

SPECIFICATION OF RIGS AND SUPPORTING EQUIPMENT

Rig GEFCO SpeedStar 40K

DRILLING RIG UNIT:

Name of drilling unit (Rig) 1-GEFCO SpeedStar 40K

Drilling unit type Multipurpose Drill Rig (truck mounted)

Serial No.

PT BINTANGMANDIRI PERKASA DRILL Owner

Rig manufacturer Gerge E. Failing Company Canada Current rig location PTBMP Yard – Sumbawa Site Office

> SPEED STAR 40K WELL. DONE. Topdrive Multipurpose Drill Rig

















SPEED STAR 40K

SPECIFICATIONS

MOUNTING

Customer to furnish Western Star truck.

MAIN FRAME

Structural steel construction and electrically welded with mast rest and hinge post being integral part of the structure. The full with driller's and helper's platforms hinge upward during transit, while the center portion is removable. The structure includes hydraulic jack mountings and all necessary items for mounting to truck. Extended driller's, helper's and center platform included, built with steel.

MAST AND CROWN BLOCK Constructed of square steel tubing and structural steel electrically welded. Equipped with cable sheaves and guide tracks for top head rotary which allows top head to retract off center line of hole. Allows 41 ft (10.6 m) working space above breakout table. Raised and lowered by two (2) hydraulic cylinders. Rated working capacity 80,000 lbs (36,288 kg). Includes a hinge mounted hydraulic breakout cylinder mounted above breakout table. Mast Pivot point is raised 12" to allow additional working space between the bottom of the mast and the top of the table.

TOPHEAD ROTARY

Hydrostatically powered top head rotary with infinitely controlled rotation speed of 0 to 120 RPM and a maximum torque of 70,000 in-lbs (7,907 NM). Air/fluid course is 2-1/2 in. (63.5 mm) diameter equipped with a floating sub to allow smooth drill pipe connecting and a clamp for attaching wear sub. The stroke of the pull down and holdback cylinder allows the head to travel 34 ft. (10.4 m) up and down the mast.

PULLDOWN/HOLDBACK

The pull down holdback system powers the top head rotary in either the pull down mode or the holdback mode through the use of heavy-duty cables and a 6-1/2 in. (165.1 mm) hydraulic cylinder. Pull down mode provides 25,000 lbs (11,340 kg) with a feed rate up to 85 FPM (25.9 mpm). Holdback mode provides 40,000 lbs (18,144 kg) with a pull out rate up to 91 FPM (27.7 mpm).

HYDRAULIC LEVELING JACKS

Five (5) leveling jacks are mounted to level the rig. Two (2) 48 in. (1,219 mm) stroke jacks are mounted in the front just behind the truck cab. Two (2) 36 in. (914 mm) stroke jacks are mounted in the rear, one (1) jack mounted on front bumper. All jacks are individually controlled with locked checks to prevent leak-off. Swivel base plates are also provided for each jack.

AIR COMPRESSOR

Sullair two-stage twin screw rotary 1,000 CFM (25.5 m³min) and maximum pressure up to 350 PSI (24.1 bar) @ 1,800 RPM. Unit is driven from gear transfer through multi-disc air clutch and standard universal joint drive shaft. Used to conserve fuel, reduce engine starting loads and to disengage when not in use. Automatic low oil/high temperature shutdown system. Equipped with air receiver, pressure gauges, valves and all necessary discharge piping.

MAIN HYDRAULICS

Consists of large common oil supply tank, oil cooler, hydraulic pumps, filters, control valves, cylinders and all necessary plumbing.

SLIDING BREAKOUT TABLE/ POWER SLIDE HOLDING WRENCH

Breakout table mounts in rear section of main frame. Unit retracts hydraulically to allow setting casing up to 16 in. (406 mm) diameter. Equipped with hinged section to allow easy insertion and removal of guide bushings. A sliding wrench is mounted on backside of table for holding drill pipe when breaking out. Bumper stops are integral part of table, which allows various sizes of holding wrenches to be used.

WATER INJECTION PUMP

A hydraulically powered water injection pump, equipped with variable speed control for rated output up to 18 GPM (68.1 LPM) and 700 PSI (48.3 bar). A needle control valve on suction side enables foam to be metered into the system.

SINGLE PIPE LOADER

A single pipe loader is mounted on the right side of mast. Consists of a holding pod with hand wheel on bottom and a guide with safety latch on top. Unit swings from side of mast to center of hole for automatic line up with top head. Unit set up to handle 4-1/2 in. pipe.

PIPE SPINNER

Hydraulically powered pipe spinner for 2-7/8 in. (69.85 mm) to 4-1/2 in. (114 mm) diameter flush joint pipe. Unit is swivel mounted above breakout table, so it can swing out of way. Easy, one man operation. Can be used to spin in or out.



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BREAKOUT WRENCH A modified 60 in. (1,524 mm) pipe wrench attached to breakout cylinder. 8" (203 mm) jaw

capacity.

Carrying rack with slide mounted on right side of rig. Accommodates 15 pieces of 4-1/2 in. **PIPE RACK**

(114 mm) diameter flush joint x 20 ft. (6.08 m) drill pipe. Toolbox mounted below rack with

lockable door. Pipe rack is constructed of steel.

REMOTE CONTROLLED

JIB BOOM

Independent controls located opposite drillers side for jib and winch functions.

Adjustable jib boom for winch cable is mounted on top of mast and is provided with two (2) JIR ROOM

hydraulic cylinders for boom extension and boom swing from center of mast to center of rod

box when provided.

Hydrostatically driven winch mounted on the mast for the purposes of tripping and pipe **WINCH ON MAST**

handling through the jib boom. Rated working capacity is 40,000 lbs (18,144 kg) with two line receiving and line speed of 250 FPM (76.2 mpm) on bare drum. Design allows for power-up

or power-down.

CONTROLS All controls and gauges are grouped at the left rear corner of the drill. All controls, valves

and gauges are labeled for operator's convenience and safety. Removable and lockable

control panel cover is provided.

Heavy-duty gear type power/gear transfer/pump drive case intersects truck drive line and **GEAR POWER TRANSFER**

transfers truck engine power to hydraulic oil pumps and air compressor. Unit is equipped

with pressure lubrication and oil cooler. Air shift control mounted in truck cab.

MUD AND AIR PLUMBING Mud and Air lines are to be combine with a Y before the hinge hose.

LIGHTS Six (6) shock proof 12 volt halogen lights for the convenience of night time drilling. The system

powered by the truck electrical system with the switch located at the operator's station.

STANDARD MISCELLANOUS

EQUIPMENT

Two (2) spanner wrenches for adjusting top head packing; Level for setting up the rig; Single

line hook.

OPERATING TOOLS INCLUDED (1) Hoisting Plug; (1) Guide Bushing, 4-1/2"; (1) Rod Wiper

POPULAR OPTIONS

MUD PUMP Gardner Denver 5-1/2" x 8 piston pump. Driven hydrostatically through heavy-duty gear

reducer. Equipped with slush service valves and pistons. 2" discharge piping, pressure gauge, shear relief valve, surge chamber, 4" x 20' suction hose with strainer and coupling,

valve seta and liner puller included. Rod oilers are included.

Hydraulically driven auxiliary winch for handling purposes. Capacity of 2,000 lbs single line pull **AUXILIARY WINCH**

on bare drum. Equipped with 750 ft of 3/8" wire line.

Casing hammer package complete less the casing hammer. A hydraulic cylinder equipped **CASING HAMMER PACKAGE**

with a control valve in the "float" position that enables the driver to follow the casing during the driving phase. A swing jib and cylinder actuated guide rail allow the casing driver to swing out of the mast opposite the operator station when driving phase completed. Equipped with all necessary 1-1/2" piping, filters, controls, gauges, regulator, airline

lubricator. All plumbing and standpipe to go up left side (driller's) side of mast.

WEIGHTS AND DIMENSIONS

Length: 43 ft. 6 in. (13.1 m); Width: 8 ft. 6 in. (2.6 m); Height: 13 ft. 3 in. (4.0 m); Approximate weight: 56,000 lbs. (28,348 kg).



Drilling Mud System With Solids Control

ENVIRO CLEAN 200B MUD PUPPY

- 32,000Liter Capacity
- Shale Shaker
- 3x Desander Cones
- Settling Tanks
- Premix Tanks
- Hydraulic Agitators
- 3x H.P. Mix Hoppers

