrier

- 2 x Cat C-18, 1260 combined hp (939 KW) @ 2100RPM, with water loss, low oil pressure, high water temperature and over speed protection, electrical-start

Power System Electrical System

- 3 X Volvo 1241GE engines 1500 RPM X 300 Kw, 3 X Stamford HC14D Generator Voltage 400/230-Frequency 50 HZ-375 KVA Complete with MCC and control room, buildings to house all equipment as well as air compressor system. Lighting system conforms to API RP 505 for rig system

Main Transmission

- Allison 6 speed S6610HR, Rated at 710 hp, input speed 2500 rpm

Compound transmission

- BJX260H, input speed 2500rpm, max output torque 18,824 ft lbs

Control System

- Stainless steel clad Drillers cabin
- Driller control system employs a drillers chair with one joystick to control draw works
- The driller controls the major rig functions such as the Mud Pumps and the Top Drive with the use of air

actuated valves all within easy reach of driller

- Driller's cabin console also houses all other interface devices such as video system monitor (if fitted), intercom system, instrumentation system, hydraulic weight indicator and stand pipe pressure gauges

Mud Pumps

- Mud Pumps: Qty 2 x 1000hp triplex pumps c/w liner wash and charge pumps, Suction strainer, dampener and pulsation dampener, reset relief valves with integrated bleed and relief valve line. Each pump is powered by Cat 3512B 1060 HP engine

BOP and Control system

- Shenkai 13- $\frac{5}{8}$ " 5K Annular BOP, 13- $\frac{5}{8}$ " 10K Single Ram, Drilling Spool, 13- $\frac{5}{8}$ " 10K Double Ram,. Ram assemblies included. BOP Test Pump, (air powered) with hoses and chart recorder. BOP Test Base. BOP Stack Lifting device. Transport Skid. BOP Control Unit. BOP Control Unit remote Panel, (For Drill floor) Transport Skid for above control units. Choke and Kill Manifold 3-1/16" X 10K. 3-1/16" X 10K Manual and Hydraulic valves. JY-70A Remote Choke panel. DSA. 2-1/16" 10K Non-return Valve. All high pressure fire proof hydraulic hoses, hand wheels etc.

Solids Control System

- BBL capacity: 4 tank, 1,230 BBL (196M³). With additional brake cooling water tank and trip tank module
- 3 each Brandt King Cobra Linear Shale Shakers with 3rd shaker incorporating 1 each Brandt King Cobra Mud Cleaner (16 x 4" de-silter cones rated for 1000GPM and 2 x 12" de-sander cones rated for 1000GPM)
- Qty 1 Ea Model Brandt DG-12 Vacuum Degasser with 5 hp, 50 hz, 230/460 volt, 3 phase, explosion proof electric motor rated for 1200 GPM complete with JP-12 Jet Pump Eductor.
- Mix hopper: Qty 2 DN150 x Jet hoppers and Qty 11- mud guns supplied
- Agitators: 14 total. 13 x HM-15, 20 hp (15KW) and 1 x 7 hp (5.5 KW)
- Centrifugal pumps: Qty 2- 6 x 8 x 12 1/2" impeller, 100 hp (75KW) (de-silter, de-sander pumps)
- Centrifugal pumps: Qty 2- 6 x 8 x 13" impeller, 100 hp (75KW) (mix pumps)
- Centrifugal pumps: Qty 2- 6 x 8 x 13" impeller, 100 hp (75KW) (charge pump)
- Centrifugal pumps: Qty 2- 3 x 4 x 9" impeller, 15 hp (11KW) (water pump)
- Centrifugal pumps: Qty 2- Cooling pumps
- Poor Boy degasser: Qty 1- NQF1200/0.7

Handling Tools and Equipment

- Drill pipe and casing elevators, Bails, Slips for drill pipe and casing, Manual drill pipe and casing tongs, Pipe spinner, Casing power tong, Hydraulic unit, Swivel/Kelly unit with drive bushings, rotary table bushings and inserts, pipe racks, bit breakers

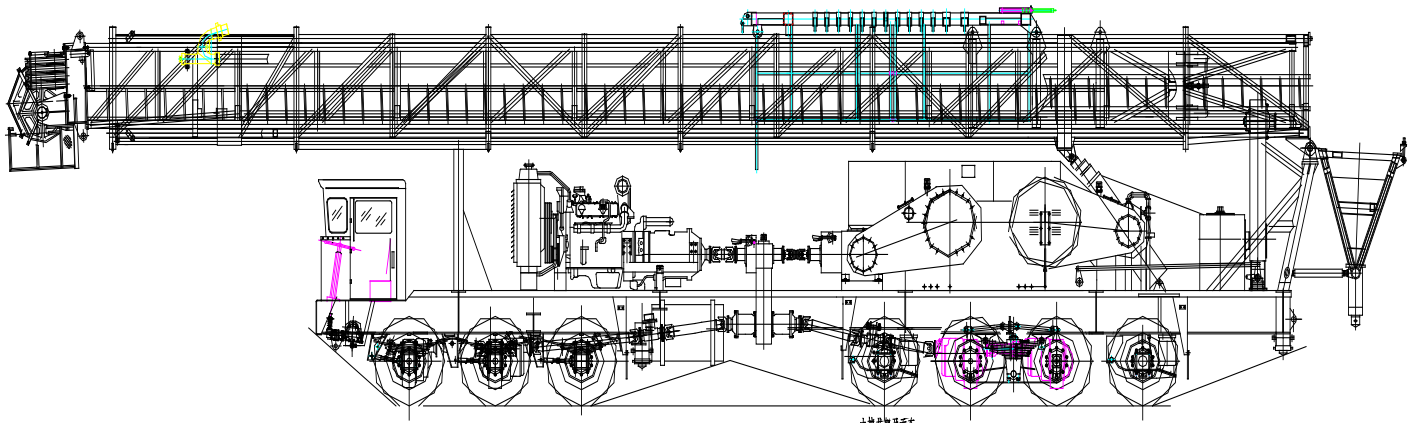
Air System

- 2 X Air compressors (Sullair) and air dryer system with reservoir in generator house as well as additional reservoir located in substructure

Rig Move

- Max. Road speed (limited): 45km/h
Max. Climbing gradient: 26%
Approach/Departure Angle: 26°/18°
Min. ground clearance: 311mm and Min. turning radius: 19.5m

Technical Drawings



主钩升降及天车

