

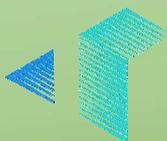
# HIGH FREQUENCY VIBRATORY-ROTARY DRILL TONE-SONIC DRILL "SD-160"

SD-160 Drill is succeeded model of SD-150 Drill which was the first TONE-SONIC drill released in Japan, and has a larger capacity for torque and feed system.

SD-160 Drill can play a role in wider drilling fields such as environmental investigation, under-ground geothermal heat exchange hole, anchoring, water well, micro piling, dewatering hole, soil remediation, etc.

TONE-SONIC DRILL

The Fastest Drilling Solution



**TOA-TONE BORING CO., LTD.**

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

**TONE-SONIC DRILL TECHNOLOGY is**

An epoch-making drilling system transmitting high frequency vibration and rotation to drill bit and enables faster drilling than ordinary rotary drilling, DTH hammer drilling or hydraulic drifter drilling methods.

**FEATURES OF TONE-SONIC DRILL**

- Applicable to most of ground formation
- Enables drilling without circulation fluid
- Enables continuous sampling
- Has less drilling disposal
- Has high verticality of drilled hole

**APPLICATION OF TONE-SONIC DRILL**

- Geothermal hole
- Environmental investigation
- Soil improvement
- Dewatering hole
- Well rehabilitation
- Water well
- Soil remediation
- Anchoring
- Retaining bored pile
- Grounding hole, etc.



**TECHNICAL SPECIFICATIONS**

ROTARY HEAD		FRAME	
Type	Hydraulic motor driven	Type	Hydraulically raised & lowered
Rotation speed	0 – 100 min <sup>-1</sup>	Vertical slide stroke	1250 mm
Tilting angle range	0 – 45°	Sideway swing angle	±5°
Rotating torque	Forward: 4.9 kN-m	HOIST	
	Reverse: 5.9 kN-m	Type	Hydraulic motor driven
FEED SYSTEM		Hoist capacity & speed	6.9 kN 0 – 10 m/min.
Type	Hydraulic motor driven	Spooling capacity	9.0 mm x 20 m
Feed force	78.6 kN	FUEL & HYDRAULIC OIL	
Balance force	78.6 kN	Fuel tank capacity	300 L
Stroke length	4,850 mm	Oil tank capacity	420 L
OSCILLATOR		LEVELING JACK	
Type	Hydraulic motor driven	Stroke	650 mm
Vibration force	216 kN	ENGINE	
WEIGHT & MEASUREMENT		Output	173 PS(129 kW)/2,000 min <sup>-1</sup>
Drill unit weight	Approx.12500 kg	HYDRAULIC BREAKOUT SYSTEM	
Dimensions during traveling	8130x2320x2770mm	Applicable pipe range	4-1/2" – 10-3/4"

*In accordance with our policy of constant improvement, we reserve the right to amend design, materials, specifications and prices at any time without prior notice.*



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