NL-55



Versatile [Multi-Purpose] Spindle Type Drill

Designed for greater depth with larger diameter for civil
engineering works, Mineral
exploration and water well drilling.
Having gained a high reputation
especially around Asian market,
major mining and drilling companies
have introduced NL-55 in their
drilling operation.

Features

1) Versatility

Applicable to several purposes: Large diameter with air hammer and roller bit works, soil investigation, water well and hot spring drilling.

2) Efficient Operation

Central Control System enables an operator to avoid unnecessary motions and work in safe.

3) High Fuel Efficiency

Double fuel efficiency compared with that of Hydraulic drilling machines.

4) Robustness

Gearing structure enables the machine to last long.

5) Easy Maintenance

This advantage can be most helpful to operators in remote drilling sites.

6) Long Life



HAM-R Hydraulic Chuck



One Man Control System



Built-in Wireline Hoist







Happy Sewing Machine Bldg.6th floor 9-5, 2-Chome, Taito, Taito-Ku, Tokyo 110-0016 Japan

NL-55 Technical Specifications

Diesel Engine Type

Drilling Depth Guidelines for Wireline

NJ-WL (O.D. 69.9 mm)	1,500 m
HJ-WL (O.D. 88.9 mm)	1,000 m
PJ-WL (O.D. 114.3 mm)	600 m

Prime Mover

Diesel Engine Unit	ISUZU 4 Cylinder Diesel Turbo Engine (Water Cooled)
Displacement	4.3 L
Rated Power at 1,800 rpm	60 kW (81.8 PS)

Drill Head

Maximum Rod Diameter	145 mm (142 mm with Hyd. Chuck)
Mechanical Transmission	4 Speed & Low / High + Reverse

Torque & RPM Ratings at 1,800 rpm

	Speed (rpm)		Torque (Nm)	
	Low	High	Low	High
1st Gear	31	176	18,484	3256
2nd Gear	62	360	9,242	1593
3rd Gear	114	658	5,022	870
4th Gear	193	1110	2,963	516

Hydraulic System

Primary Pump	Piston Pump
Max. Flow / Pressure	57 L/min at 1,800 rpm / 13.7 Mpa

Drill Mast & Feed System

Feed Stroke	600 mm
Pull Capacity	222.4 kN at 13.7 MPa
Thrust Capacity	168.5 kN at 13.7 MPa
Rod Pull	3 m or 6 m
Drilling Angle	0 ± 90°(Vertical) / 25 ± 90° with Built-in Mast

Main Hoist

Max. Line Pull	63.7 kN at 21 m/min at 2nd Gear
Line Speed at 1,750 rpm	10 - 21 - 39 - 66 m/min
Wire Capacity	80 m (16 mm Dia.)

Built-in Wireline Hoist

Max. Line Pull	9.8 kN
Line Speed	70 m/min
Wire Capacity	1,300 m(5 mm Dia.)

Dimention & Weight (Main Body)

Dimentions (LxWxH)	2,920 x 2,250 x 2,090 mm
Weight (Less Power)	4,500 kg

Drilling Depth Guidelines

Drilling Capacity have been calculated, based on field experiences, and may be reasonably expected. Ratings are based on vertical, straight, clean down hole using a 127.4 kN hoist (2 Part Line Pull). Actual drilling capacity will depend on in-hole tools, conditions, drilling techniques and equipment used.

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^{*} Specifications may change for upgrading without any notices.