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# LX™ 11 MULTIPURPOSE DRILL

Technical Overview



# LX™ 11

The LX11™ is a powerful medium-sized exploration multipurpose drill capable of both diamond coring and reverse circulation drilling.

The LX11 is ideal for all drilling contractors who need the flexibility of a multipurpose machine in their fleets. The LX11 is a drill that provides increased safety, operational flexibility with a low overall cost of ownership.



The LX™ 11 is the culmination of many years of hands-on experience, advanced engineering and field-testing.

## FLEXIBILITY

- Reverse Circulation and Diamond Coring Capabilities. A 7.2 m feed stroke and a top drive head allow 6-meter rods to be pulled under the head.
- Small footprint for easier site access and maneuverability

## SAFETY

- An available rod presenter allows for safe and efficient handling of rods
- Standard radio remote control for safer driving
- An interlocked safety cage provides additional operator protection

## REDUCED COST OF OWNERSHIP

- Drill service parts are conveniently located for easy access and reduced maintenance
- Fuel efficient John Deere or Deutz engine options
- The LX11 is designed to fit into a standard shipping container reducing transportation costs



**1 TOP DRIVE SINGLE ROTARY DRILL HEAD.**

Maximum rotation speed of 1200 rpm, maximum torque of 7.8 kNm @ 100 rpm.

**2 DRILLERS CONTROL PANEL.**

Placed for ideal visibility.

**3 OPTIONAL ROD PRESENTER.**

For safe and efficient handling of both RC and diamond coring rods.

**4 THE INTERLOCKED SAFETY CAGE.**

Protects the operators from the rotating drill string. If the guard is opened during drilling, feed speed and rotation is reduced.

**5 OPTIONAL 1200 CFM CYCLONE.**

For reverse circulation drilling.

**6 A 7.2 M FEED STROKE AND TOP DRIVE HEAD.**

Allow 6-meter rods to be pulled under the head.



# TECHNICAL INFORMATION

Drilling Depth Guidelines - Diamond Core		
Drill Rod / Core Barrel	Metric	U.S.
BRQ™ / BQ™	2,000 m	6,560 ft
BRQTK / BQTK	2,600 m	8,530 ft
NRQ / NQ / NQ2	1,450 m	4,750 ft
NRQ V-WALL™	1,750 m	5,740 ft
HRQ / HQ	925 m	3,035 ft
HRQ V-WALL™	1,175 m	3,850 ft
PHD / PQ	450 m	1,475 ft
PHD V-WALL™	775 m	2,540 ft

The figures in these tables have been calculated, based on field experiences, and may be reasonably expected. Actual drilling capacity will depend on in-hole tools, conditions, drilling techniques and equipment used.

Drilling Depth Guidelines - Reverse Circulation		
	Metric	U.S.
RC 4 "	400 m	1,310 ft
RC 4 1/2 "	325 m	1,065 ft

Prime Mover		
	Metric	U.S.
Engine	John Deere, 6068HF485, Tier III	
Fuel	Diesel	
Fuel Consumption	39 l/h (Full Power)	10.3 gal/h (Full Power)
Maximum Power	187 kW @ 2,000 rpm	251 hp @ 2,000 rpm
Engine	DEUTZ, TCD 2013 L06 2V Tier III	
Fuel	Diesel	
Fuel Consumption	31 l/h (Full Power)	8.2 gal/h (Full Power)
Maximum Power	176 kW @ 2,000 rpm	236 hp @ 2,000 rpm
Electrical Circuit	24 V	
Fuel Tank Capacity	500 l	132 gal

<b>Hydraulic System</b>		
	<b>Metric</b>	<b>U.S.</b>
Primary Pump	Axial Piston Pump with Power Regulator, Load Sensing and Pressure Regulator	
Maximum Flow, Q1	240 l/min	64 gal/min
Maximum Flow, Q2	190 l/min	50 gal/min
Maximum Pressure	300 bar	4,300 psi
Auxiliary Pumps	2 x Gear Pump	
Flow Q3	36 l/min	9.5 gal/min
Flow Q4	30 l/min	6.6 gal/min
Hydraulic Oil Tank Capacity	600 l	158 gal

<b>Single Rotary Head LXH25</b>		
	<b>Metric</b>	<b>U.S.</b>
Maximum Torque	7.8 kNm @ 100 rpm	5,800 ft-lbf @ 100 rpm
Maximum Rotation (Varies by head selection)	1,200 rpm @ 0.64 kNm	1,200 rpm @ 470 ft-lbf

<b>Undercarriage</b>		
	<b>Metric</b>	<b>U.S.</b>
Type	B4	
Crawler Width	500 mm	19.7 in
Crawler Track Type	Steel, 3 rib grouser plate	
Driving Speed	2 km/h - 4 km/h	1.25 mph - 2.5 mph
Maximum Grade+B15 (without winch)	20°	

<b>Machine Controls</b>		
Drilling Controls	Pilot Hydraulic, Adjustable Driller Panel	
Drilling Control Panel	2 point positioning adjustment	
Driving Controls	Radio Remote Control - Standard	
Mast Hydraulic Hose Bundle	Mounted on Right of Mast	

# TECHNICAL INFORMATION

Drill Mast and Feed System		
	Metric	U.S.
Drill Mast Feed Method	Hydraulic Feed Cylinder	
Drill Mast Length (w/o Cat Head and clamp support)	9 m	29.5 ft
Feed Stroke Length - Single Head	7.2 m	23.6 ft
Feed Speed - Down	52 m/min	170 ft/min
Feed Speed - Up	10 m/min	32.8 ft/min
Fast Feed Speed - Up	34 m/min (66 m/min @ 5.5 to)	112 ft/min (216 ft/min @ 12,125 lb)
Pull Down Force (Crowd)	94 kN	21,100 lbs
Pull Back Force	170 kN	38,200 lbs
Mast Dump	1.8 m	5.9 ft
Maximum rod length - Single Head	6 m	20 ft
Jib Crane	250 kg @ 3 m	

Rod Clamping / Breaking Systems		
	Metric	U.S.
<b>254 mm Pivoting Jaw System</b>		
Maximum Clamp Diameter	254 mm	10"
Clamping Range	60 mm - 254 mm	2.4" - 10"
Maximum Holding Force	196 kN	44,000 lbf
Maximum Break Out Torque	32 kNm	23,600 lb-ft
Centralizer Sizes	76, 89, 101, 108, 114, 133, 152, 178, 220, 254 [mm]	
Clamp Jaw Style	Pivoting	
<b>Foot Clamp KWL 1600</b>		
Clamp Diameter Range	BQ - PQ	

Water Pumps		
	Metric	U.S.
<b>Pump Type</b>	<b>FMC L1118 DISC</b>	
Flow	112 l/min	29.6 gal/min
Pressure	83 bar	1,200 psi
<b>Pump Type</b>	<b>HPW 200/30 Mist Pump and High Pressure Washer</b>	
Flow	30 l/min	8 gal/min
Pressure	200 bar	2,900 psi



<b>Winch</b>		
	<b>Metric</b>	<b>U.S.</b>
<b>Winch Type (Option)</b>	<b>Main Hoist</b>	
Maximum pull on inner layer	55 kN	12,300 lbf
Line Speed	48 m/min	158 ft/min
Cable Diameter	16 mm	0.63 in
Cable Length	21 m	69 ft
<b>Winch Type (Option)</b>	<b>Main Hoist</b>	
Maximum pull on inner layer	120 kN	27,000 lb
Line Speed	58 m/min - 34 m/min	190 ft/min - 111 ft/min
Cable Diameter	22 mm	0.9 in
Cable Length	20 m	66 ft
<b>Winch Type</b>	<b>Wireline</b>	
Maximum pull on inner layer	10 kN	2,250 lbf
Line Speed	440 m/min - 155 m/min	1,440 ft/min - 508 ft/min
Length at Cable Diameter	1,400 m @ 6 mm	4,600 ft @ 0.24 in
Length at Cable Diameter	1,650 m @ 5 mm	5,400 ft @ 0.20 in

<b>Rod Handling</b>		
	<b>Metric</b>	<b>U.S.</b>
Rod Presenter	6 m	20 ft
Coring Capability HQ / NQ / PQ		
RC Capability	76 - 114 mm	3 - 4.5"

<b>Oil Line Lubricator For DTH Drilling</b>		
	<b>Metric</b>	<b>U.S.</b>
Tank Capacity	10 l	2.7 gal
Max Pressure	35 bar	507 psi

<b>Optional Accessories</b>	
Cyclone	1200 cfm

<b>Weight</b>		
	<b>Metric</b>	<b>U.S.</b>
Weight (dependant on additional equipment)	20,000 kg	44,100 lb

## Measurements

**Weight:**

20,000 kg (44,100 lb)\*

**Width:**

2,430 mm (8 ft)

**Length**

11,500 mm (37.7 ft)

**Height (Road Transport):**

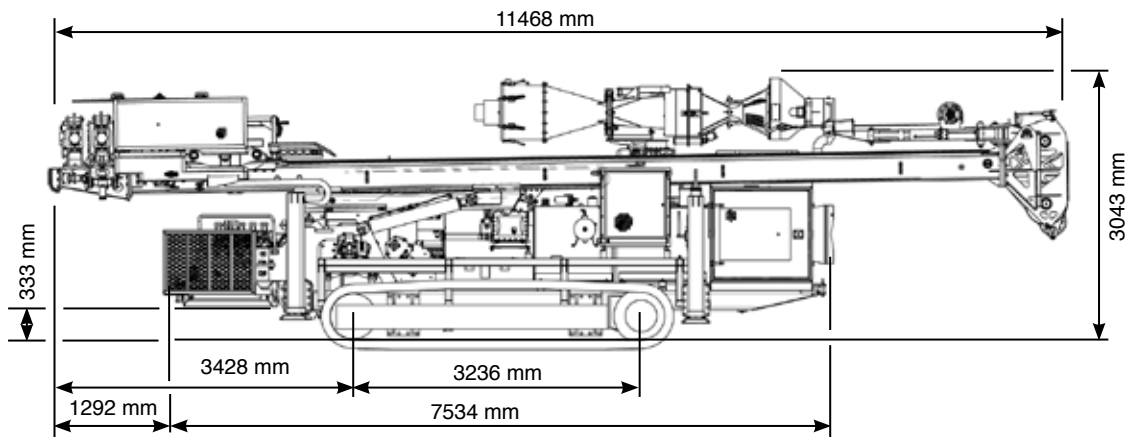
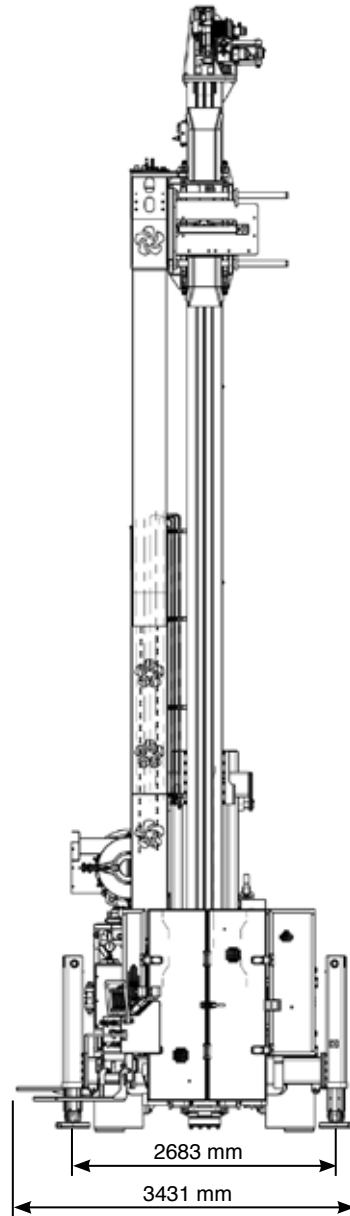
2,800 mm (9.2 ft)

**Width (Container Transport):**

2,250 mm (7.4 ft)

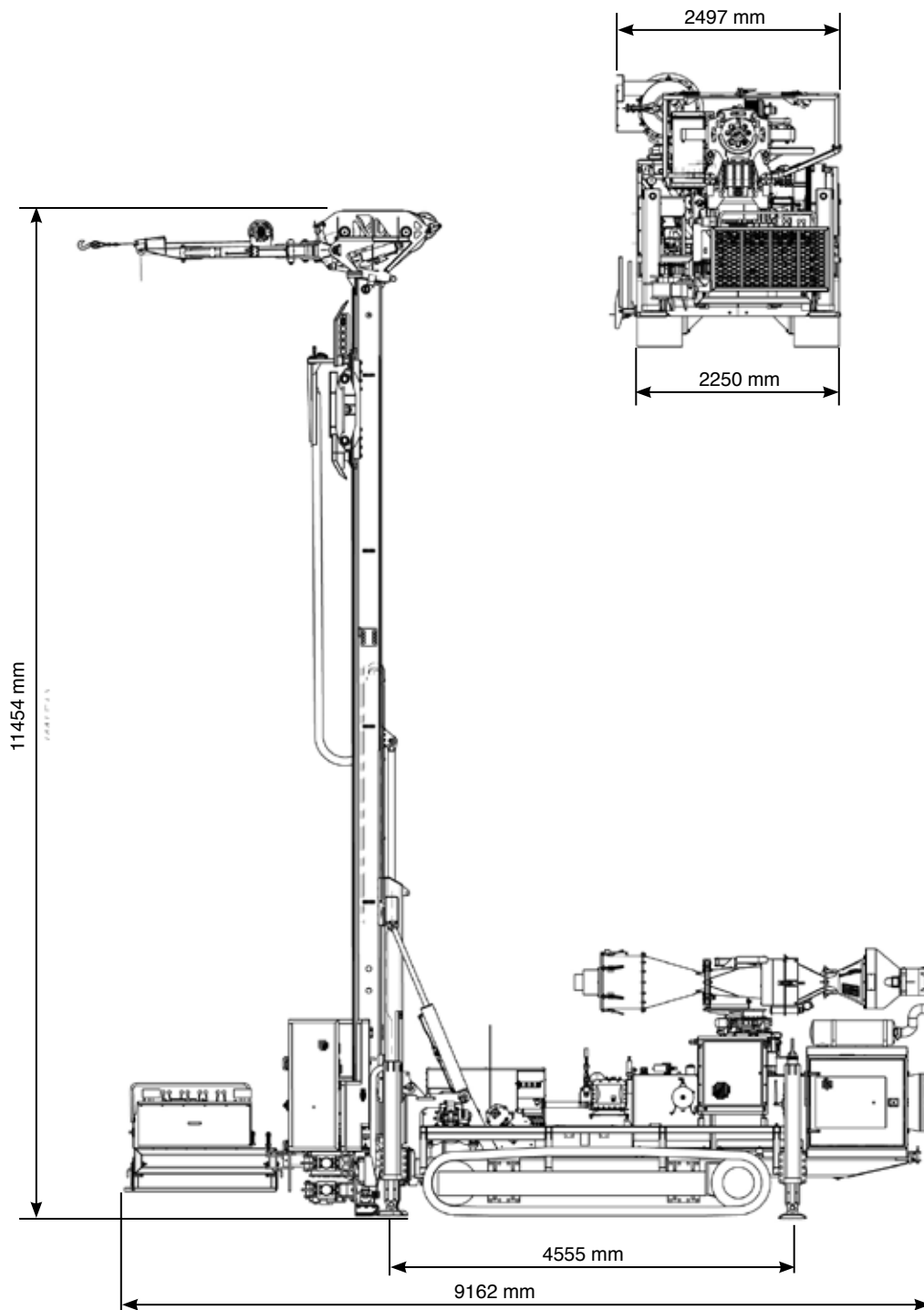
**Height (Container Transport):**

2,590 mm (8.5 ft)



\*Weight will vary based on additional equipment.

## Measurements





### Global Headquarters

Boart Longyear  
10808 South River Front Parkway  
Suite 600  
South Jordan, Utah 84095  
United States of America  
info@boartlongyear.com

Tel: +1 801 972 6430  
Fax: +1 801 977 3374

### Latin America

Boart Longyear  
Portal Riesco  
Av. El Salto 4001, Huechuraba  
Santiago, Chile 858 0641  
infochile@boartlongyear.com

Tel: +56 2 595 3300  
Fax: +51 242 671

### Canada

Boart Longyear  
2442 South Sheridan Way  
Mississauga, Ontario  
Canada L5J 2M7  
info@boartlongyear.com

Tel: +1 905 822-7922  
Fax: +1 905 822-7232

### Europe

Boart Longyear  
12 Avenue des Morgines  
CH1213 Petit-Lancy,  
Geneva, Switzerland  
infoEU@boartlongyear.com

Tel: +41 22 709 0800  
Fax: +41 22 709 0801

### Asia Pacific

Boart Longyear  
26 Butler Boulevard  
Adelaide, 5950  
Australia  
info\_au@boartlongyear.com

Tel: +61 8 8375 8375  
Fax: +61 8 8375 8497

### Sub-Saharan Africa

Boart Longyear  
Cycad House, Constantia Office Park  
Cnr 14th Avenue and Hendrik Potgieter  
Weltevreden Park, 1709  
Gauteng, South Africa  
infosasa@boartlongyear.com

Tel: +27 11 767 9300  
Fax: +27 11 767 9301

## MINING AND EXPLORATION DRILLING PRODUCTS



Diamond Products



Genuine Q™ Wireline  
Tooling



Rods and Casing