



# 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 m<sup>3</sup>/min (3,600 ft<sup>3</sup>/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·S<sup>SM</sup>) 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 m<sup>3</sup>/min (7,200 ft<sup>3</sup>/min) dry dust collection

Water Injection System, High Volume	5299 L	1,400 gal
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)

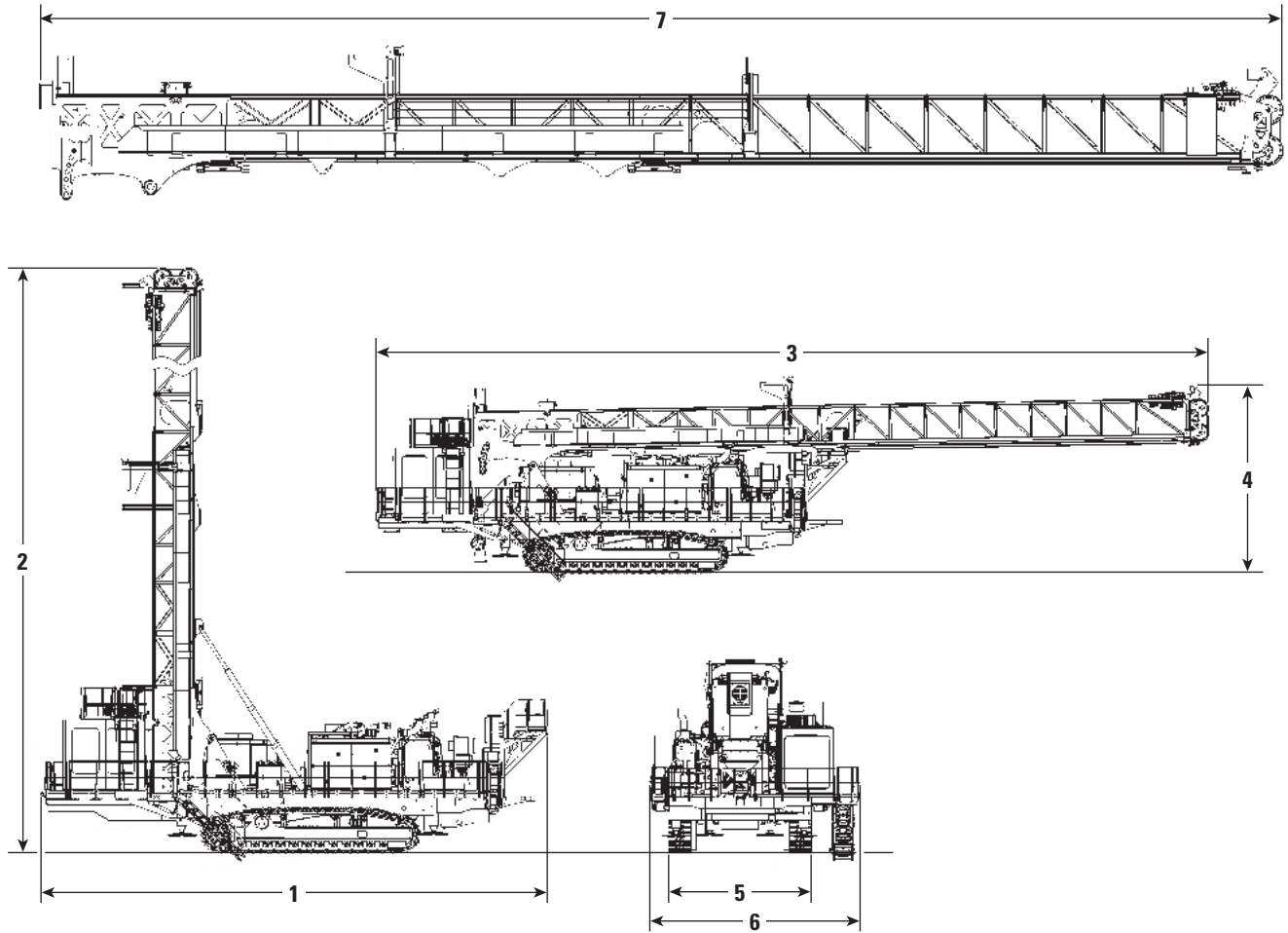
## Automation and Technology

- 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.



<b>1</b> Working Length Mast Up*	14.7 m	48.1 ft
<b>2</b> Height Mast Up	26.7 m	87.6 ft
<b>3</b> Length Mast Down	28.3 m	92.9 ft
<b>4</b> Height Mast Down	6.6 m	21.7 ft
<b>5</b> Working Width (non-drill end)	6.06 m	19.9 ft
<b>6</b> Working Width (drill end)	6.89 m	22.6 ft
<b>7</b> 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
<b>POWER TRAIN</b>			<b>MAST</b>		
Receiver tank for ASME/CRN/AU or CE receiver tank	✓		No mast access/handrail only	✓	
<b>CAB</b>			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)		✓	<b>PIPE LOADER (SELECT ONE)</b>		
LED lighting	✓		219 mm (8.625 in) diameter – Two pipe rack – Capable of single and multi-pass	✓	
<b>CONTROLS</b>			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		✓	<b>TOP SUB/SHOCK SUB (SELECT ONE)</b>		
Remote tram		✓	219 mm (8.625 in) standard	✓	
<b>PRODUCT LINK/TERRAIN</b>			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
<b>TOOL GROUPS (SELECT ONE)</b>			<b>TRICONE BITS GROUP (SELECT ONE)</b>		
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			<b>SERVICE TOOLS</b>		
<b>VARIABLE GRIP HYDRAULIC BREAKOUT WRENCH (SELECT ONE)</b>			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		✓
<b>DRILL PIPE – 9.9 M (32.5 FT) LENGTH</b>			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		✓	<b>SERVICE PACKAGES/FLUID SYSTEM</b>		
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
<b>CLIMATE/REGIONAL CONSIDERATIONS</b>			<b>DUST SUPPRESSION</b>		
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 <sup>3</sup> /min (7,200 ft <sup>3</sup> /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)		✓	<b>UNDERCARRIAGE (SELECT ONE)</b>		
Certifications CE	✓		750 mm (29.5 in) double grousers for hard rock applications or	✓	
<b>FRAME/DECK</b>			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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AEXQ2735 (12-2019)

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