



# RIG 22

## 1,500 hp Triple Mast Pad Drilling Rig

### SUBSTRUCTURE

Hodgson box on box Substructure  
w/ integrated Columbia Moving System  
Floor Height: 21'-6" (6.55m)  
Clear Height: 17'-5" (5.30m)  
Rotary Capacity: 1,000,000 lbs (444,822 daN)  
Max Pipe Setback: 675,000 lbs (300,255 daN)  
Casing Capacity: 675,000 lbs (300,255 daN) irrespective of setback

### MAST

136' (41.5m) Hodgson cantilever design  
Base width: 18'-6" (5.64m)  
Static Hook Load: 675,000 lbs (300,255 daN)  
Drill Line: 1-1/4"  
Racking Capacity: 20,000' of 5" DP (6,096m of 127mm DP)

### BLOCK

Becket Load Rated: 350 Tons

### ROTARY TABLE

HHF 27-1/2 27-1/2" (698 mm)  
Rotary Load Capacity: 500 Tons  
Round Opening: 27-1/2" (698 mm)

### DRAWWORKS

PREP AC 600,000 lbs (266,893 daN) w/ 10 lines  
Input Power: 1,500 hp TT1500 induction motor  
Brake: Wichita 336 spring applied emergency brakes and regenerative braking

### MUD PUMP #1

HHF1600 Triplex Pump Rated Power: 1,500 hp  
Stroke: 12" (305 mm)  
Input Power: (1) 1,500 hp OEM TT1500 AC induction motor  
Pressure Rating: 7,500 psi (51.7 MPa)

### MUD PUMP #2

HHF1600 Triplex Pump Rated Power: 1,500 hp  
Stroke: 12" (305 mm)  
Input Power: (1) 1,500 hp OEM TT1500 AC induction motor  
Pressure Rating: 7,500 psi (51.7 MPa)

### MUD PUMP #3

PZ-11 (1600) Triplex Pump Rated Power: 1,500 hp  
Stroke: 11" (279 mm)  
Input Power: (1) 1,500 hp Cat 3512  
Pressure Rating: 7,500 psi (51.7 MPa)

### MUD TANKS SYSTEM

Two Tanks w/ 944 bbls (150 m<sup>3</sup>) total capacity  
Comprised of 6 compartments, including pill tank  
Mix tank pump room includes  
(2x) Centrifugal Pump 6" (152mm) x 5" (127mm) x 14" (356mm)  
w/ 14" impeller for mixing and mud row.  
Two tanks have (6) 10 Hp agitators  
and (1) 16 cone desilter mud cleaner.

### SCALPING TANK

Main Tank 113 bbls (18 m<sup>3</sup>)  
(2) Mission Magnum 6" (152mm) x 5" (127mm) x 14" (356mm)  
variable speed centrifugal pumps.

### SHAKER

(2x) NOV Venom Shakers on the scalping tank and  
(3x) NOV Venom Shakers at the central mud tank.

### MUD GAS SEPARATOR (Degassers)

NACE trim

### BOP (NACE Standards)

13-5/8" (346 mm) x 5,000 psi (34,475 kPa) Annular  
13-5/8" (346 mm) x 10,000 psi (68,950 kPa) Double Ram Preventer Stack  
13-5/8" (346 mm) x 10,000 psi (68,950 kPa) Drilling Spool  
13-5/8" (346 mm) x 10,000 psi (68,950 kPa) Ram Preventer  
*Note: Alternate BOP Sizes are available*

### ACCUMULATOR

220 gallon, 3,000 psi (21,000kPa) 6- station, with PLC electric remote.  
Flare tank with igniter.

### TOP DRIVE

Tesco 350 EXI 800 350 Ton Max Speed: 220 rpm  
Input Power Rated: 800 Hp  
Continuous Drill Torque: 37,500 ft-lbs (5,084 daN-m)  
Max Torque (Make-Up): 48,000 ft-lbs (6,508 daN-m)  
Max Torque (Break-Out): 56,000 ft-lbs (7,593 daN-m)  
w/ integrated swivel rated at 700,000 lbs (311,360 daN)

### IRON ROUGHNECK

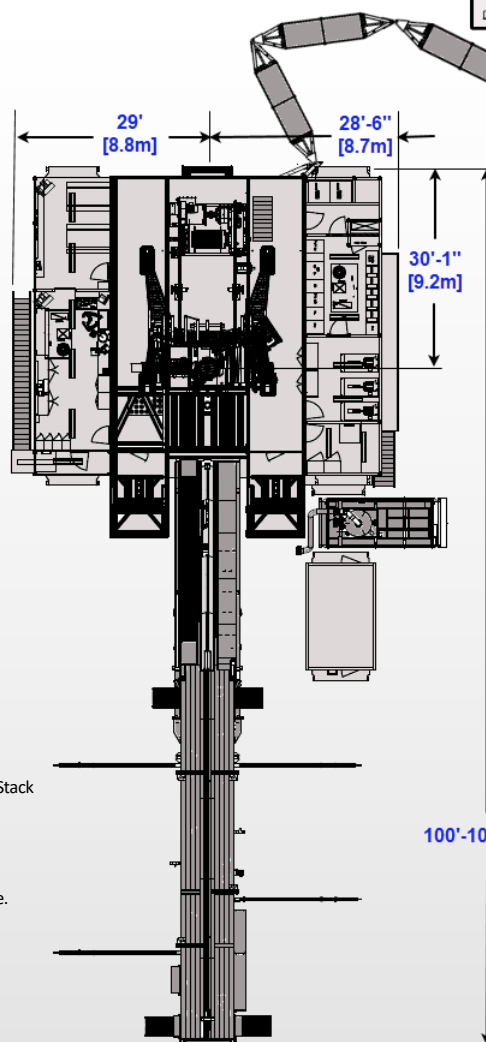
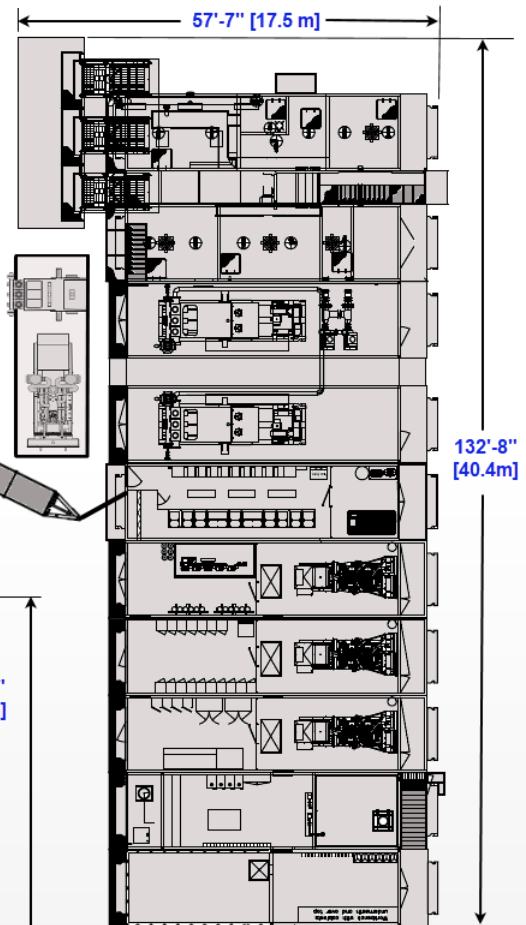
NOV ST-80C Conn. Range: 4-3/4" (108 mm) to 8-1/2" (216 mm)  
Spin Speed: 75 RPM -nominal on 5" (127 mm) Drill Pipe  
Spin Torque: 1,750 ft-lbs (2,373 Nm)  
Maximum Make-Up Torque: 60,000 ft-lbs (81,500 Nm)  
Maximum Break-Out Torque: 80,000 ft-lbs (108,500 Nm)

### SELF MOVING SYSTEM - WALKING

Hydraulic moving system capable of moving entire drilling module  
in linear motion or rotation with 300' (91.4m) in utility suitcases.  
Central complex can be placed on an independent moving system.

### POWER SYSTEM

Three Caterpillar C32 generators sets rated at 910 kW.  
Convert team generator controls and VFD's  
Total power available: 2,730 kW continuous.  
**Dual Fuel Compatible** (Diesel / Natural Gas)



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 mast rating and 80% of mud pump manufacturer pressure rating. Operation of rig equipment beyond these parameters requires approval from AKITA field office management.

### CATWALK MACHINE

Northrig C22 Hydraulic Power Catwalk capable of moving tubulars up to 47' (14.3m) and 10,000 lbs (4,536 Kg)

### TUBULARS

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

### Miscellaneous

Water Tank: 375 bbls (59.6 m<sup>3</sup>)  
Fuel Tank: 6,340 Gals (24,000 Liters)  
Boiler: (2x) 125 Hp steam boilers. (Optional)  
Boilers are rigged up for  
Natural Gas or Diesel Operations.  
Z-45 / 22 Genie, pull down winches rated at 45,000 lbs  
Steel matting for improved load distribution,  
240 Gallon Vacuum, 200 Hp Cold Start.

### TOOL / STORAGE / CAMP

Parts Storage Room and Tool House Room  
Rig Manager Trailer