



BLAKE 1005E

BASIC RIG INVENTORY-BLAKE 1005E

Mast and Superstructure

Assembly:

1. Pyramid 142'x18' "free standing" triples bootstrap mast with a static hook load of 600,000 pounds with 10 lines. Maximum wind load 115 MPH, no setback and 100 MPH rated setback of 17,950' 4-1/2" drill pipe, 14,480' 5" drill pipe and 3 stands 8-1/2" drill collars.
2. One (1) Continental-Emsco crown block with five (5) 50" diameter sheaves for 1 3/8" drilling line. Capacity 350 tons
3. Air operated adjustable casing stabbing board
4. Dual 4-1/2" O.D. 10M test 5M working stand pipe with goosenecks, connected to a "H" type standpipe manifold. Standpipe manifold complete with pressure gauges and sensors for instrumentation, kill line outlet, and fill-up and bleed-off outlets.

Master Skid and Substructure:

1. Mast and drawworks skid, 18' x 36" to accommodate a Pyramid 142' telescoping mast and 1000 H.P. drawworks with two (2) motor drive (electric).
2. Box girders 62'x5'4". Simultaneous capacity 720,000#
3. Dual purpose substructure supports (7-compartments):
 - a. 20' x 8' x 17' 230 Bbl. 4 compartment active tank.
 - b. 20' x 8' x 17' 230 Bbl. 3 compartment shaker tank.
4. Split Master Skid with hyd. jacks and skid pipes (skid top section)
5. Hydraulic rig mover jacks and mats to skid total rig package under support boxes.
6. Motorshed (drawworks roof) with built in brake water tank, hydraulic drill line rack with 1-3/8" plastic coated drill line, drill line anchor and air compressor skid.
7. Wing basket (off drillers side) with air purged motor control panel (MCC) 400 gal. hydraulic power unit (HPU) with three (3) independent Rexroth hydraulic pumps.
8. Wing basket (drillers side), 160 gal. accumulator, 7 station with bottle skid and nitrogen back up.



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Drawworks and Prime Mover Assembly:

1. 1000 HP Drecto Superior D1000UE electric drawworks with high/low drum clutch. Baylor Model 6032, Eddy Current type electric brake.
2. Cardwell (hydrocat) hydraulic breakout cathead with air controls (over hyd.) mounted in derrick base.
3. Cardwell (hydrocat) hydraulic makeup cathead with air controls (over hyd.) mounted in derrick base.
4. Duramatic crown/floor protector, installed on drawworks.
5. Lebus grooving, split sleeves for 1-3/8" drill line.
6. Two (2) G.E. 752 traction motors 1000 HP (electric), factory frame (series) winding.
7. Cooling system – 120M capacity independent fresh water system
8. Partech - 2 speed transmission on top Partech right angle drive, coupled with Faulk 1050 couplings to traction motors (1500 HP).
 - a. Right angle drive with air brakes and torque tube to drive rotary table.
 - b. One (1) elect. driven drawworks oiler pump with all stainless steel piping on air lines.
 - c. One (1) 3 x 2 mission magnum centrifugal pump for hydromatic brake cooling system.
 - d. Oil lubricating system with heat exchange.

Rotary Table and Associated Equipment:

1. Continental Emsco 3750 (37-1/2") rotary table with master bushing locks. Rated 600-tons dead weight capacity, maximum speed, 350 rpms.
2. Continental Emsco LB-400 Ton with 6-5/8" API regular left hand pin down substitute and link bumper, 260 ton capacity at 100 rpm. 400 ton working load 5000 psi rating wp.
3. Continental Emsco RA 44-5 350 Ton Block, with five (5) 42" diameter fabricated steel sheaves grooved for 1-3/8" drill line, 8" diameter coaster pin with 350 ton Web Wilson (Hydra-Hook).
4. 3 1/2" square kelly with 6-5/8" API regular LH box thread 40' long with 3 1/2" IF bottom connection (with pin drive bushing).
5. OMSCO upper kelly valve, 6-5/8" API regular LH threads 5,000# test pressure.
6. Varco kelly (pin drive) bushing complete with assembly for 3 1/2" square drive kelly with guide skirt.



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7. Rotary hose, Copper State, 4' x 70' long with 4" API line pipe couplings. (7500# PSI working pressure.)
8. One (1) set Web Wilson bails, 2-3/4" x 108" long, 350-ton or equivalent.

Travel and Associated Equipment:

1. One (1) Continental Emsco RA 44-5 / Web Wilson Hydra Hook traveling block-hook combination with five (5) sheaves 42" OD grooved for 1-3/8" OD drilling line, 350 ton capacity with spring assembly and hook locking device.
2. Spinmaster 950H hyd. spinning tongs (for D.P. only) with hyd. lift cylinder.
3. One (1) set Foley type "SDD" tongs
4. Two (2) 3 1/2" IF Safety Valves (H2S Certified)
5. Two (2) 3 1/2" IF Inside Gray (H2S Certified)

Pump Units:

1. Two (2) Gardner-Denver PZ-9 triplex pumps, 1000HP rated, each driven by one (1) G.E. 752 DC electric motor. Each pump c/w:
 - a. 5"x6" centrifugal supercharging pump, belt driven from mud pump
 - b. Forged steel fluid ends
 - c. Water cooling system for liners
 - d. Hydril K20 5,000 psi WP. Pulsation dampener
 - e. Cameron 3' type B reset relief valve
2. All spare parts will be times three (3), except modules times one (1)

Blowout Preventer Stack:

1. One (1) Hydril GK 13 5/8"x 5,000# working pressure annular preventer with 5m flange on bottom.
2. One (1) 13 5/8" Cameron Type "U" double, 5m working pressure with 13 5/8" 5,000# working pressure flanges top and bottom, with 4-1/16" 5,000# working pressure flange outlets between rams.(H2S Certified)
3. One (1) 13 5/8" Cameron Type "U" single, 5m working pressure with 13 5/8" 5,000# working pressure flanges top and bottom, with 4-1/16" 5,000# working pressure flange outlets between rams.(H2S Certified).
4. Two (2) sets of blind rams. (H2S Certified)
5. Two (2) sets of 3 1/2" pipe rams. (H2S Certified)
6. Two (2) sets 2 3/8" x 3 1/2" flex rams (H2S Certified)
7. One (1) set 7" pipe rams (H2S Certified)



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8. One (1) set of 2.875" x 2.875" dual pipe rams
9. One (1) set of 3 1/2" x 3 1/2" dual pipe rams
10. One (1) set 3 1/2" x 5" flex packer rams
11. Ring gaskets to N/U BOP's
12. All rams and annular comes with one (1) set spare components

Blowout Preventer Closing Unit:

1. Skid mounted blowout preventer closing unit (split skid) consisting of 160 gallon (7 station) 3,000 psi. accumulator and manifold consisting of six (6) stations complete with (2) remote control stations. Air and electric power sources and nitrogen backup system. (Divertor ready equipped).
2. BOP actuating lines between closing system and BOP stack.

Choke Manifold:

1. Skid mounted 10m PSI working pressure 3-1/16" choke manifold with 48"x10' gas buster and one (1)hydraulic, and two (2) manual chokes. (H2S Certified)
2. 200' 2" chocksan lines (10m test working pressure).

Tankage (460 Bbl. Surface Volume):

1. Rig Substructure (460 Bbls.) consisting of:
 - a. One (1)-230 bbl. shaker tank manifolded to degasser, one (1) 5 h.p. dual blade agitator with shakers.
 - b. One (1) 230 bbl. active tank with four (4) 5 h.p. dual blade agitators.
 - c. One (1) 142 bbl. reserve tank with one (1) 5 h.p. dual blade agitators.
 - d.. Four (4) 5" X 6" Mission Magnum electrical centrifugal pumps with mechanical seals.
 - e. One (1) mud hopper with Venturi system
2. Additional 142 Barrel tanks are available if needed for volume (to be charged back at current rental rates).

Mud Processing System:

1. Unit has self contained mud system and engineered for excellent mud control.
 - a. Seven (7) tank compartments, sand trap, settling tank, reserve tank, mixing tank, active tank and two (2) slugging tanks.
 - b. Top and bottom equalization between each compartment.
 - c. 48" gas buster with 8" vent and 8" discharges.
 - d. Burgess model 1000 (1000 gpm) 20 h.p.degasser (on shaker tank)
 - e. Two (2) Derrick Cascade Model 2M48-90F-3-MADD-15 linear motion cascade shakers. (750 gpm each)
2. Shaker is installed in rig substructure assembly on top of shaker tank



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- Accessory Rig Equipment:
1. Generators and Associated Equipment
 - Three (3) Cummins KTA 50 Generator Prime Movers.
 - Three (3) 1100KW, 600 volt, 1500 KVA and 60 HZ Kato generators.
 - One (1) 10' x 20' Generator House
 - One (1) IPS Model 1000 SCR system
 - One (1) diesel fuel day tank
 - One (1) Quarters Panel
 2. Air Compressor for standard rig equipment.
 - a. Two (2) Quincy Model 390 Air compressors with two (2) 20 h.p. electric motors
 - b. Two (2) 400 gallon air receivers.
 - c. One (1) air dryer
 3. One (1) 142 Bbl. diesel tank with electric transfer pump.
 4. One (1) 142 Bbl. potable water tank with electric transfer pump.
 5. One (1) 40 hp. Reda submersible pumps with casings.
 6. One (1) Red Fox Model 1500 sewage unit.
 7. Communications Equipment
 - a. Six (6) station gaitronic communication system.
 - b. Six (6) walkie talkies
 8. Life jackets and work vests, life rafts, etc. for 40 men accommodations.
 9. Standard safety equipment for normal operations.
 10. Tool House (with rig tools and spare parts).
 11. One (1) 500 gallon waste oil tank