

ATWOOD SOUTHERN CROSS



A SEMISUBMERSIBLE RIG LOCATED IN THE CANARY ISLANDS, THE ATWOOD SOUTHERN CROSS CAN OPERATE AT WATER DEPTHS UP TO 2,000 FEET AND DRILL DOWN TO APPROXIMATELY 20,000 FEET



CHARACTERISTICS

Type Of Vessel	Semisubmersible
Water Depth	2,000 ft.
Drilling Depth	20,000 ft.
Year of Construction	1976
Years of Upgrade	1997
Variable Load	2,500 ST
Drilling Draft	48 ft.
Operating Displacement	18,107 ST

PRINCIPAL DIMENSIONS

Length	260 ft.
Beam	158 ft.
Hulls	2
Beam	40 ft.
Depth	21.75 ft.
Baseline to Main Deck	81.75 ft.
Baseline to Pipe Rack	95.75 ft.
Baseline to Drill Floor	116.75 ft.

CAPACITIES

Liquid Mud	
Active & Reserve	1,791 bbls.
Bulk Material	9,420 cu. ft.
Sack Storage	2,108 sacks
Drill Water	6,455 bbls.
Fuel	4,956 bbls.
Potable Water	1,739 bbls.
Accommodations	100 persons (plus 4 bed sick bay)

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MOORING SYSTEM

Anchor Winches

Four (4) Skagit model DMW 250 double drum wire rope winches and four (4) Skagit model WMD 32 double wildcat chain mooring windlasses

Anchor Wire

Eight (8) 2½" x 3,000' 6 x 36 galv. EEIP grade

Anchor Chain

Eight (8) 3,500' lengths of 2-1/8" K4 grade

Anchors

Five (5) ea. 7 metric tonne Model MK5 High Holding Stevpris; three (3) ea. 7 metric ton Model New Generation MK 7; two (2) ea. 7 metric tonne Model MK5 High Holding Stevpris

DRILLING EQUIPMENT

Drawworks

Oilwell E-2000HP driven by two (2) GE-752 DC motors with Elmago 7838 electric brake

Derrick

Lee C. Moore mast with 1,000,000 lb hook load capacity, 182' height

Motion Compensator

Rucker Shaffer model DSC-18-400 with 18' stroke and 400,000 lbs capacity

Rotary Table

National C-495 driven by GE-752 DC motor

Crown Block

Woolslayer 500 ton with seven (7) 60" sheaves for 1-3/8" line

Traveling Block

National Oilwell 500 ton

Top Drive

National Oilwell PS2 500/500

Spinning Wrench

Varco SSW40

Raised Backup System

Varco RBS-3

Iron Roughneck

National Oilwell Varco ST-80 Iron Roughneck. Can make or break tool connections from 4¼" to 8½"

Drill Pipe

15,600' 5" Grade S-135 19.50 lb with NC-50 connections. Range 2 internally coated and fifty (50) joints 5" heavy wall drill pipe.

Drill Collars

Thirteen (13) 9½" OD x 2-13/16" ID x 30' long spiral collars with 7-5/8" API Reg connections. Thirty (30) 8¼" OD x 2-3/16" ID x 30' long spiral collars with 6-5/8" Reg connections. Ten (10) x 7" OD x 2-13/16" ID x 30' long spiral collars with 4½" IF connections. Thirty (30) x 6½" OD x 2-13/16" ID x 30' long spiral collars with 4½" IF connections

BOP EQUIPMENT

Choke-Kill Manifold

3-1/16" 10,000 PSI WP

Diverter System

Regan KFDJ Fixed Diverter with two (2) 12" lines

Ball Joint

One (1) OSI Flex Joint, Two (2) each OilStates Flex Joints

Riser Connector

Vetco H-4

Annular BOP's

Two (2) Hydril Model "GL" 18¾", 5,000 PSI WP

Ram Preventers

Two (2) Cameron Type Double "U" - 18-3/4" 10,000 psi wp

Well Head Connector

Vetco 18¾"

WellHead Connector

Vetco H-4 Connector 18 ¾", 10,000 PSI WP

BOP Control Unit

Shaffer-Koomey Model 24300 3S hydraulic power unit c/w 400 gallon reservoir

Marine Riser

Six (6) joints, 21" OD x 50' long x ½" wall and fifty (50) joints 21" OD x 50' long x 5/8" all with Vetco MR6-C connectors and integral choke and kill lines; thirty-two (32)

joints are fitted with buoyancy modules

Riser Pup Joints

Five (5), ten (10), fifteen (15), twenty (20), thirty (30), and forty (40) feet long with Vetco MR6-C connections.

Slip Joints

One (1) Regan KFDG 45' stroke; two (2) Vetco 55' stroke

Riser Tensioning Units

Eight (8) each Western Gear and two (2) Rucker Shaffer riser tensioners with 50' line travel; maximum single line load capacity of 80,000 lb. tension; total riser tensioning capacity on 10 lines 800,000 lbs.

Guideline Tensioning Units

Four (4) Western Gear and two (2) Rucker Shaffer single line with 40' line travel and maximum line load capacity of 16,000 lbs. each

MUD SYSTEM

Mud Pumps

Two (2) Oilwell A-1700PT triplex each driven by two (2) GE-752DC motors

Mud Charging Pumps

Two (2) 6" x 8" centrifugal with 100HP electric motors

Mud Mixing Pumps

Three (3) 6" x 8" centrifugal with 100HP electric motors

Shaleshaker

Four (4) Varco Brandt VSM-300

Desilter/Mud Cleaner

Varco Brandt 24-0, installed above one of the VSM-300 Shakers

Gumbo Box

One (1) Brandt Model 173235249

Degasser

One (1) Varco Brandt Model DG-10 c/w with IR D255 Vacuum Pump and One (1) 50 HP 8 x 6 Centrifugal Pump

POWER SYSTEM

AC Generator

Four (4) EMD MD-16E-8 diesel engines 1950HP each driving EMD 1,500 KW AC generators; one (1) EMD MD-12E-8 diesel engine 1,500 HP driving EMD 1,500 KW

Emergency Generator

One (1) Caterpillar D398 diesel engine driving GE 600 KW AC 480V generator

Power Distribution

Five (5) Tech Power Control 2,000 amp SCR power conversion modules for DC power distribution, plus two (2) 1,000 KVA transformers, 600 volt AC to 480 volt AC

AUXILLIARY EQUIPMENT

Cranes

One (1) Linkbelt API 238A Crane with 120' boom, 61,700 lbs load rating @ 35 feet radius (dynamic). One (1) Manitex Sea Crane ML4800 with 120' boom, 60,000 lbs load rating @ 26' feet radius

Safety

Two (2) Survival System International Model CA-5400 Fifty (50) person capsules.

Four (4) twenty-five (25) person RFD inflatable life rafts.

Vessel Positioning Reference System

Kongsberg HPR410D Acoustic Underwater Positioning System for Drilling Application

Drilling Recorder

M/D Totco Rigsense V 2.0

Ballast Control System

Electronic control board including 40 tank digital monitoring system

Heliport

Designed to accommodate Sikorsky S-61N helicopter

Communication System

VHF, SSB, Nera Satellite - Fleet 77 Phone/Fax, GMDSS

Distillation Units

Alfa-Laval distillation unit rated at 12,400 GPD (DPU-36-C100)

Sewage Treatment System

Two (2) Omni-Pure Model 12MX