



# STOPEMASTER™ SERIES HX

Rock Drill and Blast Rig Technical Overview

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# PRODUCTIVITY THROUGH SAFE, RELIABLE AND TRUSTED DESIGN

The StopeMaster™ Production Drill continues Boart Longyear's drive for continuous improvement. Along with low capital investment, the StopeMaster delivers increased productivity and decreased maintenance costs.

- Designed to bring maximum benefits in a compact, mobile package.
- Modular design with efficient dismantling and reassembly - it can be transported rapidly, even into captive areas, decreasing move time and increasing productivity.
- Excellent deep hole accuracy, through superior guidance of the durable feed system and Hercules centralizer.
- Consistent, high performance regardless of varying operator skill levels or conditions.
- Longer intervals between scheduled preventative maintenance servicing, proven through millions of feet of drilling experience.

Compact enough to get into the tightest drill situations:

- Cageable flexibility
- Level-to-level mobility
- Stope-to-stope versatility
- Optimum manoeuvrability
- Proven reliability

## Hercules Rod Mate™ Centralizer

The Boart Longyear™ Hercules Centralizer has very few parts, positive centering and is low cost. The robust Hercules is less complicated, more durable and harder working.



- Cassette type centralizer for quick changes
- Withstands torsional loading
- Withstands axial loading from percussion, feed force and total drill string weight
- Positively centers the drill output shaft during coupling and collaring functions
- Low maintenance because there are no pins or bushings (only 12 parts)

## DRILLING ACCURACY

- 4 levelling jacks for stability
- Standard Helac positioner assembly and feed stell cylinder ensure feed assembly is held firm and true

### Drilling Versatility



Drop Raise



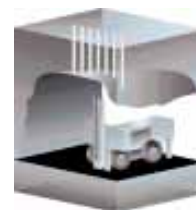
Cable Bolting



Fan Drilling



Ring Drilling



Parallel Drilling

## TECHNICAL INFORMATION

<b>Drill Specification:</b>		
	<b>Metric</b>	<b>U.S.</b>
Hydraulic Powerpack		
High efficiency electric motor	56 kW	75 hp
Tandem piston pump (Load sensing system)		
High pressure oil filter	10 micron	
Return oil filter	25 micron	
Main reservoir	260 liters	68 gallons
Auxiliary reservoir	75 liters	20 gallons
Fuel Capacity	25 liters	6.5 gallons
Electric oil transfer system (filtered)		
NEMA 4 electrical panel		
Water booster pump	3.5 kW	5 hp
Oil Lubricator (rock drill)	5 liters	5 qts
Thermostatically controlled oil cooler (water/oil type)	40 kW	54 hp
Electric trailing cable	12 m	36 ft
Filter condition indicator flags		
Fire suppression system (4 nozzle, manually operated)		

<b>Minimum Requirements to Drill</b>		
	<b>Metric</b>	<b>U.S.</b>
Air flow @ 90 psi	0.15 m <sup>3</sup> /min	5 cfm
Water Flow	38 L/min	10 gpm
Note: Higher water flow is required on deeper, larger diameter downholes		

<b>Carrier</b>
4 wheel skid steer
Gradeability - 30%
4 wheel independent drive and braking (SAHR) system
Solid rubber tires on steel rims
Motion control valving for precise control, even over rough terrain
Quick disconnect brakes for easy towing
Engine (Tramming) Deutz TD2011L0 Diesel 73hp Tier III 55 kW

<b>Drill Positioner</b>			
		<b>Metric</b>	<b>U.S.</b>
Dump		Helac dump positioner	
Traverse	side to side travel (total)	1.5 m	60 in
Adjustable pads to compensate for wear			
Movement via dual opposed cylinders			
Standard Helac positioner			
Rotation		Dual motor drive system c/w SAHR braking system	
Heavy duty rotation slew bearing			
Feed Crowd	Independent	0.74 m	29 in
Hydraulic cylinder driven			
<b>Stabilizers</b>			
<b>4 hydraulic cylinders</b>		<b>Metric</b>	<b>U.S.</b>
Stroke		0.51 m	20 in

<b>Rock Drill Feed System</b>			
		<b>Metric</b>	<b>U.S.</b>
Slim feed series feed assembly c/w:		Single telescopic hydraulic feed cylinder	
		Heavy duty steel frame	
		Replaceable wear pads	
		Front and rear stell cylinder	

<b>Controls</b>			
Modular designed components - for ease and speed of repair			
Direct acting feed positioning controls c/w remote pendant 24 VDC			
Remote control for all drilling functions 24 VDC			
Forward and aft tramming controls			

<b>Lights</b>			
24 VDC sealed beam tramming lights (front and rear)			
Single 500 watt drilling light			

<b>Rock Drill</b>			
HD155 - See HD155 Hydraulic Rock Drill Tech Data			

<b>Options</b>			
		<b>Metric</b>	<b>U.S.</b>
Portable fire extinguisher		9 kg	22 lbs
Ground fault monitor sub panel			
Laser hole alignment system			

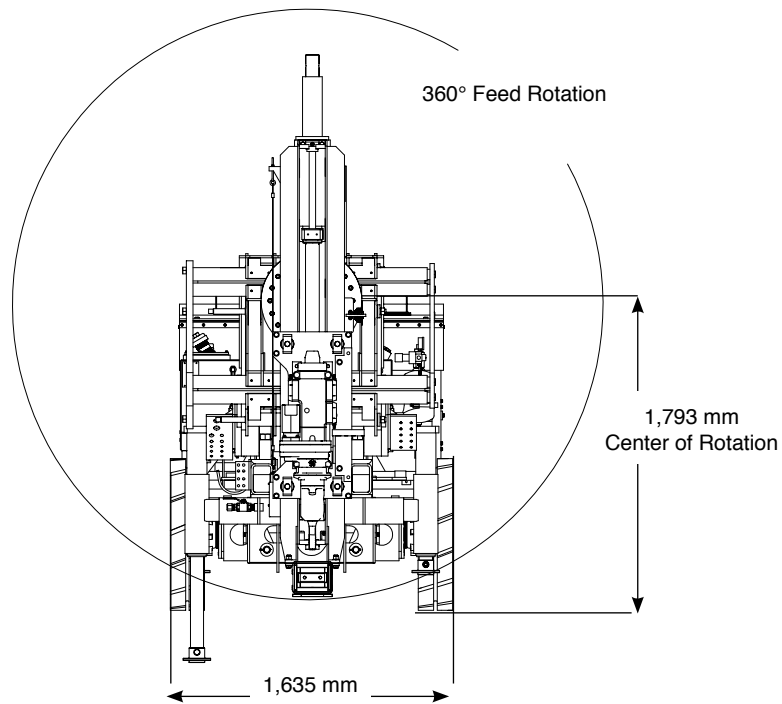
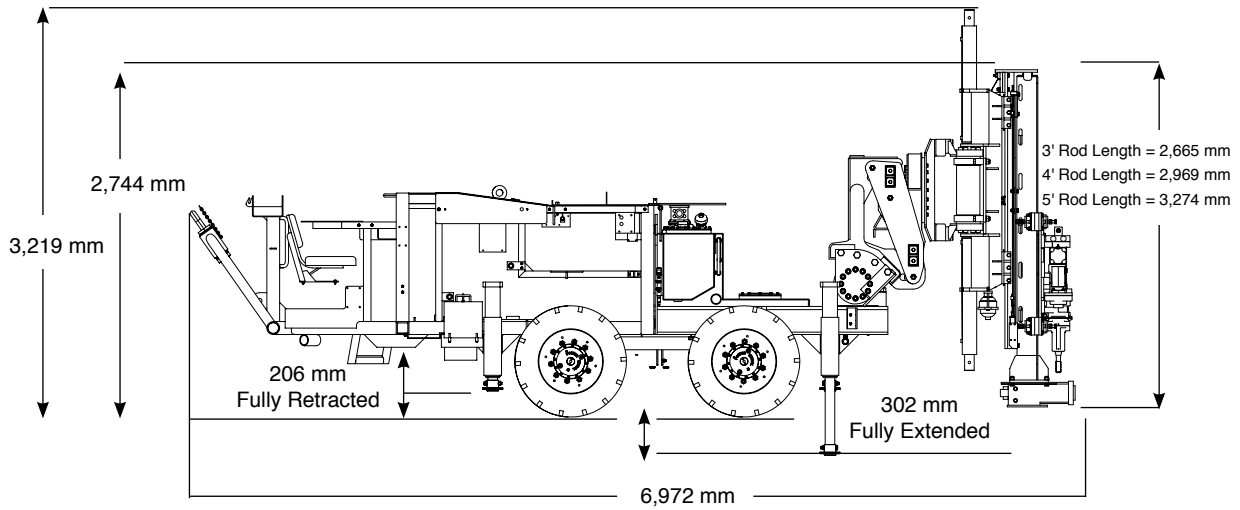
# DIMENSIONS AND WEIGHTS

<b>Overall Weight: 9,600 kg (21,165 lbs)</b>		
	<b>Metric</b>	<b>U.S.</b>
<b>Cage Transport (less traverse drill feed)</b>		
<b>Width</b>	1,635 mm	64.5 in
<b>Height</b>	1,829 mm	72 in

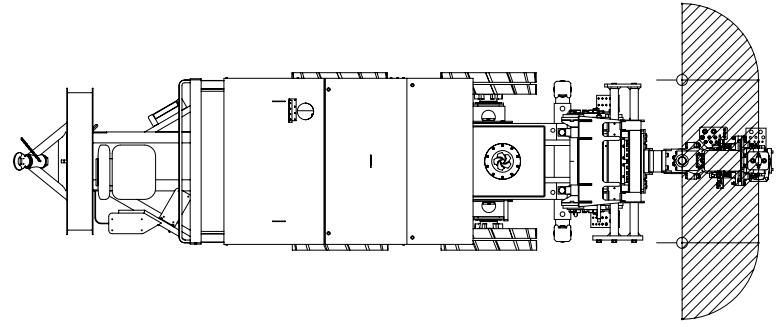
# StopeMaster™ Series Production Drill

Total Weight = 9,600 kg (21,164.4 lbs)

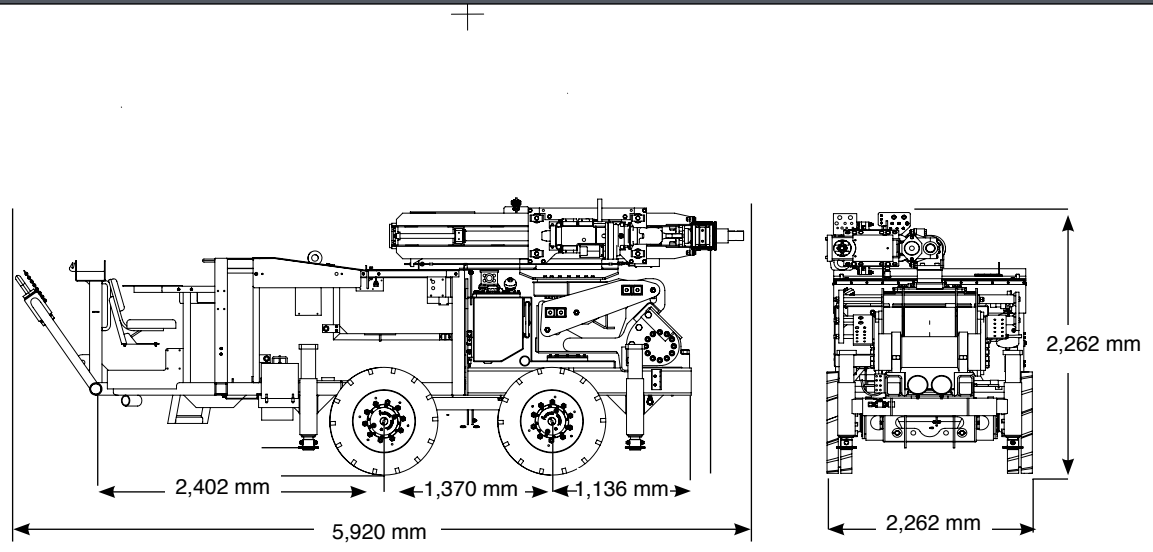
Max Speed 2.15 kph



**Drill Pattern**



**Drill Transport**







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## MINING AND EXPLORATION DRILLING PRODUCTS



Percussive Bits



Percussive Rods



StopeMate™