

PAT-Drill 501

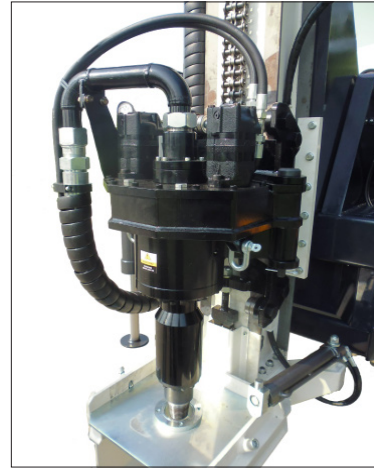
M series

A Truck mounted drilling rig

PAT-Drill 501m is Drilling machine mounted on a HINO truck 15,000 KG GVW 4x2 Truck.

Sedimentary rock mud drilling 150-300mm diameter using the onboard mounted 8x12 duplex piston mud pump to depths of 300m

Hard rock air drilling with auxiliary compressor unit 150-245mm with 6" DTH hammer.



Drilling rig mounted on a 4x2 truck diesel engine 240 hp Left or Right hand steering

Optional: Rear axle "no spin" differential system.

Drilling machine powered hydraulic system by independent diesel engine , 4 cylinder 83 hp

Mud Pump PTO driven from truck engine.



PAT

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TECHNICAL DATA & SPECIFICATION

RECOMMENDED HOLE RANGE *(Depths to 300 m)*

Medium & Hard rock, DTH-Hammer drilling :
(Needs a separated air compressor)

5" - 6" DTH-Hammer with capacity to drill
6" - 9 5/8" (150-245 mm) diameter.

Soft formations, rotary 'Mud' drilling:

Drag bit or PDC drill bit 6" - 12" (150-305 mm) diameter

TOP ROTATION HEAD

Double reduction gearbox, 2 hydraulic motors driven, and variable rotation speed. Enable to swing-a-side for easily casing installation. 50 mm (2") Air/water pipe work & flanged drill pipe adaptor inside diameter, sub joint 2 7/8 API Reg Mod.

Gear box ratio	4.75 : 1
Speed	0 – 65 rpm
Max. torque	5,230 Nm

MAST

All steel work, 6.50 metres high, break-out table to open 350 mm diameter. Mast raised to vertical from storage position by a hydraulic cylinder. The machine is also equipped with 2 LED flood lights for night time operation.

FEED SYSTEM

Rotation head is raised and lowered by a hydraulic cylinder and heavy-duty transmission chain. Head travelling stroke 4.65 metres

Pull up - Capacity:	6,400 kg
Max. speed:	32 metres/min

OPERATION CONTROL PANEL

5 levers controlling rotation head, pull and feed, winch.

2 regulators for rotation speed, pull/feed weight.

5 system pressure gauges.

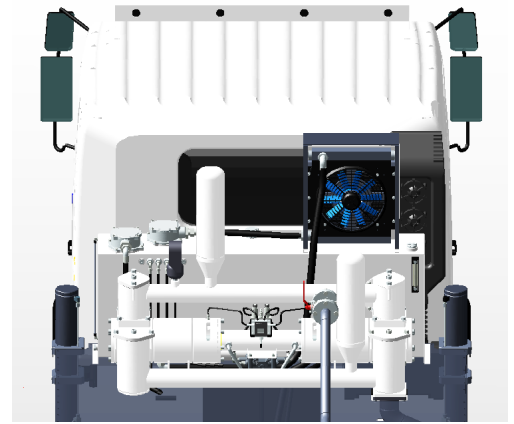
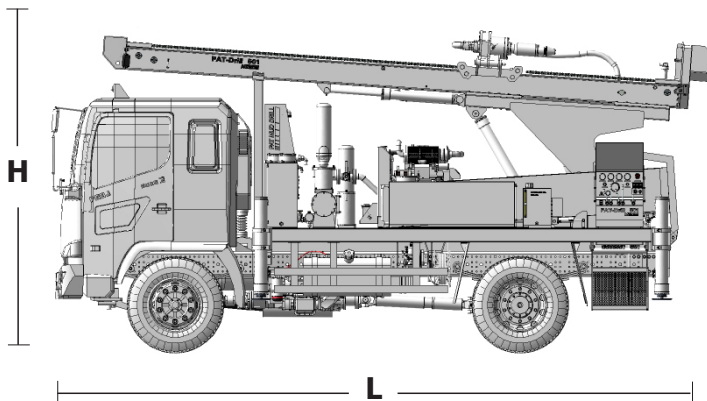
Rigid mounted control panel with lockable cover plate.

HYDRAULIC POWER PACK *(Rig service)*

Engine: 83 hp (62.5 KW) at 2500 rpm, 4 cylinders, diesel engine, water-cooled, electric start.

Hydraulic system: Triple gear pump type, system pressure 250 bar max, 300 litres tank capacity.

Fuel tank: Combine with engine truck-



MUD PUMP

High pressure Mud pump. Duplex 8x12 Piston Mud pump, mounted on board of Rig platform.

capacity, Flow:	800 litre/min
Pressure:	20 bar

complete with Hoses, Strainer, Mixer and mud pump tools, spares.
Mud pump driven by Power Take Off (PTO) from truck engine.

WATER/FOAM INJECTION PUMP

Triple piston pump driven by a hydraulic motor.

Motor speed:	450 rpm
Max. displacement:	10 litres/min
Max. working pressure:	30 bar

STABILISING JACK

4 jacks hydraulic, re-positional to adjust ground clearance.

AIR LUBRICATION SYSTEM

Fitted lubricator of Venturi-type for inject lubrication-fully adjustable flow control-for DTH-Hammer

Max pressure:	40 bar
Oil tank capacity:	7 litres
Flow rate max:	1.8 Litres/hr

PIPE RACK

Each side containing: <i>(For 3 metre)</i>	20 pcs. 89 mm pipes
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DRILL PIPE

Drill pipe length:	3 metres
Drill pipe diameter options:	89 mm

TRUCK

HINO 500 Series Truck, 240 hp 7680 CC Euro 3 GVW 15,000 Kg

Suspension: Leaf springs and shock absorbers.

Wheels & Tyres:	6 x Radial 8.25-R16
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DIMENSIONS

Overall length : (L)	6.73 m
Overall width :	2.55 m
Overall height : (H)	3.88 m
Weight (without drill pipes)	10,000 kg