



# MD6310

## 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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# MD6310 Rotary Blasthole Drill Specifications

## Engine Options

Emissions: U.S. EPA Tier 4 Final

Engine Power	C32B @ 1,800 rpm	
ISO 14396	751 kW	1,007 hp
ISO 14396 (DIN)	1021 mhp (PS)	

Emissions: Equivalent to Tier 2

Engine Power	C32B @ 1,800 rpm	
ISO 14396	769 kW	1,031 hp
ISO 14396 (DIN)	1046 mhp (PS)	

- Dual starter motors
- Scheduled oil sampling (S·O·S<sup>SM</sup>) ports
- Ether starting aid; ether bottle supplied locally
- Engine power is tested per ISO 14396:2002.

## Compressor/Receiver Options

Compressor

Rotary drilling	56.6 m <sup>3</sup> /min (2,000 ft <sup>3</sup> /min) @ 8.6 bar (125 psi)
Rotary drilling	73.6 m <sup>3</sup> /min (2,600 ft <sup>3</sup> /min) @ 7.6 bar (110 psi)
DTH drilling	42.2 m <sup>3</sup> /min (1,500 ft <sup>3</sup> /min) @ 34.4 bar (500 psi); includes tool lubrication system and hammer storage

- With the compressors variable volume control, the operator can limit air output resulting in reduced fuel consumption
  - Both high and low pressure compressors contain this feature
- Electronic compressor control and regulation with purged air lines

Receiver Tank Choices

- Low pressure 8.6 bar (125 psi) for ASME/CRN/AU or CE
- High pressure 34.4 bar (500 psi) for ASME/CRN/AU or CE

## Cooling

- Separate engine cooling module
- Replaceable cooler core sections
- Functional in ambient temperature of 52° C (125° F)
- Automatic variable speed fan control

## Climate Options

Climate Level 1 standard fluids and lubricants

- Rated down to -1° C (30° F) temperatures
- Withstands high heat to 52° C (125° F)

Climate Level 2 cold weather fluids and lubricants

- Rated down to -18° C (-0.4° F) temperatures

Climate Level 4 Arctic fluids and lubricants, heating package

- Rated down to -40° C (-40° F) temperatures
- Diesel fired heating system that heats and circulates engine coolant through the: engine block, primary water tank, heating elements for battery trays with a provision for fuel tanks
- Full arctic lubricant package includes: engine oil, compressor oil and hydraulic oil
- Electric heating package with breaker panel to power:
  - 120V heating blanket for compressor receiver tank, compressor control box, heat trace for compressor control lines, heat trace for housing from water tank to water pump and water fast-fill assembly plus tank
- Shore power connection box with switchable 240-600V (50 amp) connection; diesel genset and or plug, sold separately
- Breaker panel includes five (5) additional breakers for locally supplied heating elements, if needed

# MD6310 Rotary Blasthole Drill Specifications

## Frame and Work Deck

- Jacks, mast pivot and deck are welded integrally to mainframe for maximum durability and long life
- Stationary rear deck; for vertical and angle drilling
- Four leveling jacks to provide leveling on a 7° bench (any orientation)
- Fuel tank capacity 1609 L (425 gal)
- Fuel capacity expansion for additional +1609 L (425 gal)
- Automatic centralized, lubrication banks for all pivot points on drill, manual lubrication required for traveling sheaves
- Heavy duty tow hooks (front end)
- Four (4) lift lugs, for use with cables or chains
- Bolt-on platform for cold weather generator or fire suppression bottles
- Three egress points on deck areas in addition to main access
- Cab perimeter walkway
- Sturdy guardrails, toe guards, self closing gates

## Undercarriage

Model	Cat® 349E EL Excavator type	
Lower rollers	Fourteen (14)	
Carrier rollers	Three (3)	
Track chain guards and guides	Level two	
Draw bar pull	547 000 N	403,446 lbf
Travel speed	2.45 kph	1.5 mph
Triple grousers for soft rock ground bearing pressure 1.28 bar (18.5 psi)	750 mm	29.5 in

## Hydraulics

- Two (2) primary pumps – 210 cc (piston, with proportional electronic controls)
- One (1) auxiliary circuit pump – 110 cc (piston, load sensing)
- Two (2) fan pumps – 100 cc (piston, with proportional electronic controls)
- Two (2) charge pumps – 43.9 + 56.5 cc (double stack gear, fixed displacement)
- Scheduled Oil Sampling (S-O-S) ports

## Mast and Pipe Rack Carousel Features

13.7 m (44.9 ft) Mast		
Hole diameter range	203-311 mm	8-12.25 in
Single pass depth	Down to 13.7 m	Down to 44.9 ft
Multi pass depth	Down to 74.6 m	Down to 244.9 ft
Pull-down capacity	Up to 39 009 kg	Up to 86,000 lb
Hoist capacity	Up to 22 113 kg	Up to 48,750 lb
Hoist speed	37.4 m/min	122.7 ft/min
Bit load (single pass)	Up to 41 165 kg	Up to 90,753 lb
17.5 m (57.4 ft) Mast		
Hole diameter range	203-311 mm	8-12.25 in
Single pass depth	17.5 m	57.4 ft
Multi pass depth	Down to 47.9 m	Down to 157.4 ft
Pull-down capacity	Up to 39 009 kg	Up to 86,000 lb
Hoist capacity	Up to 22 113 kg	Up to 48,750 lb
Hoist speed	37.4 m/min	122.7 ft/min
Bit load (single pass)	Up to 42 149 kg	Up to 92,922 lb

Hydraulic, indexing pipe carousels accept various pipe diameters  
Configuration choices include single pass, multi pass, vertical out to 30 degree angle drilling

- 13.7 m (44.9 ft) or 17.5 m (57.4 ft) Mast configurations complete with pipe rack carousel
- Pulldown/hoist system is a single cylinder
- Auto tensioning of pull down and hoist cables
- Feed system accommodates multiple pipe diameters
- Variable grip hydraulic break out wrench (HOBO) for range of pipe diameters
- Sliding deck wrench assembly
- Configured with roller deck bushing for tricone applications, two-piece deck bushing for DTH
- Angle drilling 0-30°; in 5° increments
- Drill pipe positioner
- Rotation Gear Box with dual motor arrangement, up to 160 rpm, and 16,000 N·m of torque (11,800 ft-lb)

# MD6310 Rotary Blasthole Drill Specifications

## Mast Packages

Mast accessories manual 13.7 m (44.9 ft) Mast	One wire rope pipe catcher, hydraulically actuated pipe positioner
Mast accessories hydraulic	One hydraulic pipe catcher, hydraulically actuated pipe positioner
Mast accessories manual 17.5 m (57.4 ft) Mast	Two wire rope pipe catchers, hydraulically actuated pipe positioner
Mast accessories hydraulic	One hydraulic pipe catcher, plus one wire rope, hydraulically actuated pipe positioner
Angle drilling	Included with either mast

Bit basket – Manual bit basket for 13.7 and 17.5 m mast

Bit basket – Hydraulic for (13.7 and 17.5 m mast)

- Recommended for use with tricone or DTH bits up to 279 mm (11 in) diameter

Bit basket – Hydraulic for (for use with 17.5 m mast and 311 mm [12.25 in] bit only)

## Carousel (Mast size and pipe diameter dependent)

13.7 m (44.9 ft) Mast Carousel; holds quantity of 4 × 12.19 m (40 ft) pipes; total depth 62.5 m (204.9 ft)

Pipe diameters	178 mm	7 in
	194 mm	7.625 in
	203 mm	8 in
	219 mm	8.625 in

13.7 m (44.9 ft) Mast Carousel; holds quantity of 5 × 12.19 m (40 ft) pipes; total depth 74.6 m (244.9 ft)

Pipe diameters	194 mm	7.625 in
	219 mm	8.625 in

13.7 m (44.9 ft) Mast Carousel, dual purpose; holds quantity of two (2) 12.19 m (40 ft) pipes and quantity of two (2) 9.14 m (30 ft) pipes, and adapters to connect to DTH hammer and tricone bit (DTH hammer and tricone not included)

- Accepts 194 mm (7.625 in) pipe – contact factory for additional pipe diameters

17.5 m (57.4 ft) Mast Carousel; holds quantity of 4 × 7.62 m (25 ft) pipes; total depth 48 m (157.5 ft)

Pipe diameters	178 mm	7 in
	194 mm	7.625 in
	203 mm	8 in
	219 mm	8.625 in

17.5 m (57.4 ft) Mast Carousel; holds quantity of 2 × 7.62 m (25 ft) pipes; total depth 32.7 m (107.4 ft)

Pipe diameter	235 mm	9.25 in
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## Hydraulic Break Out Wrench

Variable grip hydraulic break out wrench grip ranges

- 178-219 mm (7.0-8.625 in)
- 235 mm (9.25 in)

## Drill Pipe

12.19 m (40 ft) pipes – pipe rack carousel holds a quantity of four (4) or five (5) pipes

DTH	178 mm	7 in
Rotary or DTH	194 mm	7.625 in
Rotary	203 mm	8 in
Rotary	219 mm	8.625 in

7.62 m (25 ft) pipes – pipe rack carousel holds a quantity of four (4) or five (5) pipes

DTH	178 mm	7 in
Rotary or DTH	194 mm	7.625 in
Rotary	203 mm	8 in
Rotary	219 mm	8.625 in

7.62 m (25 ft) pipes – pipe rack carousel holds a quantity of two (2) pipes

Rotary	235 mm	9.25 in
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Dual purpose carousel pipe: 13.7 m (44.9 ft) Mast; holds quantity of two (2) 12.19 m (40 ft) pipes and quantity of two (2) 9.14 m (30 ft) pipes, and adapters to connect to DTH hammer and tricone bit (DTH hammer and tricone not included)

- Dual purpose pipe carousel accepts 194 mm (7.625 in) pipe – contact factory for additional pipe diameters

## Tool Package Rotary

- Roller deck bushing
- Pipe positioner inserts
- Deck wrench, sliding
- Bit sub
- Pipe wiper seal

## Tool Package DTH

- Two piece bushing
- Pipe positioner inserts
- Deck wrench, sliding
- Shock sub and top sub adapter
- Cross over hammer adapter
- Pipe wiper seal

# MD6310 Rotary Blasthole Drill Specifications

## Rotary Head Top Drive System

- Spindle with 168 mm (6.625 in) API regular thread and splined collar
- Rotation gear box with dual motor arrangement, up to 160 rpm, and 16 000 N·m (11,800 lbf-ft) of torque
- Rotary torque control
- Virtual rotary head travel stops and interlocks

## Operator Environment

- Cab, Standard
  - Fabric seat
  - Single pane window glass
  - Removable drill window guard
  - Windshield wiper for driller window
  - Foldaway trainer's seat complete with retractable seat belt (option)
  - Removable floor mat
- Cab, Premium
  - Leather seat with fabric inlay and heat/ventilation
  - Dual pane window glass
  - Removable drill window guard and fixed window guard facing power train
  - Front window guard
  - Additional in-cab storage box
  - Additional windshield wipers on front and rear windows
  - Foldaway trainer's seat complete with retractable seat belt (option)
  - Removable floor mat
- Spacious FOPS cab has 3 m<sup>2</sup> (32.4 ft<sup>2</sup>) floor space with an integrated operator station
- Extended cab has 4.2 m<sup>2</sup> (45.2 ft<sup>2</sup>); space for refrigerator and microwave (not pre-wired/appliances are not included); Additional storage space
- Cab perimeter walkway included for both cab sizes
- Drill performance touchscreen display
- Cab rubber shock-mounts absorb mechanical vibration and restrict exterior noise
- Two swing-out hinged doors with windows and Cat keyed locks
- Operator station design integrates an ergonomic seat, armchair joystick controls with full instrumentation, and two 254 mm (10 in) color, high definition touchscreens and 12 volt power port
- Additional display screen for cc cameras; color, high-definition 254 mm (10 in)
- Power convertor 24V to 12V
- Radio-ready for communication and entertainment radio
- Literature holder
- Seat swivels, locks and has two point/76 mm (3 in) seat belt, tilts (5° adjustment), lumbar support, fore/aft seat adjustment 80 mm (3.1 in)

- Lighting:
  - LED interior lights; separate reading light, and backlit joysticks and keypads
  - Zone controls for area lights and spot lighting for night drilling
  - Flood lights for the drill perimeter
  - Spot lights for power group area; drill deck; mast carousel; access ladder and walkways
- Lighting package includes:
  - Flood light on perimeter is 4200 lumen
  - Spot light is 1950 lumen
- Lighting options:
  - Mast clearance lights
  - Cab-mounted amber strobe light
  - Front mounted tram beacon
- HVAC:
  - Floor vents in the foot rest area
  - Roof-mounted air conditioner/heating/pressurizing unit
  - Filter access from deck, does not require roof access, and has approximately 500 hour service interval
  - Defogging HVAC vents on driller window
- Cameras:
  - Mounted on the front and left sides to provide 360° view from operator's seat
  - Camera on the mast to view pipe carousel/top drive operation

## Operating System Controls (Standard)

- All electric controls for drilling, tramming, leveling plus auxiliary functions
- Electronic compressor control
- Rotation torque control
- Virtual rotary head travel stops and interlocks
- Pipe positioner engaged/disengaged indicator
- Drill depth meter
- Drill performance and drill health display system
- Delayed engine shut down
- Rotary head rpm gauge – (digital display in screen)
- Filter indicators for hydraulic, compressor and engine
- Jack pressure sensors in the display
- Dust suppression control
- Mast lock indicator
- ECM controlled proportional fan speed control system
- Tram interlock, machine stability limits
- Tram interlock, pipe in hole
- Tram interlock, mast up and locked or down and parked
- Tram interlock, jacks retracted
- Cab environment controls (AC, filter, heat, fan speeds)
- Prewired for Terrain and autonomous operation
- Data logging of machine health with warnings, and fault code records; export capability

# MD6310 Rotary Blasthole Drill Specifications

## Automation and Technology

- Drill depth indicator and interlocks
- Auto level, auto retract, auto mast
- Drill assist (single or multipass auto drill)
- Product Link™ Elite (hardware from factory, subscription package via dealer)
- Autonomy ready
- Cat Terrain for Drilling – Mining System Interface
  - Production
  - Navigation

## Dust Suppression Options

- Tram off spray to wet the ground around the cuttings pile (not recommended for cold weather applications)
- Water injection
  - Water tank capacity 1514 L (400 gal)
- Water injection and dry dust collector (option)
  - Water tank capacity 1514 L (400 gal)
  - 204 m<sup>3</sup>/min (7,200 cfm) dry dust collector
  - Self-cleaning filters, with auto-eject dust chute
- High Volume Water Injection system
  - Water tanks total capacity 3785 L (1,000 gal) maximum
  - Primary tank above deck – 1514 L (400 gal) capacity (heated for extreme cold weather)
  - Secondary tank above deck – 2271 L (600 gal) capacity deck
- Static dust curtains, four sides boxed in

## Service Packages

- Fast Fill for fuel and water; Automatic Lubrication System
- Premium – Service center for lubricant drain and fill (compressor oil, hydraulic oil, gearbox oil, engine oil, tool lubrication and grease), Automatic Lubrication System, Fast Fill for fuel and water, blowdown hose

## Service Tool Options

- Bushing Retention Tool 178 to 235 mm (7.00 to 9.25 in) pipe diameter
- Lifting bails (available on request)
  - 114 mm (4.5 in) API reg thread; for 203 mm (8 in class) DTH hammer and 229 mm (9 in) tricone bits
  - 168 mm (6.625 in) API reg thread for top sub/shock sub and 250-311 mm (9.875-12.25 in) tricone bits
  - 114 mm (4.5 in) BECO thread for 178 mm (7 in) pipe
  - 152 mm (6 in) BECO thread for 194-235 mm (7.625-9.25 in) pipe

## Safety and Security

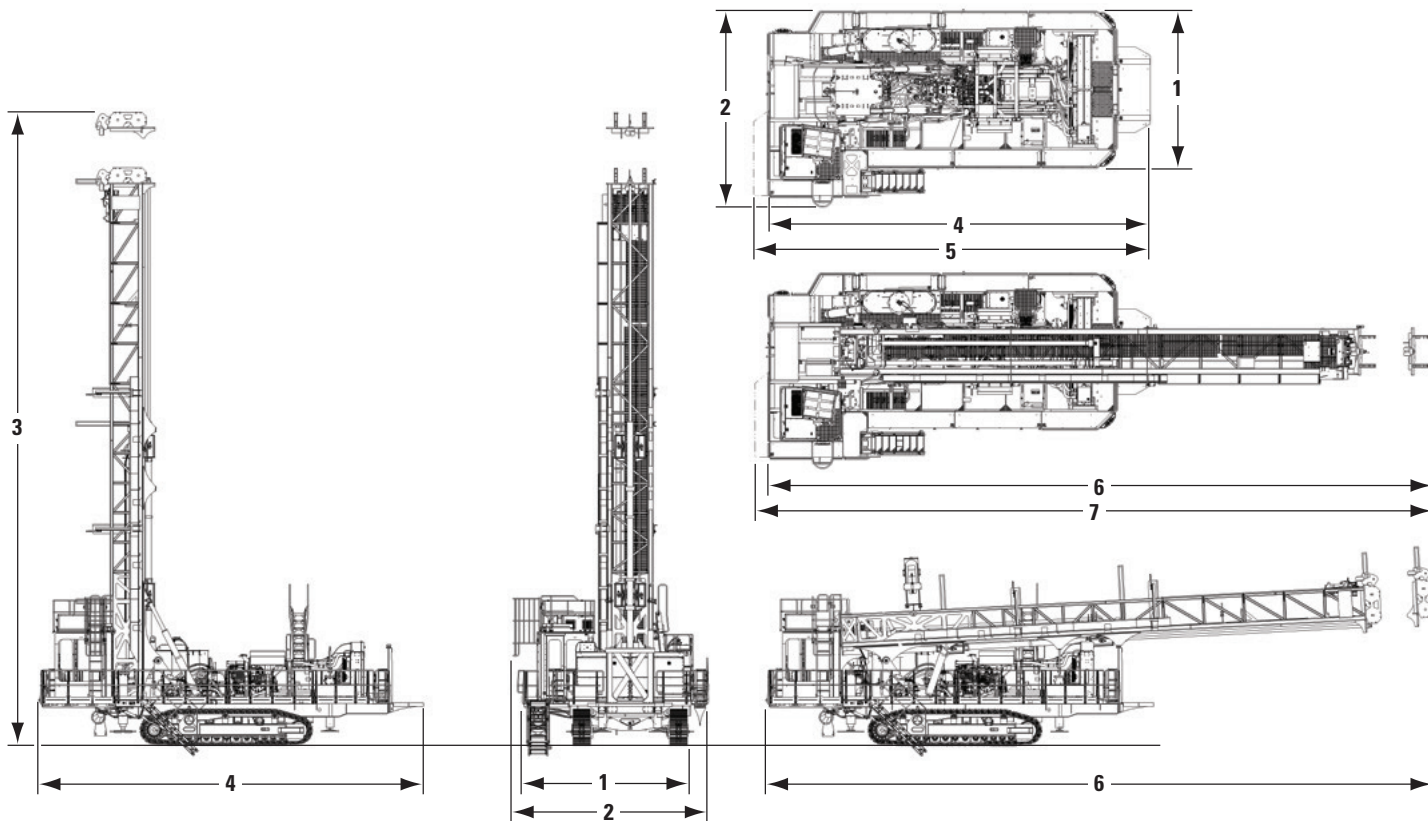
- Approach angle of 14 degrees facilitates loading and unloading on a lowboy
- Alloy drill deck covers, with storage provision
- Seven (7) engine shut down buttons: in cab, at drill deck, on deck at power train, ground accessible by main access point and each side of the drill front and left
- Electric horn activated by push button in the cab
- Tram alarm is automatic and audible
- Hinged protective guard for full front drill window
- Guards for exhaust pipes and turbo lines
- Mast access ladder with mast grating (option)
- Three egress points on deck areas in addition to main access
- Self-closing, gates secure egress ladder locations
- In-deck mounted battery box
- Ground level keyed battery disconnect/starter lockout with remote jump start terminals
- Air hose retention devices



# MD6310 Rotary Blasthole Drill Specifications

## Dimensions

All dimensions are approximate.



	13.7 m (44.9 ft) Mast		17.5 m (57.4 ft) Mast	
1 Width front	5.39 m	17.7 ft	5.39 m	17.7 ft
2 Width rear	6.32 m	20.7 ft	6.32 m	20.7 ft
3 Height mast up	19.93 m	65.4 ft	23.77 m	78.0 ft
4 Body length – standard cab	13.27 m	43.5 ft	13.27 m	43.5 ft
5 Body length – extended cab	13.79 m	42.2 ft	13.79 m	42.2 ft
6 Length mast down – standard cab	21.1 m	69.2 ft	24.9 m	81.7 ft
7 Length mast down – extended cab	21.62 m	70.9 ft	25.43 m	83.3 ft

## Weights

Working weight range – minimum/maximum	75 800/97 000 kg	167,110/213,848 lb	75 500/97 500 kg	166,449/214,950 lb
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# MD6310 Rotary Blasthole Drill 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 OPTIONS</b>			<b>CAB OPTIONS (continued)</b>		
Cat C32B @ 1,800 rpm, 769 kW (1031 hp), U.S. EPA Tier 2 equivalent	✓		Foldaway trainer's seat, complete with retractable seatbelt		✓
Cat C32B @ 1,800 rpm, 751 kW (1007 hp), U.S. EPA Tier 4 Final	✓		Cabin pressure manometer gauge		✓
Rotary/Single Stage, Low Pressure – 56.6 m <sup>3</sup> /min (2,000 ft <sup>3</sup> /min) @ 8.6 bar (125 psi); with Low Pressure Receiver Tank for ASME/CRN/AU or CE	✓		Window shades		✓
Rotary/Single Stage, Low Pressure – 73.6 m <sup>3</sup> /min (2,600 ft <sup>3</sup> /min) @ 7.6 bar (110 psi) with Low Pressure Receiver Tank for ASME/CRN/AU or CE		✓	Viewing hatch for hole spotting with spotlight (hydraulically operated)		✓
DTH/Two Stage, High Pressure – 42.5 m <sup>3</sup> /min (1,500 ft <sup>3</sup> /min) @ 34.4 bar (500 psi) with High Pressure Receiver Tank for ASME/CRN/AU or CE; hammer storage and tool oiler		✓	Cab roof access system (includes ladders, cage and rails)		✓
<b>CAB OPTIONS</b>			<b>CONTROLS</b>		
Standard cab; includes a fabric seat, single pane window glass, windshield wiper for driller window, removable driller window guard, removable floor mat, cab size 3 m <sup>2</sup> (32.4 ft <sup>2</sup> )	✓		Drill depth indicator and interlocks, auto-level, auto-mast	✓	
Premium cab size 3 m <sup>2</sup> (32.4 ft <sup>2</sup> ); includes leather with fabric inlay seat with heat/ventilation, additional storage plus windshield wipers on front and rear windows, dual pane window glass, a removable driller window guard plus front window guard facing power train, removable floor mat, cab size 3 m <sup>2</sup> (32.4 ft <sup>2</sup> )		✓	Drill Assist; single pass		✓
Extended cab premium: includes premium package plus dedicated space for refrigerator and microwave (not pre-wired/appliances are not included), cab size 4.2 m <sup>2</sup> (45.2 ft <sup>2</sup> )		✓	Drill Assist; multi-pass		✓
Extended cab standard: includes standard package plus dedicated space for refrigerator and microwave (not pre-wired/appliances are not included), cab size 4.2 m <sup>2</sup> (45.2 ft <sup>2</sup> )		✓	<b>PRODUCT LINK/TERRAIN</b>		
			Product Link (Cellular)	✓	
			Product Link (Dual: Cellular + Satellite)		✓
			Terrain for Drilling (guidance)		✓
			<b>FRAME</b>		
			Fuel tank expansion of +1609 L (425 gal) for total of 3218 L (850 gal) required for autonomy packages		✓

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# MD6310 Rotary Blasthole Drill 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>MAST</b>			<b>PIPE CAROUSEL 13.7 M (44.9 FT) MAST/ 12.19 M (40 FT) PIPE RACK (SELECT ONE)</b>		
13.7 m (44.9 ft) single pass depth; – Vertical or angle drilling		✓	178 mm (7 in) pipe; four pods total depth 62.5 m (204.9 ft)		✓
17.5 m (57.4 ft) single pass depth; – Vertical or angle drilling		✓	194 mm (7.625 in) pipe; four pods total depth 62.5 m (204.9 ft)		✓
Mast access system including steps, handrails, three platforms, mast grating and lanyard posts		✓	203 mm (8 in) pipe; four pods total depth 62.5 m (204.9 ft)		✓
No Mast Access/Handrail only	✓		219 mm (8.625 in) pipe; four pods total depth 62.5 m (204.9 ft)		✓
Drill pipe thread greaser with reloadable tank that can also hold a disposable grease bucket		✓	194 mm (7.625 in) pipe; five pod; total depth 74.6 m (244.9 ft)		
Tool lubrication System (Rotary Tricone, 113.5 L [30 gal])		✓	219 mm (8.625 in) pipe; five pod; total depth 74.6 m (244.9 ft)		
Overhead winch assembly with remote, cable and hook		✓	<b>PIPE CAROUSEL 13.7 M (44.9 FT) MAST DUAL PURPOSE/ 12.19 M (40 FT) PIPE RACK (SELECT ONE)</b>		
<b>MAST ACCESSORIES</b>			Holds total quantity of four (4) pipes: two (2) 12.19 m (40 ft) pipes and two (2) 9.14 m (30 ft) pipes; includes adapters to connect to DTH hammer and tricone bit (DTH hammer and tricone not included)		
13.7 m (44.9 ft) or 17.5 m (57.4 ft) Mast:			<b>PIPE CAROUSEL 17.5 M (57.4 FT) MAST/ 7.62 M (25 FT) PIPE RACK (SELECT ONE)</b>		
Pipe catcher, manual	✓		178 mm (7 in) pipe; four pods total depth 47.9 m (157.4 ft)		✓
One wire rope (13.7 m/44.9 ft) or two wire rope (17.5 m/57.4 ft), hydraulically actuated pipe positioner			194 mm (7.625 in) pipe; four pods total depth 47.9 m (157.4 ft)		✓
Bit basket, manual	✓		203 mm (8 in) pipe; four pods total depth 47.9 m (157.4 ft)		✓
Bit basket, hydraulic – recommended for use with tricone or DTH bits up to 11 in (279 mm) diameter		✓	219 mm (8.625 in) pipe; four pods total depth 47.9 m (157.4 ft)		✓
13.7 m (44.9 ft) Mast:			235 mm (9.25 in) pipe; two pods; total depth 32.7 m (107.4 ft)		✓
Pipe catcher, hydraulic – one hydraulic pipe catcher, hydraulically actuated pipe positioner		✓	<b>BREAK OUT WRENCH (SELECT ONE)</b>		
Bit basket, hydraulic – recommended for use with tricone or DTH bits up to 11 in (279 mm) diameter		✓	Variable grip hydraulic break out wrench grip range of 178–219 mm (7.0–8.625 in)		✓
17.5 m (57.4 ft) Mast:			Variable grip hydraulic break out wrench for 235 mm (9.25 in)		✓
Pipe catcher, hydraulic – one hydraulic pipe catcher, Plus one wire rope, hydraulically actuated pipe positioner		✓			
Bit basket, hydraulic (for use with 12.25 in (311 mm) bit only)		✓			

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# MD6310 Rotary Blasthole Drill 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>DRILL TOOL PACKAGES/ROTARY – 13.7 M (44.9 FT) MAST (SELECT ONE)</b>			<b>DRILL TOOL PACKAGES/ROTARY 17.5 M (57.4 FT) MAST (SELECT ONE)</b>		
194 mm (7.625 in) pipe diameter – One-piece roller deck bushing, pipe positioner inserts, sliding deck wrench, bit sub, pipe wiper seal (select top sub arrangement in next section)		✓	194 mm (7.625 in) pipe diameter – Roller deck bushing, pipe positioner inserts, sliding deck wrench, bit sub, pipe wiper seal		✓
203 mm (8 in) pipe diameter – One-piece roller deck bushing, pipe positioner inserts, sliding deck wrench, bit subs, pipe wiper seal (select top sub arrangement in next section)		✓	203 mm (8 in) pipe diameter – Roller deck bushing, pipe positioner inserts, sliding deck wrench, bit sub, pipe wiper seal		✓
219 mm (8.625 in) pipe diameter – One-piece roller deck bushing, pipe positioner inserts, sliding deck wrench, bit subs, pipe wiper seal (select top sub arrangement in next section)		✓	219 mm (8.625 in) pipe diameter – Roller deck bushing, pipe positioner inserts, sliding deck wrench, bit sub, pipe wiper seal		✓
<b>DRILL TOOL PACKAGES/DTH – 13.7 M (44.9 FT) MAST (SELECT ONE)</b>			<b>DRILL TOOL PACKAGES/DTH 17.5 M (57.4 FT) MAST (SELECT ONE)</b>		
178 mm (7 in) pipe diameter – Two-piece bushing, pipe positioner inserts, sliding deck wrench, cross over adapter for hammer, pipe wiper seal (select top sub arrangement in next section)		✓	178 mm (7.0 in) pipe diameter – Two-piece bushing, pipe positioner inserts, sliding deck wrench, cross over adapter for hammer, pipe wiper seal, (select top sub arrangement in next section)		✓
194 mm (7.625 in) pipe diameter – Two-piece bushing, pipe positioner inserts, sliding deck wrench, cross over adapter for hammer, pipe wiper seal (select top sub arrangement in next section)		✓	194 mm (7.625 in) pipe diameter – Two-piece bushing, pipe positioner inserts, sliding deck wrench, cross over adapter for hammer, pipe wiper seal, (select top sub arrangement in next section)		✓
Dual purpose 194 mm (7.625 in) pipe diameter – Two (2) piece bushing, pipe positioner inserts, sliding deck wrench and dual purpose carousel		✓			

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# MD6310 Rotary Blasthole Drill 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>SUBS (SELECT ONE)</b>			<b>TRICONE DRILLING BITS GROUP (SELECT ONE)</b>		
Shock absorbers with crossover sub (required with DTH package, optional with Rotary package)			228 mm (9.0 in), OPT 1, (S3)		✓
178 mm (7 in)		✓	228 mm (9.0 in), OPT 2, (M2)		✓
194 mm (7.625 in)		✓	228 mm (9.0 in), OPT 3, (H1)		✓
203 mm (8 in)		✓	251 mm (9.875 in), OPT 1, (M1)		✓
219 mm (8.625 in)		✓	251 mm (9.875 in), OPT 2, (M3)		✓
235 mm (9.25 in)		✓	251 mm (9.875 in), OPT 3, (H1)		✓
Shock subs with long top sub adaptor for Dual Purpose 13.7 m (44.9 ft) Mast			270 mm (10.625 in), OPT 1, (S3)		✓
194 mm (7.625 in)		✓	270 mm (10.625 in), OPT 2, (M3)		✓
Top Subs (Rotary package only)			270 mm (10.625 in), OPT 3, (H1)		✓
194 mm (7.625 in)		✓	311 mm (12.25 in), OPT 1, (M1)		✓
203 mm (8 in)		✓	311 mm (12.25 in), OPT 2, (M3)		✓
219 mm (8.625 in)		✓	311 mm (12.25 in), OPT 3, (H1)		✓
235 mm (9.25 in)		✓	<b>DTH HAMMERS AND BITS</b>		
<b>VARIABLE GRIP HYDRAULIC BREAKOUT WRENCH (SELECT ONE)</b>			<b>SERVICE TOOLS</b>		
Grip range; 219, 235, 273 mm (8.625, 9.25, 10.75 in)	✓		Lifting Bail 114 mm (4.5 in) API reg thread for 203 mm (8 in class) DTH hammer and 229 mm (9 in) tricone bits pipe		✓
Grip range; 324, 340 mm (12.75, 13.375 in)	✓		Lifting Bail 168 mm (6.625 in) API reg thread for top sub/shock sub for 250-311 mm (9.875-12.25 in) tricone bits		✓
<b>DRILL PIPE – 12.19 M (40 FT) PIPE FOR 13.7 M (44.9 FT) MAST; CAROUSEL HOLDS QUANTITY OF FOUR OR FIVE</b>			Lifting Bail 114 mm (4.5 in) BECO for 178 mm (7 in) pipe		
219 mm (8.625 in) Rotary		✓	Lifting Bail 152 mm (6 in) BECO for 194 mm (7.625 in) and up to 235 mm (9.25 in) pipe		✓
203 mm (8 in) Rotary		✓	Bushing Retention Tool 178 to 235 mm (7 to 9.250 in) pipe diameter		✓
194 mm (7.625 in) DTH/Rotary		✓			
178 mm (7 in) DTH/Rotary		✓			
<b>DRILL PIPE – 7.62 M (25 FT) PIPE FOR 17.5 M (57.4 FT) MAST; CAROUSEL HOLDS QUANTITY OF TWO OR FOUR</b>					
219 mm (8.625 in) Rotary		✓			
203 mm (8 in) Rotary		✓			
194 mm (7.625 in) DTH/Rotary		✓			
178 mm (7 in) DTH/Rotary		✓			
235 mm (9.25 in) Rotary only; carousel accepts quantity of two only		✓			
<b>DRILL PIPE – 9.14 M (30 FT) PIPE FOR 13.7 M (44.9 FT) MAST; CAROUSEL HOLDS TOTAL QUANTITY OF FOUR (4); TWO (2) 12.19 M (40 FT) PIPES AND TWO (2) 9.14 M (30 FT) PIPES. ADAPTERS TO CONNECT TO DTH HAMMER AND TRICONE BIT ARE INCLUDED (HAMMER AND BIT ARE NOT INCLUDED)</b>					
194 mm (7.625 in) DTH/Rotary		✓			
Pipe Thread Greaser		✓			

*(continued on next page)*

# MD6310 Rotary Blasthole Drill 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>SERVICE PACKAGES/FLUID SYSTEM</b>			<b>FRAME/DECK</b>		
<b>13.7 M (44.9 FT) MAST (SELECT ONE)</b>			Machine access via fixed stairs		
Standard fast fill for fuel and water only; automated lubricant system		✓		✓	
Premium with Service Center for lubricant drain and fill; automated lubricant system, fast fill fuel and water; blowdown hose		✓	Machine access via cascading, hydraulic stairs with walkway		✓
<b>SERVICE PACKAGES/FLUID SYSTEM</b>			Walkway around cab to drill deck	✓	
<b>17.5 M (57.4 FT) MAST (SELECT ONE)</b>			No Tool Storage Box (Cover Only)	✓	
Standard fast fill for fuel and water only; automated lubricant system		✓	Tool Storage Box		✓
Premium with Service Center for lubricant drain and fill; automated lubricant system, fast fill fuel and water; blowdown hose		✓	JIB Crane Ready Only		✓
<b>CLIMATE/REGIONAL CONSIDERATIONS</b>			<b>DUST SUPPRESSION</b>		
Batteries, sealed quantity four (4)	✓		Static dust curtains, four sides boxed in		
Batteries, sealed quantity six (6) (required for cold weather Level 2 and 4 and/or semi autonomy packages)		✓	Dust curtain hydraulic lifters raise 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)	✓		Water Injection only (No Dust Collector); 1514 L (400 gal) tank		
Climate level 2: – Cold weather fluids and lubricants. Rated down to –18° C (–0.4° F) temperatures		✓	Water Injection and Dust Collector; 1514 L (400 gal) tank plus dry dust collector		
Climate level 4 Arctic fluids and lubricants –40° C (–40° F) temperatures – Engine coolant and water tank heaters, battery trays, and provision for fuel heating – diesel fired – 50 Hz High Pressure Compressor, Tier 2 or 4 final engine – Arctic fluids, Genset ready, heater and blankets for tanks, heated water suction lines – Shore power connection box with switchable 240-600 volt, 50 amp waterproof connection		✓	High Capacity Water Injection; with total 3785 L (1,000 gal) tanks: 1514 L (400 gal) and 2271 L (600 gal) both mounted above deck		
Certifications EAEU	✓		Tram-off spray system		
Certifications CE	✓		<b>UNDERCARRIAGE (SELECT ONE)</b>		
Decals, ANSI	✓		750 mm (29.5 in) triple grouser for soft rock applications		
Decals, ISO	✓			✓	

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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