

NLC COMPANY LIMITED

FOR BETTER DRILLING BUSINESS



LONG TIME ACCUMULATED

TECHNOLOGY FROM JAPAN

TO THE WORLD



We, as a drilling equipment maker, have devoted ourselves to the development of the industry mainly in the areas of deep hole drilling and geological survey since we established our company in 1983. We got independent from Longyear Company after a long time experience since 1956, holding great ambition with the inherited technology.

With the rapid spread of industrialization on a global scale, we have witnessed in many areas rising problems threatening human existence. Among them, "Greenhouse Warming" is becoming a major human concern, whose solution requires ultimate culmination of human wisdom with global human efforts. Our mission is to be part of those efforts with our long accumulated expertise and experiences in the coring technologies ecological surveys.

"Where a hole is dug, there is our job."

We manufacture and market high quality products: Drilling Machines, Drill Rods and Tools around the world. We have established firm status with Wireline Coring System mainly in the field of Mining Exploration, Soil Investigation, Water Well

Performance In The



AFRICA

South Africa Eritrea Ethiopia Mali Niger

OCEANIA

Australia New Zealand Papua New Guinea

SOUTH EAST ASIA

Malaysia

Philippines Chi
Singapore Hor
Vietnam Mo
Myanmar Kor
Indonesia Ky

EAST/CENTRAL ASIA

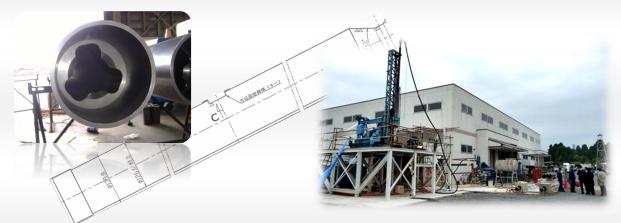
China
Hong Kong
Mongolia
Korea
Kyrgyz
Uzbekistan

CENTRAL/ SOUTH AMERICA

Nicaragua Chile Brazil **Our longtime accumulated expertise with advanced technology** is developed at our Mito Factory by capable engineers, incorporating customer needs brought from the head office in Tokyo and other branches.



Highlighted are such academic governmental projects as earth observation well and joint R&D (Research and Development), supplying drilling tools with a technology of control drilling in the optional direction. Such technical research and tests are conducted at our technical laboratory.



Our contribution is also to be focused on giving high quality support to customers in the process of a selection to an introduction of appropriate items. This is what we seek most to be always helpful to our customers.



Company Profile

Trade Name	NLC Company Limited			
Head Office	Happy Sewing Machine Bldg. 6th Floor 2-9-5, Taito, Taito-ku, Tokyo 110-0016 Japan			
Fukuoka Branch	2-4-1, Nakahata, Onojo, Fukuoka 816-0921 Japan			
Mito Factory	645-1, Kogyodanchi, Hitachiomiya, Ibaraki 319-2134 Japan			
Company History	Nippon Longyear Co., Ltd., which was 100% owned by Longyear Company at Minneapolis, U.S.A., was established in Japan in 1956. Since then Nippon Longyear had been manufacturing and marketing Drilling equipment, Wireline system, civil engineering equipment under Longyear patents and licence. As of June 1, 1983, Nippon Longyear transferred all the rights of manufacturing and marketing on Longyear products to NLC Co., Ltd. that was authorized by Longyear Co. NLC commenced manufacturing and marketing as the successor of Nippon Longyear effective from June 1, 1983. Established in Shibuya-ku, Tokyo with the paid-up Capital of ¥50,000,000. On June 1, 1994, Geo Engineering Co., Ltd. was established, being independent from Contract division of NLC Co., Ltd with accumulated Wireline system technology of the company, targeting the development/introduction of advanced technology. Geo Engineering is 100% owned by NLC with paid-up Capital of ¥20,000,000.			
Main Handling Items	Mining, civil engineering, civil engineering works equipment, tools and accessories, Drilling Machines, Pumps, Core Tubes, Wire-Line Core barrels, Drill Rods, Casings, Packers for Grouting, Metal Bits, Tri-cone Bits, Diamond Bits, Air-Hammers, Mast, Wire-Line Hoist, Conical Bits, TC Inserts, TC Knife, TC Rods, Fiberglass Casings & Tubing.			
Certifications	ISO 19001 MSR MSA-QS-3992 JAB CM024			

NLC Company Limited

Product

Information





All Hydraulically Driven Core Drill

All Hydraulically Driven Core Drill









Features

1) Versatility

Both High speed and low speed rotation are applicable in drilling operations. PJ Head is available.

2) Function-oriented

Central Control system Hydraulic Sliding Head, Mast Slide and Rod Connection Support

(Optional)

3) High Productivity

Easy set-up in a proper Bit Weight & Speed

- 4) Mobility (when trailer mounted)
- 5) Other Option

Trailer Mount, Crawler Mount, Outrigger, Mud Pump & Mixer



		NL-500	NL-700-V2	
Drilling Capacity	m	HJ-WL-300m / NJ-WL -550m	PJ-WL-350m / HJ-WL-500m/	
Drining Capacity		116 112 6661117 116 112 666111	NJ-WL -700m	
Spindle I.D	mm	95 / 120 (PJ : Optional)	95 / 120 (PJ : Optional)	
Spindle RPM	rpm	70-210, 150-300, 250-500, 470-	70-210, 150-300, 250-500, 470-1,200	
Opinale 141 W	ipiii	1,200	70 210, 100 000, 200 000, 470 1,200	
Torque (Max.)	kN	5.4, 3.8, 2.3, 0.95	6.1, 4.3, 2.6, 1.1	
Thrust	kN	50	50	
Pull	kN	80	80	
Feed Stroke	m	1.85	2.1	
Hud Dump	L/min-Mpa	1st:175-20.0, 2nd:120-17.5,	1st:175-25.5, 2nd:120-17.5,	
Hyd. Pump		3rd:58-14.0	3rd:50-14.5	
Max. Output	PS	87 (65kw) / 1800 rpm	168.3 (123.6kw) / 2200rpm	
Dimensions	mm(LxWxH)	4,500 x 2,450 x 2,050	4,710 x 2,530 x 2,090	
Weight	kg	4,800 (Less Power)	6,500 (Less Power)	

Drilling Capacity, Spindle RPM and Torque are calculated figures.

Mechanical Spindle Type Drill

NL-55

Prestigious drill designed to deal with greater depth with larger diameter.



Features

1. Versatility

High Speed, High Torque and 145mm Spindle I.D. realize several types of drilling Operations.

- 2. High Fuel Efficiency
- 3. Robustness / Long Life
- **4. Easy Maintenance**Very helpful for maintenance in remote areas.
- 5. Long Life





Drilling Capacity	m	PJ-WL- 600 m / HJ-WL-1000m / NJ-WL -1500m		
Spindle I.D	mm	145mm (142mm when Hyd.Chuck used)		
Spindle RPM (Max.)	rpm	Low:31, 62, 114, 193 High:176, 359, 658, 1109		
Torque (Max.)	N∙m	Low:18484, 9241, 5021, 2962 High:3255, 1593, 870, 510		
Thrust	KN	168.5		
Pull	KN	222.4		
Feed Stroke	mm	600		
Oil Pump	L/min-Mpa	57-13.7		
Max. Output	KW/PS	45/60 (at 1600rpm)		
Dimension	mm(LxWxH)	2920 x 2250 x 2090		
Weight	kg	3300		

Drilling Capacity, Spindle RPM and Torque are calculated figures.res.

Center Hole Machine

NL-55 Conversion Kit for Long Feed Top Drive

- 1. Long Feed Stroke of 6.5m
- 2. Kelly rod drive for powerful drilling
- 3. Switchable **Hyd. Motor** on the head with higher rotation speed for coring
- 4. Hyd. Breakout Wrench and Holder







Mechanical Spindle Type Drill

L-38-98

High Speed Diamond Core Drill L-38 is well known model in the world, having high acceptance in mineral exploration throughout the global market.



Features

- 1) 8 Bit Speed 4-step Gear x High & Low
- **2) High Speed**High Speed is up to 1,105 rpm.
- 3) Robustness / Long Life
- 4) Easy Maintenance
- 5) High Fuel Efficiency
- 5) Option

Built-in Mast / Built-in Wireline Hoist





Built-in Mast

Two types of built-in masts are available as options : Long Tall Mast: 9.9m Single Pole Mast: 6.7m (Height)





Drilling Capacity	m	HJ-WL - 375m / NJ-WL - 565m		
Spindle I.D	mm	98mm (94mm when Hyd.Chuck used)		
Spindle RPM (Max.)	rpm	Low:41, 85, 156, 265	High:172, 357, 653, 1105	
Torque (Max.)	N∙m	Low:6000, 3560, 1940, 1150 High:1750, 850, 460, 270		
Thrust	KN	58.4		
Pull	KN	85.3		
Feed Stroke	mm	600		
Oil Pump	L/min-Mpa	50-8.8		
Max. Output	KW/PS	38/51 (at 1800 rpm)		
Dimension	mm(LxWxH)	2250 x 1160 x 1750		
Weight	kg	1880 Less Power		

Mechanical Spindle Type Drill

L-38-150 "Megalo"

Spindle Type of Drill for Larger Diameter has enjoyed high prestige in Japanese market over long years.

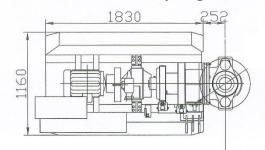


Features

- 1) 8 Bit Speed
- **2) High Torque**High torque is up to 10375Nm.
- 3) Large diameter with 148 mm I.D.
- 4) Versatility
 - · Water-well drilling
 - · Anchor drilling
 - · Coring operation, etc.
- 5) Robustness / Long Life
- 6) Easy maintenance
- 7) High Fuel Efficiency

Standard Megalo

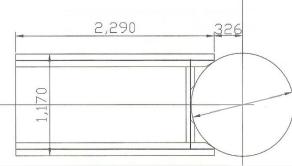




Max. applicable actual diameter : **480mm**

L-Frame Megalo





Max. applicable actual diameter : **900mm**

Adding a standard model, we offer L-Frame Megalo to deal with bigger diameters of tools up to 900mm for water well drilling, civil constructions, etc.

		Standard L-38-150	L-Frame L-38-150	
Drilling Capacity	М	HJ-WL 375 / NJ-WL 565		
Spindle I.D	mm	145mm (142mm when Hyd.	Chuck used)	
Spindle RPM (50Hz)	rpm	Low: 35 / 71 / 130 / 220	Low: 30 / 61 / 112 / 190	
		High: 145/298/548/920	High: 122 / 257 /474 / 797	
Torque (Max.)	N∙m	1st : 4600 2nd : 1430 3rd : 640		
Thrust	kN	58.0		
Pull	kN	85.3		
Feed Stroke	mm	600		
Oil Pump	L/min - MPa	50 – 8.8		
Max. Output	kW/PS	49 / 66 at (1500 rpm)		
Dimension	mm (LxWxH)	2250 x 1160 x 1190	2820 x 1160 x 1920	
Weight	kg	1910 Less Power		

Drilling Capacity, Spindle RPM and Torque are calculated figures.res

Man-portable Compact Drill

NL-26

Man-Portable Drill equipped with Hydraulic Chuck.

This small-sized and light drilling machine can be disassembled to be easily carried to mountainous areas.



Performance in Philippines

Soil Investigation in 2018

DPWH

Features

1. Light Weight

Main Gear Case, Transmission & Clutch Housing, Swivel Frame, and Cross Head are of aluminum.

2. 6-step Gearing

Speed can be controlled finely in an actual drilling operation.

Max. Disassembling Weight:60 kgs (except power unit).

4. Compact Hydraulic Chuck equipped as a standard.

5. Safety

Rotary portions such as Cone Pulley and Drive Rod are equipped with Safety Guards.

1. Sealing System

No oil leakage from Gear Case nor the other portions.









Drilling Capacity	m	40.5 Rod – 230m / AJ-WL – 200m/ BJ-WL- 150m / NJ-WL – 100m	
Spindle I.D	mm	47mm	
Spindle RPM (Max.)	rpm	Low:90, 135, 180 High:275, 360, 560	
Torque (Max.)	N∙m	Low:912, 600, 450	High:275, 225, 150
Thrust	КN	30.9	
Pull	КN	38.5	
Feed Stroke	mm	515	
Oil Pump	L/min-Mpa	20-6.8	
Max. Output	KW/PS	8.6	
Dimension	mm(LxWxH)	1360 x 750 x 1405	
Weight	kg	450 Less Power	

Man-portable Compact Drill

NL-G80

Portable Drill with Hydraulic Top Head Drive

Designed for shallow coring, Geo technical and Tri-cone rotary drilling.











Features

Two types of G80s are available:

NL-G80 : standard : (50 to 800 rpm)
NL-G80 II : 2 speed transmission in two
rotational ranges (High Speed Coring and

High Toque Rotary Work)

1. Portability

Incorporates a compact modular design, and weight kg man portable. Easy to set up, operate, and service even in remote areas.

NL-G80 II NI -G80 Drill Rod N size Drilling Capacity 80 (max.) m 1st Gear 2nd Gear 2nd Gea Spindle rpm rpm 50 ~ 800 250 - 400 | 400 - 1000 10-130 10-200 (Max.) (Option) (Option) (Option) Torque (Max.) 391 N·m Thrust Capacity Ν Pull Capacity Hyd. Pump L/min-M pa 45(at 1200 rpm) / (at 1200 rpm)-14.0Mpa Max. Output KW/PS 11/17 mm(LxWx Dimensions 2100x1100x2700 (virtical) H) Weight kg 929

Increased power model (NJ x 137m) is also available.

2. Versatility

- Rotary operation with optional high torque/low speed motor Tri-cone Roller Bits to depth of 35 m.
- High Angles from 90 to 37 or 50° degrees.

3. Productivity

- · Productive with its 1.7m feed stroke.
- · Optional Extension Mast with Double Sheave for wireline drilling

4. Safety

Emergency stop system for Rod rotation when opening Safety Cover.

Machines for Civil Construction

LHB-150 Low Head

Drilling / Injection Combined Machine for Jet Grouting with Step-up device

Low Head eliminates going up to the top of machine in rod lifting..

Spindle I.D	mm	145mm (142mm when Hyd. Chuck used)		
Spindle RPM (50Hz)	rpm	Low: 1 - 6.5 / 2.2 - 13 / 4 - 24 / 6.5 -41 High: 11.5 - 71 / 24 - 144 / 43 -262		
Torque (Max.)	N∙m	1st : 4600 2nd : 1430 3rd : 640		
Thrust	kN	17.6		
Pull	kN	27.4		
Step-up Interval	mm	25-50-75		





Compact Hydraulic Drill for drilling on slopes or tunnel, etc. with DTH.

Control Panel and Oil Power Unit are separated.

•			
	m	LSD 7.5	LSD 3.7
Drilling Capacity		20-80m (at 66-115 mm dia. hole)	10 (at 66 mm dia. hole)
Spindle I.D	mm	62	42
Spindle RPM (Max.)	rpm	0-60	0-65
Drilling Angle	Degree	7(upward)-60(downward)	Any angle as installed
Torque (Max.)	N⋅m	980.6	441.3
Thrust	N⋅m	29414.9 (at 980 MPa)	400 (at 686 MPa)
Pull	N⋅m	24516.6	3922.6
Feed Stroke	mm	600	300
Retract Stroke	mm	450	300
Weight	kg	470	100







NSP

"Rock Mighty Drill"

Hydraulically Driven Compact Rotary Percussion Drill

Light weight for easy scaffolding / Double Tube Percussion Drilling

light weight for easy scanolding / Double Tube Fercussion Drining						
		NSP-30	NSP-30V	NSP-37V		
Drilling Capacity	m	20–3	0m	30-50		
Percussion	bpm		550-880			
Spindle RPM (Max.)	rpm		35, 65			
Striking Force	kg•m	0-55				
Casing Size	mm	96, 118, 133				
Drilling Angle	Degree	5 (upward)-45 (downward) 30 (upward)-90 (downward)				
Torque (Max.)	N·m	2941.9, 1470.9		3922.6, 1961.3		
Thrust	N∙m	19613.3 (at 13.7 MPa)		21574.6 (at 16.6 MPa)		
Pull	N·m	26477.9 (at 13.7 MPa) 31871.		31871.6 (at 16.6 MPa)		
Feed Stroke	mm	1700				

