PAT-Drill 301

The oldest PAT model and still in constant production – and has many design refinements through its 25 years.

With a 'stand alone' mast unit it can be simply transported and man handled onto drill sites – some with tight access.



Rig is powered by a stand alone power pack with a heavy duty Diesel engine or lightweight Petrol engine option.

Ideal application sedimentary mud drilled holes to 100 m depth 100 - 200 mm diameter.



Product Description:

In its modular format it remains one of the lightest drilling packages in its depth capacity in the world and can meet many specialist needs – manhandled up mountains for horizontal well drilling, compact air cargo movement where road transport is not an option or local mounting on hydraulic excavator arms and similar configurations.

TECHNICAL DATA & SPECIFICATION

RECOMMENDED HOLE RANGE

Soft formations, rotary mud drilling operation:

(Needs a seperated mud pump)

4" - 8" (100-200 mm) borehole diameter.

TOP ROTATION HEAD

Single reduction gearbox, hydraulic motor driven, and variable rotation speed. Able to swing-a-side for easy casing installation. Swivel spindle 40 mm inside diameter, sub joint 2 3/8 API Reg Mod Gear box ratio: 3.875:1 Speed: 0 – 50 rpm Max. torque: 1320 Nm

MAST

All steel work, 3.15 metres high, break-out table to open 200 mm. diameter.

2 - wheel axle aids erecting the mast to a vertical positon for drilling and aids moving the unit around site or loading / unloading the unit from a vehicle.

FEED SYSTEM

Rotation head is raised and lowered by a hydraulic cylinder and heavy-duty transmission chain.

Head travelling stroke: 2.25 metres
Pull up - Capacity: 2300 kg

Max. speed: 9.5 metres/min
Pull down - Capacity: 3480 kg
Max. speed: 14.5 metres/min

OPERATION CONTROL PANEL

the control panel is mounted on the mast, and is equipped with: 4 levers controlling rotation head, pull and feed

2 regulators for rotation speed and pull/feed weight

3 system pressure gauges

HYDRAULIC POWER PACK

Engine: 14 hp (10.4 kW) KUBOTA diesel engine

13 hp (9.7kW) HONDA petrol engine

Hydraulic system: VANE pump type, system pressure

250 bar max, 75-litres tank capacity.

200 kg

Hydraulic hose line: 2 pieces supply & return. 6 m long with quick release self-sealing type couplings to connect power pack to rig.

DRILL PIPE

Drill pipe length: 2 metres
Drill pipe diameter: (Option) 60/76 mm.

DIMENSIONS

 Overall length (L):
 1.10 m

 Overall width (W):
 0.85 m

 Overall height (H):
 3.20 m

 Weight:
 Drilling Unit
 450 kg

 Power pack diesel
 250 kg

Power pack petrol



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