



MD6380

Rotary Blasthole Drill

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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MD6380 Rotary Blasthole Drill Specifications

Engine

Emissions	U.S. EPA Tier 2/ EU Stage II equivalent	
Engine	Cat® 3512C @ 1,800 rpm	
Power Rating (ISO 14396)	949 kW	1,273 hp
Power Rating (J1995)	960 kW	1,287 hp

Compressor/Receiver Tank

- Rotary, single stage, low pressure 101.9 m³/min (3,600 ft³/min) @ 6.9 bar (100 psi); with low pressure receiver tank for ASME/CRN/AU or CE

Cooling

- Functional in ambient temperature of 52° C (125° F)

Undercarriage

Cat 374 EEL

Drawbar Pull	980 686 N·m	723,316 lbf
Double Grousers for Hard Rock Applications	750 mm	29.5 in
Double Grousers for Soft Rock Applications	900 mm	35.4 in

Hydraulics

- Two (2) primary pumps – 280 cc (piston with proportional electronic controls)
- One (1) auxiliary circuit pump – 145 cc (piston, load sensing)
- Two (2) fan pumps – 100 cc (piston with proportional electronic controls)
- Two (2) charge pumps – 74 cc (fixed displacement)
- Scheduled Oil Sampling (S·O·SSM) ports

Mast

Hole Diameter Range	251-381 mm	9.875-15 in
Single Pass Hole Depth Down To	19.8 m	65 ft
Multi-Pass Hole Depth Down To	39.5 m	129 ft
Bit Load Up To	53 845 kg	118,719 lb
Pulldown Capacity Up To	49 895 kg	110,000 lb
Rotation Torque Up To	20 880 N·m	15,400 lbf

- Vertical or angle drilling

Mast Accessories

- Pipe positioner (stabilizer) engaged/disengaged indicator, and interlock
- One hydraulic pipe catcher
- Hydraulic pipe support in the upper section of the mast

Pipe Loader

- LH/RH pipe racks holds 9.906 m (32.5 ft) drill pipe
- 219 mm (8.625 in) diameter
 - LH and RH, double pipe rack
 - Capable of single and multi-pass
 - Primary loader @ 29.68 m (97.4 ft)
 - Secondary loader @ 39.59 m (129.9 ft)
- 235 mm (9.25 in) diameter
 - LH and RH, double pipe rack
 - Capable of single and multi-pass
 - Primary loader @ 29.68 m (97.4 ft)
 - Secondary loader @ 39.59 m (129.9 ft)
- 273 mm (10.75 in) diameter
 - LH and RH, double pipe rack
 - Capable of single and multi-pass
 - Primary loader @ 29.68 m (97.4 ft)
 - Secondary loader @ 39.59 m (129.9 ft)
- 324 mm (12.75 in) diameter
 - Single pipe rack
 - Dust collector side only
 - Single pass only
- 340 mm (13.375 in) diameter
 - Single pipe rack
 - Dust collector side only
 - Single pass only

Break Out Wrench

- Variable Grip
 - 219, 235, 273 mm (8.625, 9.25, 10.75 in)
 - 324, 340 mm (12.75, 13.375 in)

Drill Tool Package

- One piece roller deck bushing, pipe positioner, deck wrench, bit sub, pipe wiper seal
 - 219 mm (8.625 in)
 - 235 mm (9.25 in)
 - 273 mm (10.75 in)
 - 324 mm (12.75 in)
 - 340 mm (13.375 in)

MD6380 Rotary Blasthole Drill Specifications

Subs

- Shock absorber with top sub adapter – available in Standard or Premium
 - 219 mm (8.625 in)
 - 235 mm (9.25 in)
 - 273 mm (10.75 in)
 - 324 mm (12.75 in)
 - 340 mm (13.375 in)

Operator Environment

- Cab, Standard
 - Includes a fabric seat, single pane window glass, shades, and a windshield wiper for driller window, removable driller window guard and a trainer seat
- Cab, Premium
 - Includes a leather seat with heat and ventilation, heavy duty suspension, dual pane window glass
 - Additional storage plus windshield wipers on front and rear windows
 - Removable driller window guard plus front window guard and trainer seat

Fluids

Service Packages

- Standard
 - Fast fill fuel and water only
 - Automated lubricant system
- Premium
 - Service center for lubricant drain and fill
 - Fast fill fuel and water
 - Automated lubricant system

Dust Suppression

Water Injection System	2271 L	600 gal
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- Tank below deck
- Fast fill

Water Injection/Dry Dust Collection	2271 L	600 gal
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- Tank below deck
- Fast fill
- 204 m³/min (7,200 ft³/min) dry dust collection

Water Injection System, High Volume	5299 L	1,400 gal
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Total Tank Capacity

- 2271 L (600 gal) below deck mounted tank
- 3028 L (800 gal) above deck mounted tank
- Fast fill

Batteries

- Four (4) each batteries, sealed
- Six (6) each batteries, sealed
 - Required for semi/full autonomy packages

Climate

- Level 1, Standard fluids and lubricants
 - Temperature range of –1° C (30° F) to 52° C (125° F)
- Level 2, Arctic fluids and lubricants
 - Temperatures down to –18° C (–0.4° F)

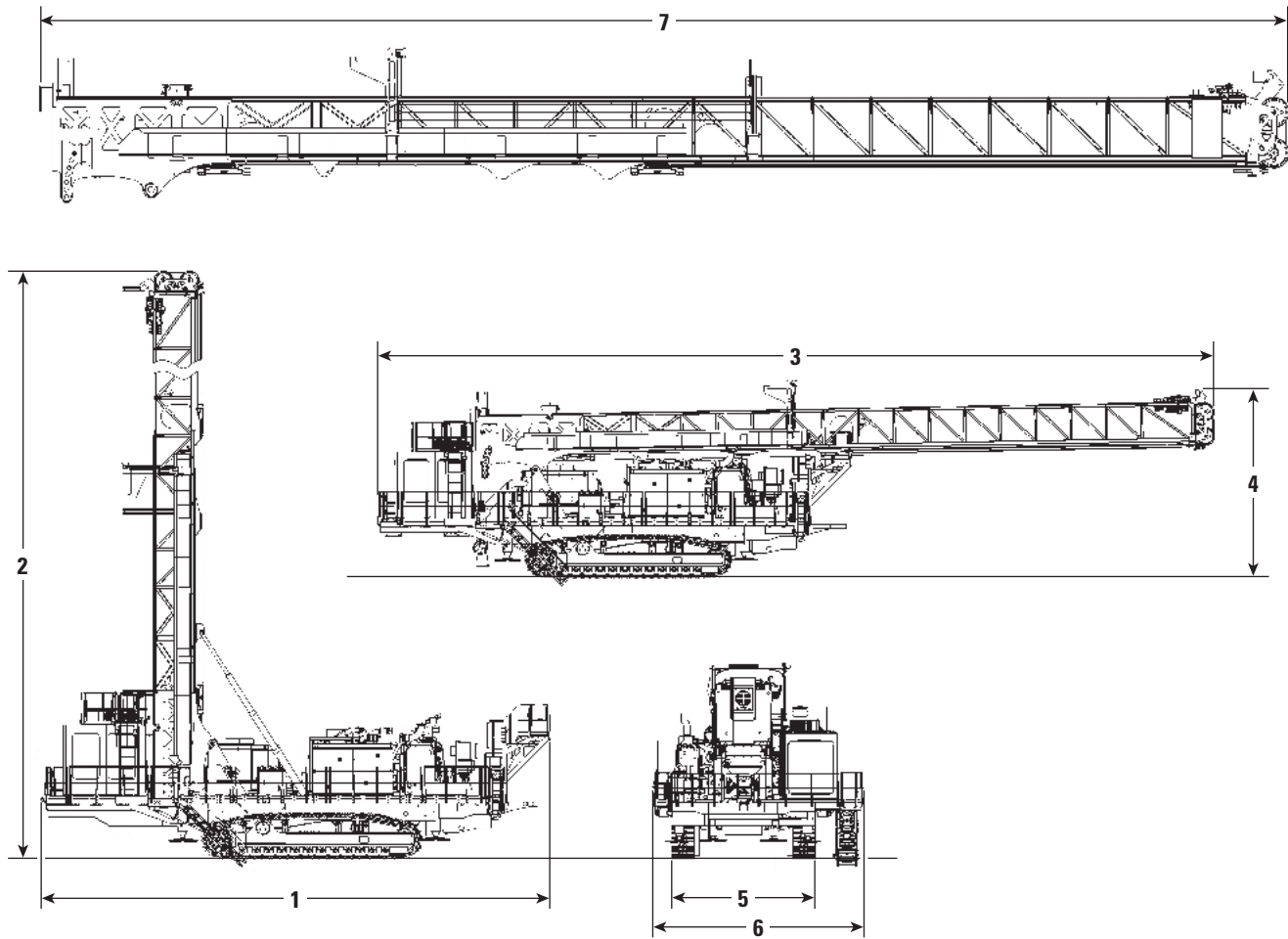
Automation and Technology

- Single pass auto drill/drill assist
- Multi pass auto drill/drill assist
- Drill depth meter
- Auto level, auto retract jacks, auto raise and lower mast
- Electric controls for drilling, tramming, leveling plus auxiliary functions
- Radio-ready for communication and entertainment radio
- Product Link™
- Integrated Terrain for Drilling complete with wiring and harnesses

MD6380 Rotary Blasthole Drill Specifications

Dimensions

All dimensions are approximate.



1 Working Length Mast Up*	14.7 m	48.1 ft
2 Height Mast Up	26.7 m	87.6 ft
3 Length Mast Down	28.3 m	92.9 ft
4 Height Mast Down	6.6 m	21.7 ft
5 Working Width (non-drill end)	6.06 m	19.9 ft
6 Working Width (drill end)	6.89 m	22.6 ft
7 Mast Only Shipping Length	25.24 m	82.8 ft

*Working Length Mast Up with bolt-on platform adds 1.2 m (4 ft) for total of 15.9 m (52.1 ft)

Weights

Working Weight Range	142 300 kg	313,717 lb
Without Mast	102 300 kg	225,533 lb
Mast Only	40 000 kg	88,184 lb

MD6380 Standard and Optional Equipment

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
POWER TRAIN			MAST		
Receiver tank for ASME/CRN/AU or CE receiver tank	✓		No mast access/handrail only	✓	
CAB			Mast Access Arrangement – Includes steps, guardrails, landing platforms, and walkway		✓
Standard cab – Includes a fabric seat, single pane window glass, shades, and a windshield wiper for driller window, removable driller window guard and a trainer seat	✓		Drill pipe thread greaser		✓
Premium cab – Includes a leather seat with heat and ventilation, heavy duty suspension, dual pane window glass – Additional storage plus windshield wipers on front and rear windows, a removable driller window guard plus front window guard and a trainer seat		✓	Tool Lubrication System – Rotary tricone, 113.5 L (30 gal)		✓
Viewing hatch to spot over the hole	✓		Flashing beacon for mast clearance		✓
Cab roof access system (includes ladders, cage and rails)		✓	Overhead winch assembly – Includes cable and hook plus remote		✓
Lights for tram (front and cab)		✓	PIPE LOADER (SELECT ONE)		
LED lighting	✓		219 mm (8.625 in) diameter – Two pipe rack – Capable of single and multi-pass	✓	
CONTROLS			235 mm (9.25 in) diameter – Two pipe rack – Capable of single and multi-pass	✓	
Basic drill depth indicator and interlocks	✓		273 mm (10.75 in) diameter – Two pipe rack – Capable of single and multi-pass	✓	
Auto Drill Assist – Single pass auto drill		✓	324 mm (12.75 in) diameter – Single pipe rack – Dust collector side only – Single pass only	✓	
Auto Drill Assist – Multi pass auto drill		✓	340 mm (13.375 in) diameter – Single pipe rack – Dust collector side only – Single pass only	✓	
Manometer/pressure gauge		✓	TOP SUB/SHOCK SUB (SELECT ONE)		
Remote tram		✓	219 mm (8.625 in) standard	✓	
PRODUCT LINK/TERRAIN			235 mm (9.25 in) standard	✓	
Product Link (Satellite)		✓	273 mm (10.75 in) standard	✓	
Product Link (Cellular)	✓		324 mm (12.75 in) standard	✓	
Product Link (Dual)		✓	340 mm (13.375 in) standard	✓	
Terrain (Guidance)		✓	219 mm (8.625 in) premium		✓
			235 mm (9.25 in) premium		✓
			273 mm (10.75 in) premium		✓
			324 mm (12.75 in) premium		✓
			340 mm (13.375 in) premium		✓

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MD6380 Standard and Optional Equipment

Standard and Optional Equipment *(continued)*

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
TOOL GROUPS (SELECT ONE)			TRICONE BITS GROUP (SELECT ONE)		
219 mm (8.625 in)	✓		9.875 in (251 mm) tricone bit		✓
– One piece roller deck bushing, pipe positioner, deck wrench, bit sub, pipe wiper seal			10.625 in (270 mm) tricone bit		✓
235 mm (9.25 in)	✓		12.25 in (311 mm) tricone bit		✓
– One piece roller deck bushing, pipe positioner, deck wrench, bit sub, pipe wiper seal			Bit lock plate 251 mm (9.875 in)		✓
273 mm (10.75 in)	✓		Bit lock plate 270 mm (10.625 in)		✓
– One piece roller deck bushing, pipe positioner, deck wrench, bit sub, pipe wiper seal			Bit lock plate 311 mm (12.25 in)		✓
324 mm (12.75 in)	✓		Bit lock plate 349 mm (13.75 in)		✓
– One piece roller deck bushing, pipe positioner, deck wrench, bit sub, pipe wiper seal			Bit lock plate 381 mm (15 in)		✓
340 mm (13.375 in)	✓		Hydraulic bit basket	✓	
– One piece roller deck bushing, pipe positioner, deck wrench, bit sub, pipe wiper seal			SERVICE TOOLS		
VARIABLE GRIP HYDRAULIC BREAKOUT WRENCH (SELECT ONE)			Lifting bail 152 mm (6 in) BECO for 194-235 mm (7.625-9.25 in) pipe		✓
Grip range	✓		Lifting bail 203 mm (8 in) BECO for 273-324 mm (10.75-12.75 in) pipe		✓
– 219, 235, 273 mm (8.625, 9.25, 10.75 in)			Lifting bail 254 mm (10 in) BECO for 340 mm (13.375 in) pipe		✓
Grip range	✓		Lifting bail 168 mm (6.625 in) API regular thread for 251-349 mm (9.875-13.75 in) tricone bit		✓
– 324, 340 mm (12.75, 13.375 in)			Lifting bail 178 mm (7.0 in) API regular thread for 381 mm (15 in) tricone bit		✓
DRILL PIPE – 9.9 M (32.5 FT) LENGTH			Bushing retainment tool (8.625-10.75 in pipe) (6 in, 7 in and 7.8 in flats)		✓
219 mm (8.625 in) diameter		✓	Bushing retainment tool (12.75-13.378 in pipe) (10.5 in and 11.38 in flats)		✓
235 mm (9.25 in) diameter		✓	SERVICE PACKAGES/FLUID SYSTEM		
273 mm (10.75 in) diameter		✓	Standard fast fill for fuel and water only, automated lubricant system	✓	
324 mm (12.75 in) diameter		✓	Premium with Service Center for lubricant drain and fill; automated lubricant system, fast fill fuel and water		✓
340 mm (13.375 in) diameter		✓			
No pipe thread greaser	✓				
Pipe thread greaser		✓			

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MD6380 Standard and Optional Equipment

Standard and Optional Equipment *(continued)*

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
CLIMATE/REGIONAL CONSIDERATIONS			DUST SUPPRESSION		
Air receiver tank low pressure (ASME/CRN/AU) or	✓		Water injection only (no dust collector) – 2271 L (600 gal) tank below deck	✓	
Air receiver tank low pressure (CE)	✓		Water injection and dust collector – 2271 L (600 gal) tank below deck – 204 m ³ /min (7,200 ft ³ /min) dry dust collection		✓
Four (4) batteries	✓		High capacity water injection – 5299 L (1,400 gal) • 2271 L (600 gal) below-deck mounted tank and a 3028 L (800 gal) above deck mounted tank		✓
Six (6) batteries (required for autonomy packages)		✓	Dust curtain hydraulic lifters – Front and rear dust curtains (recommended with dust collector)		✓
Climate Level 1 – Standard fluids and lubricants – With a temperature range of –1° C (30° F) to 52° C (125° F)	✓		Tram-off Spray System		✓
Climate Level 2 – Arctic fluids and lubricants – Temperatures down to –18° C (–0.4° F)		✓	UNDERCARRIAGE (SELECT ONE)		
Certifications CE	✓		750 mm (29.5 in) double grousers for hard rock applications or	✓	
FRAME/DECK			900 mm (35.4 in) double grousers for soft rock applications	✓	
No tool storage box (cover only)	✓				
Tool storage box		✓			
No jib crane (cover only)	✓				
Jib crane pedestal only		✓			
Blowdown lines and nozzle (with quick connect cooler end and drill deck)		✓			

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