



# RIG 516

## 1,500 hp Triple Mast Drilling Rig

### SUBSTRUCTURE

One Piece Step Down  
 Floor Height: 16'-2" (4.93m)  
 : 20'-2" (6.1m) with optional 4' pony sub  
 Clear Height (beneath rotary beams): 13'-10" (4.22m)  
 : 17'-10" (5.4m) w/opt 4' pony sub

Rotary Capacity: 500,000 lbs (227 Metric Tons)  
 Max Pipe Setback: 380,000 lbs (172 Metric Tons)

*Note: All floor heights above are based on the substructure sitting on 6" Mats and a 14" Skidding System Beams*

### MAST

142' (43.3m) telescoping lattice design  
 Static Hook Load: 500,000 lbs (227 Metric Tons)  
 Drill Line: 1-1/4"  
 Racking Capacity: 22,500' of 4" DP (6,858m of 102mm DP)  
 18,500' of 5" DP (5,639m of 127mm DP)

### DRAWWORKS

RIGMASTER E80AC 500,000 lbs (227 Metric Tons) w/ 8 lines  
 Input Power: 1,500 hp AC Traction motor  
 Main Brake: 1,500 hp AC traction motor (Dynamic)  
 Aux Parking Brakes: Easton armature brake & drum / band brake system

### MUD PUMP #1

F-1600 Type Triplex Pump Rated Power: 1,600 hp  
 Stroke: 12" (305 mm)  
 Input Power: (1) 1,500 hp AC traction motor  
 Pressure Rating: 7,500 psi (51.7 MPa)

### MUD PUMP #2

F-1600 Type Triplex Pump Rated Power: 1,600 hp  
 Stroke: 12" (305 mm)  
 Input Power: (1) 1,500 hp AC traction motor  
 Pressure Rating: 7,500 psi (51.7 MPa)

### MUD TANKS

Two Tanks "Covered" w/ 1,000 bbls (159 m<sup>3</sup>) total capacity  
 Shakers: (2x) MI Swaco Mongoose 4 panel dual-motion  
 Mud Gas Separator: (x1) MI Swaco 48" (122mm) OD x 120" (305mm) tall  
 1,110 GPM (76 Liters / Sec)  
 Trip Tanks: 20 bbls (3.2 m<sup>3</sup>)

### SCALPING TANK (Optional)

Main Tank 280 bbls (33 m<sup>3</sup>)  
 Trip Tank 80 bbls (9.5 m<sup>3</sup>) Capacity  
 Shakers: (x2) MI Swaco Mongoose 4 panel dual motion

### BOP (NACE Standards)

CTI 11" (280mm) x 5,000 psi (34.5 MPa) WP Spherical Annular  
 CTI 11" (280mm) x 5,000 psi (34.5 MPa) WP Double Ram  
 CTI 11" (280mm) x 5,000 psi (34.5 MPa) WP Single Ram  
 BOP Handling System

*Note: Alternate BOP Sizes are available*

### MANIFOLD

Pacific 3-1/8" x 2-1/16" 5,000 psi (34.5 MPa) c/w 1 Ea 2-9/16" manual chokes

### ACCUMULATOR

CTI 120 Gallons (454 Liters) 5 station, N2 Backup

### TOP DRIVE

Tesco EMI 400 AC 250 Ton (317 Metric Tons) Max Speed: 200 rpm  
 Continuous Drill Torque: 21,000 ft-lbs (28.5 kN-m)  
 Max Torque (Make/Break): 32,000 ft-lbs (43.4 kN-m)  
 400 hp AC induction motor & drive system w/ PLC  
 Integral 250 ton 4 x 36" (910 mm) split block assembly

### IRON ROUGHNECK

NOV ST-80C Conn. Range: 4-1/4" (108 mm) to 8-1/2" (216 mm)  
 Spin Speed: 75 RPM -nominal on 5" (127 mm) Drill Pipe  
 Spin Torque: 1,750 ft-lbs (2,373 Nm)  
 Maximum Make-Up Torque: 60,000 ft-lbs (81,500 Nm)  
 Maximum Break-Out Torque: 80,000 ft-lbs (108,500 Nm)

### ROTARY TABLE

ENID 27-1/2" (700 mm) – 250 Ton with hydraulic drive for positioning  
 tools only, Round Opening: 27-1/2" (70 cm)

### ROTARY MOUSEHOLE

90' (27.4 m) hydraulic assembly

### CATWALK MACHINE

Ja-Co Power Catwalk Tubular max length: 45 feet (13.7m)  
 Max OD 13-5/8" (346 mm) Max Weight 10,000 lbs (4,536 kg)

### POWER SYSTEM

VFD, MCC, Woodward Generator Control (x3) Detroit Diesel MTU  
 16V2000, 1,350 BHP 1,800 RPM Engines, with Marathon 900 KVA  
 Generators

### TUBULARS

Drill Pipe: Supplied as needed, *per availability*  
 Drill Collars and Heavy Weight: Supplied as needed, *per availability*

### MOVING SYSTEM

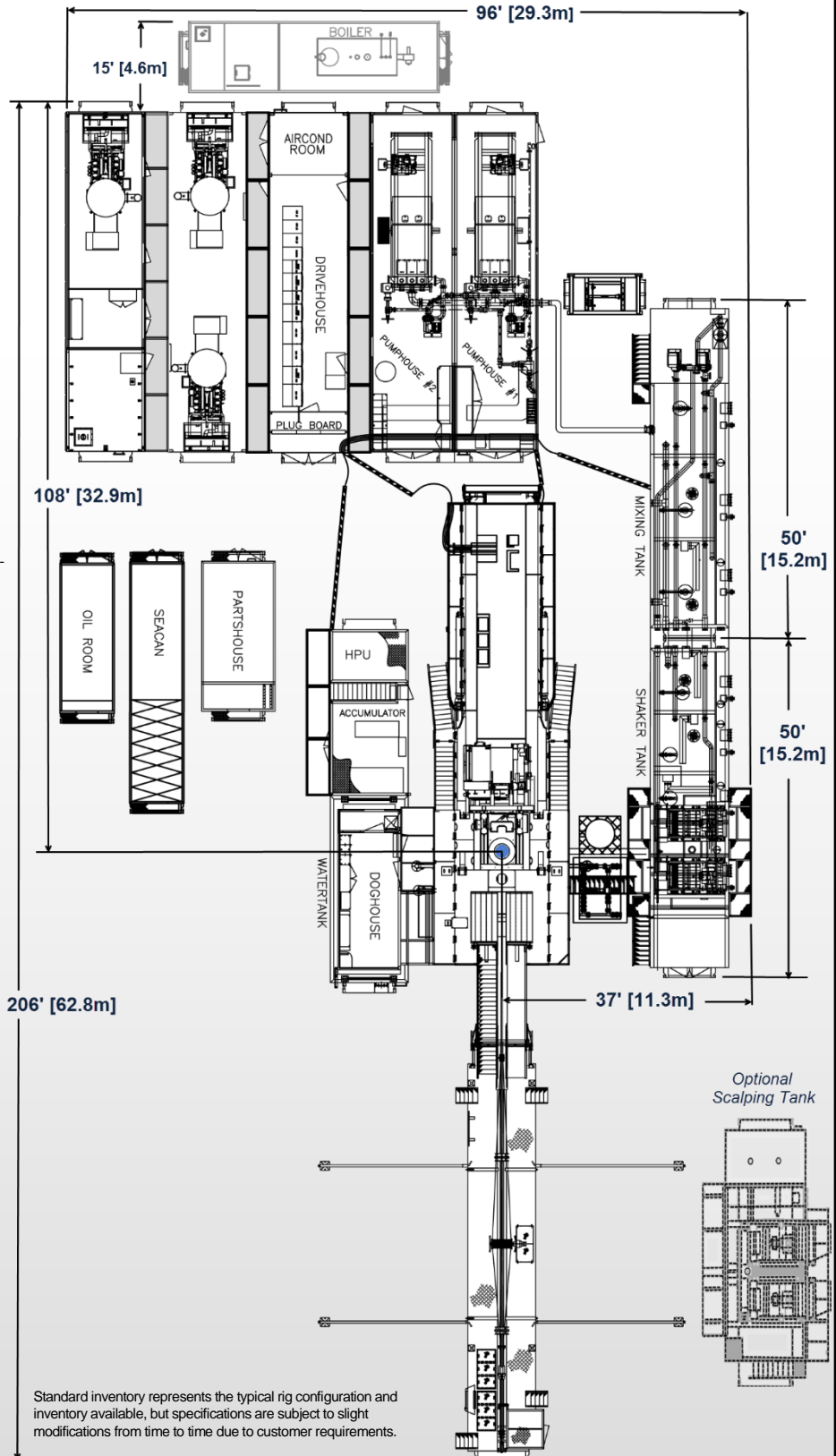
Hydraulic skidding system with rams and integrated skid beams.  
 Dual zipper (x2) style umbilical [220 ft (67 m) displacement] connection  
 for hydraulic and electrical supply.

### Miscellaneous

Water Tank: 400 bbls (47.7 m<sup>3</sup>) Fuel Tank: 10,000 Gals (37,854 Liters)  
 Screw Compressor (x1) Boiler and Full Winterization

### TOOL / STORAGE / CAMP

Parts Storage Room and Tool House Room  
 Rig Manager Trailer: One 14' x 44' (4.3m x 13.4m) Skid mounted



Standard inventory represents the typical rig configuration and inventory available, but specifications are subject to slight modifications from time to time due to customer requirements.

All ratings quoted herein are manufacture specifications. AKITA's normal operating parameters are 90% of manufactures max rating and 80% of mud pump manufacturer pressure rating. Operation of rig equipment beyond these parameters requires approval from AKITA field office management.