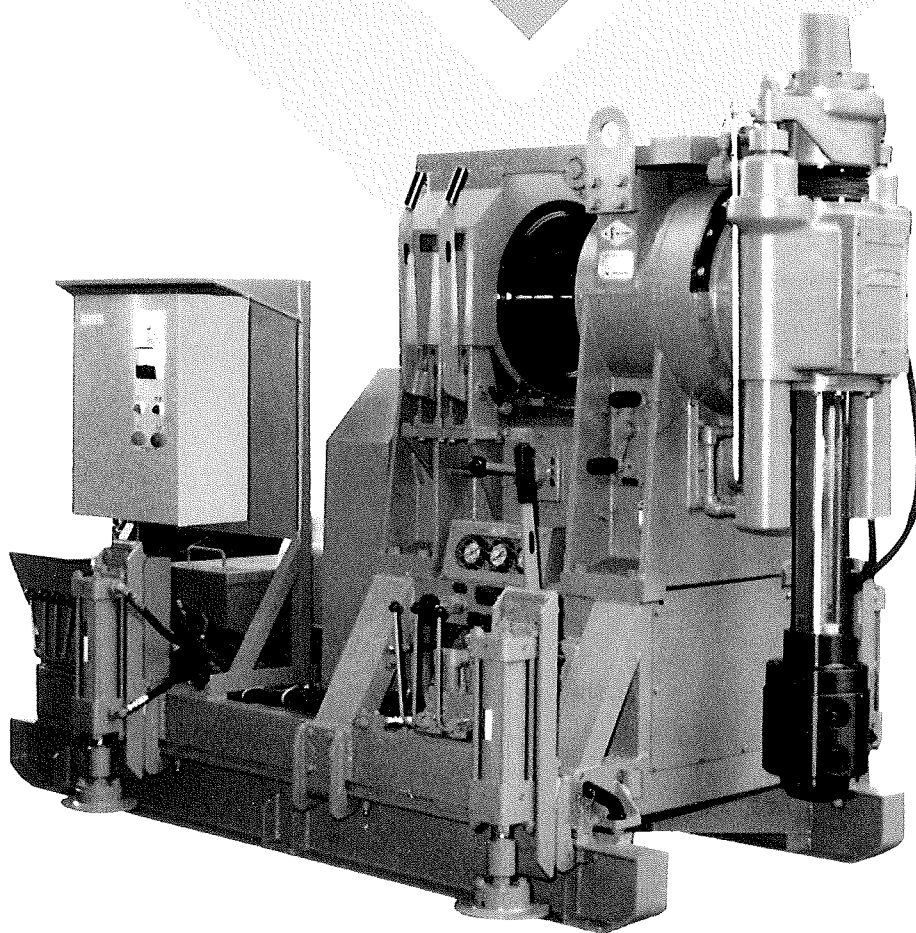


TBM-88



COMPACT AND POWERFUL, OF CONVENIENT SIZE
FOR EXPLORATION DRILLING, WATER WELL
DRILLING AND LARGE HOLE DRILLING



TOA-TONE BORING CO., LTD.

SPECIFICATIONS FOR TBM-88 DRILLING MACHINE

CAPACITY

For Exploration Drilling

Drill rod size	Recommended depth
BQT	1 300-1 350 m
NQT	1 000-1 050 m
HQT	650- 700 m

For water Well Drilling

Drill rod size	Recommended depth
3-1/2"	200-330 m
4-1/2"	150-280 m
T90(Flush joint)	200-360 m

For Large Hole Drilling for Foundation

Hole size	Recommended depth
1 000-1 500 mm	30-40 m
900-1 200 mm	40-50 m
700-1 000 mm	50-80 m

POWER UNIT

Electric motor	18.5 kw-4p
Diesel engine	Required power, 30-40 ps at 1 800 min ⁻¹

TRANSMISSION

Type	Sliding gear
No. of speeds	4-forward & 1-reverse
Clutch type	Heavy duty, single plate dry disc

HOIST

Type	Planetary gear
Drum diameter	220 mm
Drum length	210 mm
Spooling capacity	85 m with 14 mm cable
Rope speed	14, 29, 48, 70 m/min. (Bare drum)
Max. single line pull	3 920 daN(4 000 kgf)

BIT SPEED

A series	30, 60, 100, 145, R24 min ⁻¹
B series	50, 100, 170, 240, R40 min ⁻¹
C series	100, 210, 350, 500, R83 min ⁻¹

SWIVEL HEAD

Type	Twin hydraulic cylinder with screw chuck
Spindle I.D.	93 mm
Feed length	500 mm
Angle range	360°
Max. thrust	6 860 daN(7 000 kgf) at 7.48 Mpa
Max. lift	(80 kgf/cm ²) 8 820 daN(9 000 kgf) at 7.84 MPa (80 kgf/cm ²)

HYDRAULIC PUMP

Type	Variable volume, vane
Discharge vol.	0-45 L/min.
Max. pressure	10.29 MPa(105 kgf/cm ²)
Working pressure	0.98-7.84 MPa(10-80 kgf/cm ²)

MOUNTING

Type	Steel skid frame with hydraulic slide base
Slide stroke	500 mm

OVERALL DIMENSIONS

Length	Approx. 2 290 mm
Width	Approx. 1 100 mm
Height	Approx. 1 965 mm

WEIGHT

Without power unit	Approx. 2 250 kg
Max. weight of component	Approx. 350 kg

OPTIONAL EQUIPMENT

- Hydraulic chuck
- Spindle I.D. of 150 mm
- Self-towing device
- Built-in wireline hoist



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