

# **IDECO 1200HP SCR PAD DRILLING RIG** **SPECIFICATION OF MAJOR RIG EQUIPMENT**

## **HOISTING EQUIPMENT**

### **DRAWWORKS**

<u>Make and Model</u>	IDECO E-900 – Maximum pull 572,000 lbs
<u>Power</u>	1 No :- GE 752 D.C. (Nom. 1,250 HP max) Drilling Motor
<u>Drum Grooving</u>	Lebus 1 <sup>1</sup> / <sub>4</sub> "
<u>Auxiliary Brake</u>	Baylor 5010 Elmagco system c/w 5032 brake
<u>Crown Block Safety Device</u>	MD Totco ; - Total Block Control System
<u>Catheads</u>	Varco HC-26 Hydraulic Cathead System 100,000 ft lbs breakout torque available

### **MAST**

<u>Make</u>	M.I.L. VARCO API 4F – New Build 2003/2004
<u>Dimensions</u>	Clear Height 147ft. Overall Height 58 metres. From Ground level to the highest point on the derrick.
<u>Capacity</u>	Maximum Combined Operating Hookload 770,000 lbs
<u>Racking Capacity</u>	9,350 metres of 5" drillpipe 18 N° : 8" drill collars 24 N° : 6 <sup>1</sup> / <sub>2</sub> " drill collars
<u>Crown Block</u>	"Flat running crown" with 6 N°: 50" sheaves and 1 N°: 50" fastline sheave

### **SUBSTRUCTURE**

<u>Make and Type</u>	M.I.L. VARCO API 4F
<u>Simultaneous Capacity</u>	770,000 lbs casing capacity with 806,000 lbs setback capacity
<u>Height to floor</u>	28 ft
<u>Drill Floor Dimensions</u>	55 ft X 45 ft
<u>Skidding System</u>	IHC 4 x 100 T gripper jacks and beam system Skidding is possible with full setback in situ

### **TRAVELLING BLOCK AND HOOK**

<u>Make and Model</u>	IDECO Type UTB-360-5-42 360 ton capacity
<u>Sheaves</u>	5 N° : 42" dia. grooved for 1 <sup>1</sup> / <sub>4</sub> " drill line Unitised to Top Drive

**ROTARY EQUIPMENT**

**ROTARY TABLE**

<u>Make and Model</u>	Oilwell B27 <sup>1</sup> / <sub>2</sub> "
<u>Power</u>	None
<u>Static load capacity</u>	570 tons (Rotating load capacity 355 tons)
<u>Size opening</u>	27 <sup>1</sup> / <sub>2</sub> "

**ROTARY MASTER BUSHING**

<u>Make and Model</u>	Varco MSPC c/w casing bowls - #1,#2, &#3 N <sup>o</sup> : 1 - 13 <sup>3</sup> / <sub>8</sub> " - 11 <sup>3</sup> / <sub>4</sub> " N <sup>o</sup> : 2 - 10 <sup>3</sup> / <sub>4</sub> " - 9 <sup>5</sup> / <sub>8</sub> " N <sup>o</sup> : 3 - 8 <sup>5</sup> / <sub>8</sub> " down
<u>Type</u>	Pin Drive with lifting slings etc. c/w bowls N <sup>o</sup> : 1 - 13 <sup>3</sup> / <sub>8</sub> " - 11 <sup>3</sup> / <sub>4</sub> " N <sup>o</sup> : 2 - 10 <sup>3</sup> / <sub>4</sub> " - 9 <sup>5</sup> / <sub>8</sub> " N <sup>o</sup> : 3 - 8 <sup>5</sup> / <sub>8</sub> " down

**TOP DRIVE**

**Make and Model**

**VARCO IDS-4A;- 500TON TOP DRIVE SYSTEM**

Drilling Motors	GE -20A1 AC motor – 1,150 HP Equipped with helical gears and remote blower to reduce noise emission levels
Drilling Speed Range	0 to 228 RPM Continuous
Drilling Torque	44,000 ftlbs Continuous
Static Lock Brake	38,700 ftlbs
Intermittent Torque	70,100 ftlbs
Pipe Handler	<b>PH-75 – 75,000 ftlbs – (4" through 8 ½" tool joints )</b>
Upper IBOP	6 5/8" API Reg. RH Box
Lower IBOP	6 5/8" API Reg. RH Pin /Box
Top Drive Head	Infinitely Positionable
Torque Wrench	Floor Mounted Varco ST80 Torque wrench Automated make up and break out unit with integral spinner
Rig Floor Winches	2 no. Braden 3T Hydraulic Winches

**MUD PUMPING**

**MUD PUMPS 1 and 2 (IN SEPERATELY ACOUSTICALLY ENCLOSED HOUSES)**

<u>Make and Model</u>	2 N°: Gardner Denver PZ – 11 Triplex pumps
<u>Charging Pump</u>	5" x 6" MCM centrifugal each – electrically powered.
<u>Power</u>	2 N°: GE/Joliet 752 DC drilling motor each SCR Controlled
<u>Discharge Pulsation Dampener</u>	Hydril K20 - 5000psi
<u>Suction Pulsation Dampener</u>	Hydril SS20 – 275psi
<u>Discharge Relief Valves</u>	SPM 3" Full Bore Nitrogen Unloading Valve.
<u>Liner Retention System</u>	P – Quip c/w Hydraulic Quick Release Piston Rods
<u>Liner Handling System</u>	J. D. Neuhaus pump Davit system Model 2700 – SWL 500KG – 2250mm radius

**STANDPIPE**

4" schedule 160, 8000 psi

**RIG POWER SYSTEM**

**PRIMARY SYSTEM**

3 N°: Caterpillar 3512B diesel engines c/w SR4 Alternators  
1,000 KW, 600V, 60 Hz –

**FOR A.C. LIGHTING AND  
AUXILLARY SERVICES**

Ross Hill SCR system, enclosed in one house which control  
All D.C. and A.C. equipment functions and distribution

**MUD AND WATER SYSTEM**

**MUD TANKS**

Total capacity 900 bbls

No: of Tanks

3 N°: 220 bbls shaker, 240 bbls Settle, 390 bbls Active / reserve.  
Active tanks c/w 3no. 7.5 or 10HP Agitators  
Settle tank c/w 3no. 7.5 or 10HP Agitators

**MUD MIXING**

2 N°: Double Life mud hoppers, 600 GPM capacity and 2 N°: 5"  
x 6" Mission centrifugal pumps .

Trip Compartment

30 bbls – Integral to Substructure for ease of Skidding

**SOLIDS CONTROL EQUIPMENT**

**SHALE SHAKER**

3 N°: Thule VSM 100 Linear Motion Shale Shakers

**WATER STORAGE**

150 BBL Elmagco tank integral with substructure for skidding

**CHOKE MANIFOLD**

Anson 3" X 5,000 Psi Choke manifold  
1 no. Triflow - 3" 5,000 psi Automatic Choke  
1 no. Anson –3" 5,000 psi Manual Choke