

1 TONE "TOP-300" WATER WELL DRILL RIG

**DOWN-THE-HOLE HAMMERS
DIRECT AIR/MUD ROTARY
FOR 150 - 300 METER DEPTH**



TOA-TONE BORING CO., LTD.

TOP-300 TRUCK MOUNTED WATER WELL DRILL RIG

MEETS REQUIREMENTS OF THE MOST
RUGGED DRILLING DEMANDS



RATED CAPACITY

Drill pipe size	Recommended depth
3-1/2"(89mm)	200 – 300 m
4-3/4"(120mm)	150 – 200 m

ROTARY HEAD

Hydraulically driven heavy duty power swivel with retract-back system in the mast.

Rotation speed:	Low: 0 -60 min ⁻¹ High: 0 -120 min ⁻¹
Max. torque:	4.9 kN-m
Max. load capacity:	68.6 kN

HOLD BACK/PULL DOWN

Hold back and pull down system is functioned by hydraulic cylinder with wire rope located at outside of the mast frame.

Max. hold back:	68.6 kN
Max. pull down:	31.3 kN
Feed stroke length:	7.5 m

DRAWWORKS

Hydraulically driven, with free-falling mechanism for quick lowering drill strings.

Max. single line pull:	29.4 kN
Line speed:	0-50 m/min
Spooling capacity:	50 m with 14 mm cable

SAND REEL

Hydraulically driven, with free-falling mechanism for quick lowering.

Max. single line pull:	9.8 kN
Line speed:	0-100 m/min.
Spooling capacity:	300 m with 9 mm cable

MAST

Electrically welded rigid structural section, raised and lowered by twin hydraulic cylinder, with enough space for retract back of rotary head.

Height:	Approx. 11.8 m from ground level
Gross capacity:	98 kN
Hook load capacity:	88.3 kN with triple line

MUD PUMP

Duplex reciprocating piston pump, Model NP-700	
Max. discharge volume:	730 lit/min.
Max. pressure:	1.86 MPa

LEVELING JACKS

Individually controlled hydraulic jacks, each two at front and rear installed under rig common base, fully equipped with safety devices. All jacks are enclosed in housing to prevent piston rod from damage.

BREAKOUT SYSTEM

Hydraulically actuated pipe breakout system is equipped with breakout tong for easy disconnection of tool joints.

CONTROLS

All controls and gauges required for drilling and rig operation are grouped at and fitted at driller's operation panel.

FOAM INJECTION PUMP

Hydraulically driven piston pump for DTH hammer drilling.	
Max. discharge volume:	30 liter/min.
Max. pressure:	1.96 MPa

TRUCK

Type:	6x4 diesel truck
GWM:	Min. 20,000 kg

POWER SOURCE

Truck engine PTO or independent diesel power unit to drive hydraulic pumps, mud pump, etc.	
Power requirement:	125 PS

LIGHTING

Floodlight arrangement for night operation fitted on the mast.

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