

TOA-TONE TOP-750HR

**WATER WELL RIG
DOWN-THE-HOLE HAMMERS
DIRECT AIR/MUD ROTARY
REVERSE CIRCULATION
FOR 150 - 750 M DEEP WELLS**



TOA-TONE BORING CO., LTD.

URL: <http://www.toa-tone.jp>

Technical Specifications
for
TOP-750HR
Water Well
Drill Rig



RATED CAPACITY

Drill Pipe Size	Recommended Depth
4-3/4" (120 mm)	500 m

POWER SWIVEL

Hydraulically driven heavy duty power swivel, with retract-back system in the mast. Hydraulic hoses are arranged properly in the mast.

Rating speed range	(Infinity variable)
	Low series; 0-20rpm.
	High series; 0-40rpm.
Max. load capacity	25,000kg
I.D.of drive shaft	75mm (3") or 150mm (6")

HOLD BACK/PULLDOWN

The mechanism of hold back and pull down is driven by twin hydraulic cylinder located at outside mast frame.

Max. hold back	25,000kg
Max. pull down	10,000kg
Feed stroke	7.5m
Feed speed	Low; 0-5m/min.
	High; 0-20 m/min.

DRAWWORKS

Hydraulically driven, with free-falling mechanism to enable quick lowering the drill strings.

Barrel dia.	320 mm
Barrel length	300mm
Max.single line pull	8,000kg
Spooling capacity	150m x 16 mm cable
Line speed	Low; 0-23m/min.
	High; 0-45m/min.

SAND REEL

Hydraulically driven, with free-falling mechanism to enable quick lowering.

Barrel dia.	180 mm
Barrel length	295mm
Max.single line pull	3,000kg
Spooling capacity	550m x 12 mm cable
Line speed	Low; 0-40m/min.
	High; 0-80m/min.

LEVELLING JACK

Individually controlled hydraulic jacks, each two for front and rear equipped under the common base, fully equipped with safety devices. The jacks are enclosed in housing to prevent piston rods from damage.

MUD PUMP

Duplex reciprocating pump, Model "NAS-7"	
Bore x stroke	190 mm (7-1/2") x 150 mm (5-7/8")
Max.delivery volume	1,500 L/min
Max. pressure	2.0 Mpa

MAST

Electrically welded with rigid structural section, raised and lowered by twin hydraulic cylinder, provided with leak proof sealing arrangement and safer device.

Height	12m clearance above the ground
Total gross capacity	45,000kg
Hook load capacity	32,000kg

CONTROLS

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

BREAKOUT

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

TRUCK/TRAILER

GVM	Min. 26,000kg
Full or semi-trailer mounting is available.	

POWER UNIT

Heavy duty diesel engine driving hydraulic pump, mud pump etc.
Min. required power 290PS

LIGHTING

Floodlight arrangement for the night operation

OPTIONAL EQUIPMENT

Foam injection system for air drilling. Air compressor for reverse circulation or air drilling,

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