

NLC CO., LTD



NL-500

All Hydraulically Driven Core Drill

NL-500 Drill was developed in pursuit for **Safety Control**, **Labor Saving** and **Cost Efficiency**, performing drilling up to **550m** in mineral exploration and soil investigation.

Features

1. Versatility

Suitable for both High Speed and Low Speed rotary works.

2. Function-oriented

Easy handling with the central Control System.

3. High Productivity

Easy set-up in a proper Bit Weight and Speed.

4. Strong Gear Head Drive

Option

• Sliding Head

can deal with large sized casings without opening Drill Head by hand.

• Mast Slide

Stroke : 1,500m

• Rod Connection Support

These optional functions can realize high productivity with fast stable drilling operation, preventing unnecessary troubles.

• Outrigger

• Skid Base

• Operation Seat

• Horizontal Application



Hydraulic Rod Holder



New Operation Panel

Option



Rod Connection Support



Sliding Drill Head



Mast Slide

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NL-500 Technical Specification

Drilling Depth Guidelines

NJ (NQ)	550m
HJ (HQ)	300 m
PJ (PQ)	—

Prime Mover

Standard Unit	Isuzu 4 Cylinders, Diesel Turbo Engine, Water cooled
Displacement	4.3 L
Power at 1,800 rpm [Rated Speed]	65 KW (87PS)
Weight	360 kg

Drill Head

Maximum Rod Diameter	95 mm (Option : 120 mm)	
Mechanical Transmission	NLC 4 SPEED	
Ratio	1st	5.50 : 1
	2nd	4.00 : 1
	3rd	2.39 : 1
	4th	1.00 : 1
Final Drive	Gear Drive (not Roller Chain)	
Ratio	1.241 : 1	

Torque & RPM Ratings at 1,800 rpm (65 kw) of Engine

	Speed (RPM)	Torque (kN)
1st Gear	70 ~ 210	5.4
2nd Gear	150 ~ 300	3.8
3rd Gear	250 ~ 500	2.3
4th Gear	470 ~ 1,200	0.95

Hydraulic System

Primary Pump	
Max Flow	175 L/m
Maximum Pressure	20.0 Mpa
Secondary Pump	
Max Flow	120 L/m
Maximum Pressure	17.5 Mpa
Third Pump	
Max Flow	58 L/m
Maximum Pressure	14.0 Mpa

Hydraulic Tank Capacity	230 L
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Drill Mast & Feed System

Feed Stroke	1,850 mm
Pull Capacity	80.0 kN
Thrust Capacity	50.0 kN
Rod Pull	3 m or 6 m
Drilling Angle	30~90°

Main Hoist

Max. Line Pull	58.8 kN
Line Speed	24 m/min
Wire	60 m & 16 mm Dia.
Minimum Breaking Strength	182.0 KN

Wireline Hoist

Max. Line Pull	9.8 kN (Bare Drum)
Line Speed	65 m/min (Bare Drum)
Cable	1,500 m & 5mm Dia.
Minimum Breaking Strength	14.5 kN

Mud Pump

Standard Unit	AW1122 Triplex Piston Pump
High Flow / Low Pressure	120 L/min
Maximum Pressure	3.7 Mpa

Dimension & Weight (Main Body)

Dimensions (L x W x H)	4,500 x 2,450 x 2,050 mm
Weight (Less Power)	4,800 kg

Others

<p>Gear Transmission in Rotation Drill Head (Not Roller Chain)</p> <p>Central Control System</p> <p>Oil Tank Hand Pump</p> <p>Option : Sliding Drill Head, Mast Slide (1,200mm), Rod Connection Support</p> <p>Operation Seat, Outtrigger Trailer Mount, Crawler Mount, and so on.</p>
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Drilling Depth Guidelines

<p>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 58.8kN hoist (single line pull) . Actual drilling capacity will depend on in-hole tools, conditions, drilling techniques and equipment used.</p>
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