

GARDNER DENVER MAVERICK 1600HP 2-MUD PUMP PACKAGE

BUILDING:

- 48' long x 11'-6" wide x <12' high
- Skid covered with checker plate floor and roof
- Doors of building to be recessed so that no part is protruding from module frame
- All door hinges to be welded to a reinforcing pad on the building wall
- Open frame design along the length of the skid. Design to accommodate panels (not included)
- Work bench c/w rack to be provided for MP liner etc. (Attempt to accommodate inside building envelope)
- Roof designed to accommodate 40 lb/ft² snowload
- No roof access for personnel (no handrail or fall arrestor). No hatches.
- Containment around "wet" areas

OVERHEAD CRANE TROLLEY:

- Manual articulating overhead crane trolley with geared hoist, 3T capacity (2 @ 1.5T ea). SWL to be stenciled on the beam
- Chester, Zephyr low hoist system designed to be capable of mono-head block and pulsation dampener removal
 - Requires pivoting bleed and relief lines to traverse trolley to either end
- Components exceeding 3T will be removed using a loader thru the side of the building
- Hoist & trolleys to include spark resistant configuration

PUMP PONY SKID:

- (1) Removable pony skid including:
 - Pump/Gearbox
 - Lube pump and cooler system
 - Motor
 - Pulsation Dampener
 - Cross block
 - Charge Pump
 - Must have hammer union on piping for ease of disconnect
 - Approx. weight target 40,000lb

MUD PIPING:

- Contractor to supply and install Mud Pump external lube and liner wash pumps – electric drive
- All piping and to be supplied and fitted to connect all the OFE and Contractor supplied equipment
- Suction piping of 6" and 8" Sch. 80 pipe c/w suction screen (incl. spare), air unions and pipe fittings
- All low pressure valves to be equivalent to Demco Butterfly Valves (with flat stem, position indicators, serrated handles and Buna N seats) – unless noted otherwise (U.N.O.)
- Charge Pumps to be Endurel centrifugal direct drive
- High pressure piping to be supplied in 3"-5" Schedule XXH, rated for 7,500 psi. No threaded connections allowed on any HP piping
- Relief lines of 3" XXH pipe c/w weld fittings, Fig 1502 hammer unions, and 3" #7,500 Retsco pop valves.
- Relief valve for pump to be Retsco – resettable design. Valve to be connected to pipe-work by flange then cross-over to Fig 1502 hammer unions. Outlet from relief valve to run with minimum 3% slope to active tank.
- Bleed off line from mud pump shall include a 2" isolation valve and run via a separate line from the relief valve to the active tank with a minimum 3% slope
- MP Pressure Gauges to be "Type F", connected to pipe-work by Fig 1502 hammer union
- Mud catch tray (1' deep) to be provided at MP fluid end – tray must be easily removable for

cleaning

- 2" water main for make-up port for liner wash, and port for pressure washer
- Piping to be laid out to ensure easy access for operation and maintenance of valves, unions and pumps etc.
- All pump to be mounted on pedestal plates above pumps and motors to help in removal/maintenance
- All piping to be securely clamped with U-bolts or approved alternative
- BW gate valve connections in lieu of flanged (contrary to Saxon specification)
- All pressure component in compliance with NACE MR 0175
- Cross block (API Monogrammed, PSL 2)

MUD PUMPS/MOTORS/WIRING:

- Mud Pumps – 2 ea. (1600 HP Gardner Denver Maverick, c/w gearbox)
 - MP1 – on the main skid; MP2 – on the pony skid
- Main Motors – 2 ea. (1500HP Amerimex Dominator, Model: AMD1500.500.28)
- All inter-connecting piping and hoses between mud pump building and Mud Tanks
- All electrical wiring – (Supply & Install); cabling and connectors, receptacles, conduit, aluminum plug panel plates, lights, cable tray, supports, brackets etc. (for initial prototype unit only)

