

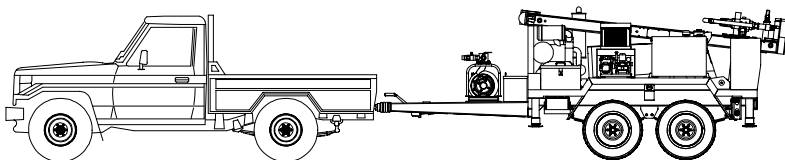
PAT-Drill 401T

Drilling Rig mounted on Trailer

The PAT-Drill 401T is a Trailer mounted drilling rig, compact and fully hydraulic, for Down-the-hole Hammer and Rotary drilling up to 120 meters.

An independent deck engine, also mounted on board the heavy-duty 4-wheels trailer, powers the whole Unit.

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Toyota LandCruiser & 401T Rig

The PAT-Drill 401 is the right choice for Government, United Nations, and Non-Governmental (NGO) organizations looking for appropriate and low cost drilling equipment to provide domestic water supplies to rural village communities at an economical price.

Technical Data, Specifications

TOP HEAD ROTATION

Single reduction gearbox with a hydraulic motor.
The system provides infinitely variable rotation speed.
Main shaft of 40 mm. hole, Sub joint 2 3/8 REG API Mod.
Enable to open swing-a-side to easy the casing installation.

Rotation torque	2232 N-m
Speed	0 - 34 rpm.

FEED SYSTEM

Top head driven by a hydraulic cylinder through heavy-duty chain.

Head travel	2.20 meter
Pull-up capacity	3813.09 kg.
Pull-up speed-slow feed	1.22 meter/min
Pull-up speed-rapid feed	12.26 meter/min
Pull-down capacity	2829.36 kg.
Pull-down speed-slow feed	1.88 meter/min
Pull-down speed-rapid feed	16.90 meter/min

DRILL PIPE

Drill pipe length	2.00 meter
Drill pipe diameter	76 mm.
Thread	2 3/8 REG API Mod, PIN and BOX

MUD DRILLING SYSTEM

Centrifugal pump type which is directly coupled to a hydraulic motor through flexible hydraulic hoses.

Mud pump speed	1630 rpm.
Flow capacity	930 liter/min
Max. working pressure	4 bar
Weight	105 kg.

WATER-FOAM INJECTION PUMP

Triplex piston pump driven by hydraulic motor.

Motor speed	365 rpm.
Displacement	10 liter/min
Max working pressure	30 bar

POWER

Powered by deck engine, "DEUTZ" engine model: F3L-912, 3 cylinders, 40 kw at 2500 rpm, air cooled.

Power pack speed	900 - 1200 rpm.
Load power pack max.	40 hp.

HYDRAULIC SYSTEM

3 pumps open system with 10 micron filtration and breather with oil cooling system.

Hydraulic tank capacity	148 liter
Oil cooling system	12 VDC. Electric fan, 1500 rpm.
Heat exchange capacity	4100-5300 Kcal./hr at 40 C°

STABILIZING JACK

2 front jacks and 2 rear jacks.

Bore	80 mm.
Stroke	480 mm.
Max. Load push-up	6148.62 kg/jack

HYDRAULIC BREAK-OUT WRENCH

Break-out torque	792.22 kg-m.
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AIR SYSTEM

Lubricator of venturi-type for down-the-hole drills.

Max. pressure	40 bar
Oil tank capacity	4.5 liter

PIPES RACK

Capacity	35 PCs. Drill pipe
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LIGHTING & ELECTRICAL SYSTEM 12 VDC

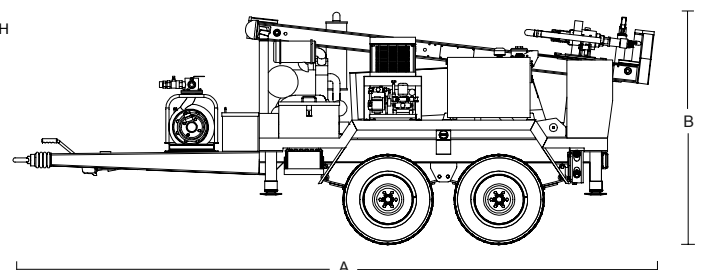
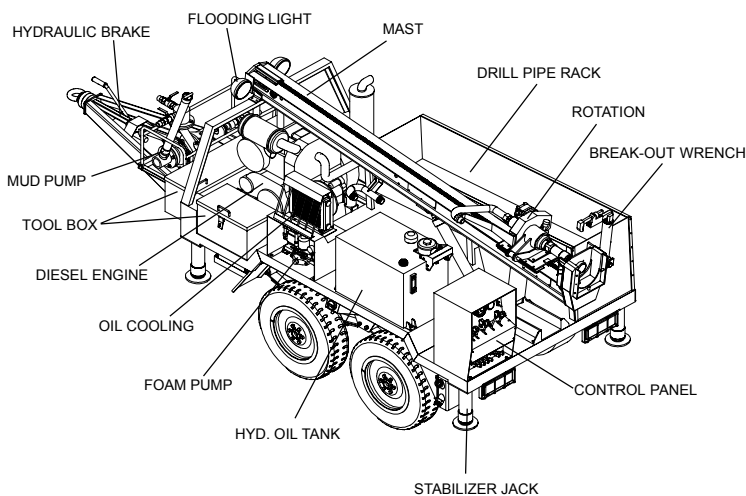
Mast	2x55 w. Flood lights
Control panel	2 gaugelights

TRAILER SUSPENSION

- 4 - Heavy duty Leaf springs
- 4 - Shock absorbers

EMERGENCY PUMP

DC-12 V driven hydraulic pump for operating all systems in case of emergency.



DIMENSIONS

Overall length (A) :	5340 mm.
Overall width	1720 mm.
Overall height (B) :	1970 mm.