

MD6640 Rotary Blasthole Drill

Bailing Velocities: 15.5° C (60° F) @ Sea Level

Diameter				Nominal Compressor Rating – m³/min (icfm)			
Hole		Pipe		84.9 (3,000)		107.6 (3,800)	
cm	in	cm	in	m/min	ft/min	m/min	ft/min
25.1	9.875	17.8	7	3450	11,300	4378	14,359
27.0	10.625	19.4	7.625	3050	10,000	3879	12,724
31.1	12.25	21.9	8.625	2200	7,300	2807	9,206
31.1	12.25	23.5	9.25	2600	8,500	3293	10,800
34.9	13.75	27.3	10.75	2300	7,500	2890	9,478
38.1	15	32.4	12.75	2700	8,800	3402	11,157
38.1	15	34.0	13.375	3650	11,900	4606	15,108
40.6	16	32.4	12.75	1800	5,900	2273	7,456
40.6	16	34.0	13.375	2150	7,100	2754	9,034

Recommended Bailing Velocity Range: 1524-3658 m/min (5,000-12,000 ft/min)

Mast Components

Mast

Standard mast for drill pipe and one pipe rack	19.81 m	65 ft
Optional mast	21.33 m	70 ft
Computer analyzed, HD tubular lattice construction with back braces		
Raising and Lowering	(2) 228.6 mm (9 in) diameter hydraulic cylinders	
Angle Hole Drilling	25° off vertical in 5° increments*	

Hoist/Pulldown

Chainless rack and pinion system driven by head-mounted excavator grade DC motor

Bit Loading	Up to 63 975 kg	Up to 141,000 lb
Feed Rate	Up to 7.62 m/min	Up to 25 ft/min
Hoist Rate	Up to 22.86 m/min	Up to 75 ft/min
Lowering Rate	Up to 22.86 m/min	Up to 75 ft/min
Electronic Depth Indicator	Standard	
Auxiliary Winch – Standard Capacity	5443 kg	12,000 lb

Pipe Racks

Single Rack 0.31 m (13.375 in) OD pipe at least 25 mm (1 in) wall thickness	Standard
Optional Rack Configurations and Maximum Drill Pipe Diameter	
2 Pipe Racks	Maximum diameter may vary

Rotary Drive

Rotary Drive – DC motor	145 kW (195 hp) @ 475V
Bit Maximum Speed	125 rpm
Cat® Shock Coupling	Standard

*With optional angle hole equipment.

Electrical

Equipment

Static DC Variable Output

Power Requirements

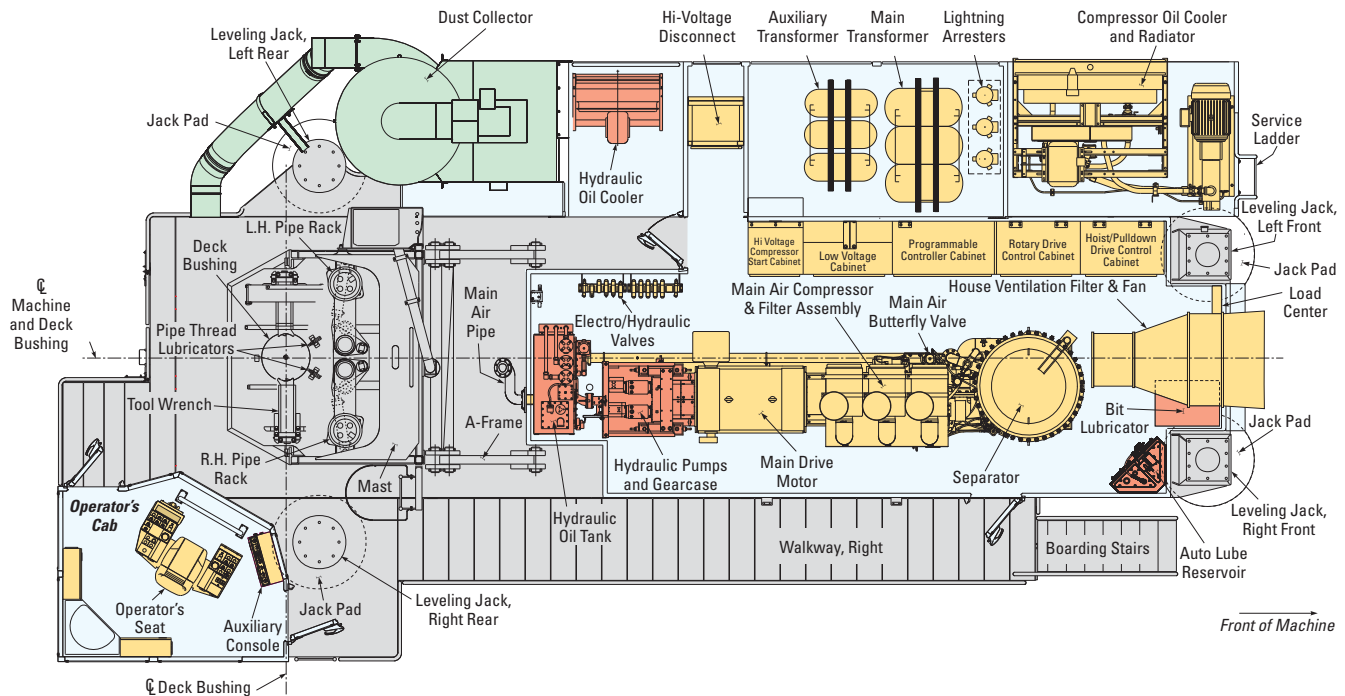
Voltage	3 Phase, 50/60 Hz, 4,160V to 7,200V**
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Main Electrical Systems

Air Compressor/AC Induction Motor	
Dual Shaft – Standard	448 kW (600 hp) @ 4,160V available for 85 m³/min (3,000 ft³/min) compressor
Optional	597 kW (800 hp) available for 108 m³/min (3,800 ft³/min) compressors
Hoist/Pulldown – DC Motor	97 kW (130 hp) @ 475V
Main Hydraulic Oil Pumps	Driven from main air compressor motor
Machinery House Pressurization – @ 529 m³/min (18,700 ft³/min) with 2.2 kW (3 hp) bleed fan	15 kW (20 hp) @ 460V
Operator Cab Pressurization with Heater and Air Conditioner	Standard
Hydraulic Oil Cooler Fan	4 kW 5 hp
Drive Transformer	3 Phase, 425 kVA dry-type
Transformer, Auxiliary	3 Phase, 250 kVA dry-type
Lighting	120/240V
Windshield Wipers – Upper and Lower Front	Standard

**For alternate power configurations consult Caterpillar.

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COMPONENTS

- Bit Viewing Hatch – Hydraulic Operated
- Hydraulic Breakout Wrench (optional)
- Dust Collector
- Tipton Dry Dust Control (optional)
- Leveling Jack (4)
- Service Platform
- Water Injection Dust Control – 3785 L (1,000 gal)
- Hydraulic Oil Cooler and Guard
- Transformers
- Compressor Oil Cooler
- Heated and Insulated Cooler Compartment (optional)
- Cable Reel (optional)
- Boarding Stairs
- Main Air Compressor Package
- Main Drive Motor
- Hydraulic Pumps and Gearcase
- Pipe Racks – 1 Standard (2 optional)
- Operator's Cab
- Hydraulic Oil Reservoir
- Electro/Hydraulic Valves
- Air Compressor Motor Control Center (MCC)
High Voltage Compressor Start Cabinet
- Low Voltage Motor Control Center (MCC) Low Voltage Cabinet
- Programmable Controller (PLC) Cabinet
- Rotary Drive Control Cabinet
- Hoist/Pulldown Drive Control Cabinet
- Auto-Lube System and Reservoir

OPTIONS

- 18.3 m (60 ft) or 21.3 m (70 ft) Masts
 - Angle Hole Drilling
 - Automatic Fire Suppression Systems Interface
 - Cold Weather Options
 - Dry Dust and Water Injection Dust Control Systems
 - Dust Curtains
 - Remote Propel
 - Front Tow Bar/Rear Tow Hooks
 - GPS Interface
 - Hydraulic Breakout Wrench (controlled from operator's control console)
 - Hydraulic Drive Cable Reels
 - Optional 108 m³/min (3,800 ft³/min) Compressor
 - Programmed Drill Control
 - Quick-Fill System for Oils and Lubricants
- Additional options to meet customer's needs.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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