# **MD6200** Rotary Blasthole Drill Specifications **11 m (36 ft)**



# **Description**

The MD6200 crawler-mounted blasthole drill is designed to drill 127-200 mm (5.0-7.87 in) diameter holes. MD6200 is optimized for single-pass or multi-pass drilling, in both Rotary and DTH drilling modes. Available with a standard Angle Drilling Package (0 to  $30^\circ$ ) or an optional negative angle/Presplit drilling package of (0 to -15) degrees, for a total range of -15 to 30 degrees.

## **Basic Specs**

Hole diameter range	127-200 mm	5.0-7.87 in	
Hole depth range			
Single-pass depth	11 m	36 ft	
Multi-pass depth	Down to 47.58 m	Down to 156 ft	
Pull-down capacity	Up to 15 876 kg	Up to 35,000 lb	
Hoist capacity	Up to 11 907 kg	Up to 26,250 lb	
Hoist speed	1.32 m/sec	4.3 ft/sec	
Bit load (single-pass)	16 964 kg	37,400 lb	
U.S. EPA Tier 4 Final			
Engine	С18 ACERT <sup>тм</sup> @ 1,800 rpm		
Emissions	U.S. EPA Tier 4 Final		
Power rating (ISO 14396)	439 kW	589 hp	
U.S. EPA Tier 2 equivalent			
Engine	C18 ACERT @ 1,800 rpm		
Emissions	U.S. EPA Tier 2 equivalent		
Power rating (ISO 14396)	438 kW	587 hp	
Compressor, Rotary drilling	32.6 m <sup>3</sup> /min (1,150 ft <sup>3</sup> /min)		
	@ 8.6 bar (125 psi)		
Compressors, DTH drilling			
	@ 24.1 bar (350 psi)		
Angle drilling available	30° to –15° in 5°	increments	

# **Engine Features**

- Dual starter motors
- Ether starting aid
- Tier 4 Final package complete with DEF/Engine Shutdown Control Package

### **Compressor Choices**

DTH drilling	Includes tool lubrication system
1050 cfm/350 psi	29.7 m³/min (1,050 ft³/min) @ 24.1 bar (350 psi) with 113.5 L (30 gal) tool oiler
Rotary drilling	Optional tool lubrication system
1150 cfm/125 psi	32.6 m³/min (1,150 ft³/min) @ 8.6 bar (125 psi)

With the compressor's electronic controls plus variable volume control, the operator can adjust air output to reach optimal match of tool, flushing air and ground conditions. Both high and low pressure compressors contain this feature.

### **Receiver Tank Choices**

- Low pressure 8.6 bar (125 psi)
- High pressure 24.1 bar (350 psi)

### Cooling

- Coolers with easy cleaning access
- All cooler core sections are replaceable
- Functional in ambient temperature of up to 52° C (125° F)
- Automatic variable speed fan control



# **MD6200 Specifications**

## **Climate Choices**

- Climate Level 1 Standard fluids and lubricants
- Rated down to -1° C (30° F)
- Withstands high heat up to 52° C (125° F)

Climate Level 2 Arctic fluids and lubricants, engine block and manifold heater 120V or 240V

• Rated down to  $-18^{\circ} C (0^{\circ} F)$ 

# **Frame and Work Deck**

- Jacks, mast pivot and deck are welded integrally to mainframe for maximum durability and long life
- Three leveling jacks provide leveling on a 7° bench (any orientation)
- Slip resistant surfaces
- Fuel tank capacity 833 L (220 gal)
- Heavy duty tow hooks (non-drill end)
- Four (4) lift lugs, for use with cables or chains

# **Frame Access Choices**

- Fixed access steps to the cab area
- Small platform to the cab includes fixed access steps
- Platform access to the cab with full length service access walkway includes fixed access steps and self-closing gates

## **Drill Deck Misc.**

• Drill pipe thread greaser with remote fill tank that also accommodates disposable grease bucket

# Undercarriage

Model	Cat <sup>®</sup> 336 Exc	Cat <sup>®</sup> 336 Excavator type	
Lower rollers	Eight (8)		
Carrier rollers	Three (3)		
Track chain guards and guide	es		
Drawbar pull	TBD		
Travel speed			
High	3.3 km/h	2.0 mph	
Low	2.1 km/h	1.3 mph	
Triple grousers	600 mm (23.6 (12.6 psi) gro		

# **Hydraulics**

- Two (2) main pumps 85 cc (piston with proportional electronic controls)
- One (1) auxiliary circuit pump 45 cc (piston, load sensing)
- One (1) fan pump 45 cc (piston with proportional electronic controls)
- One (1) charge pump 73.8 cc (gear, fixed displacement)
- Scheduled Oil Sampling (S·O·S^M) ports

### **Mast and Pipe Carousel Features**

#### • Pipe carousel:

- -Accepts quantity of four (4) 9.14 m (30 ft) pipes
- Standard angle drilling package (0 to 30 degrees, in 5 degree increments)
- Optional negative angle drilling package (0 to -15 degrees, in 5 degree increments) for a total range of (30 to -15) degrees
- Hydraulically actuated, self-indexing pipe carousel accepts pipe diameters up to 152 mm (6.0 in)
- Drills strings configured for bit changes above deck
- Single cylinder pulldown/hoist system
- · Sliding deck wrench assembly
- Configured with roller deck bushing (for low pressure/ tricone drilling)
- Two-piece deck bushing (for high pressure DTH drilling)
- Overhead winch with cable and hook plus remote control; variable speed drive with a 1361 kg (3,000 lb) rating
- Variable grip hydraulic break out wrench grip range 101-152 mm (4.0-6.0 in)
- Closed circuit camera mounted in mast to view pipe carousel/top drive operation
- Pipe positioner for angle drilling, multi-pass pipe handling
- Manual pipe catcher One (1) wire rope, pipe catcher, pipe positioner, optional manual bit basket

# **Mast Packages**

Single-pass depth	11 m	36 ft
Multi-pass depth	Down to 47.58 m	Down to 156 ft
Pulldown – rated single cylinder pull-down/ hoist system	Up to 15 876 kg	Up to 35,000 lb
Hoist	Up to 11 907 kg	Up to 26,250 lb

# **Tool Package Rotary**

- One-piece roller deck bushing
- Pipe positioner clamps
- Deck wrench
- Bit sub
- Top sub
- Pipe wiper seal
- Drill tool lubricator (optional)

# **Tool Package DTH**

- Two-piece bushing
- Pipe positioner clamps
- Deck wrench
- Shock sub
- Top sub
- Cross over subs
- Pipe wiper seal
- Drill tool lubricator is included with selection of DTH Compressor

# **Drill Pipe**

9.41 m (30 ft) pipes – Accepts	quantity of four (4)	
	101 mm	4.0 in
	114 mm	4.5 in
	127 mm	5.0 in
	140 mm	5.5 in
	152 mm	6.0 in

# **Rotary Head Top Drive System**

Torque, single motor	6166 N·m	8,360 lbf-ft
Rotation speed	0-150 rpm	

- Output shaft with box-end API-IF (NC46) 101 mm (4 in) thread
- Rotary torque control
- Virtual rotary head travel interlocks

## **Operator Environment**

### • Cab design:

- FOPS cab has 1.9 m<sup>2</sup> (20.5 ft<sup>2</sup>) floor space
- Rubber shock-mounts absorb mechanical vibration
- Operator station design integrates an ergonomic seat, joystick controls with full instrumentation, and dual 254 mm (10 in) high-definition color screens 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 stereo
- Two swing out doors and Cat keyed locks
- -Literature holder
- -Storage area suitable for lunchbox
- Cab packages:
- Standard configuration includes a fabric seat, removable floor mat, single pane window glass and driller window guard
- Premium configuration includes a leather seat with heat and ventilation, heavy duty suspension, dual pane window glass and driller window guard
- Seating:
- Seat swivels, locks and has two point retractable/76 mm (3 in) seat belt, tilts (5° adjustment), lumbar support, fore/aft seat adjustment 80 mm (3.1 in)
- Windows:
- Large windows front, rear and right cab side; full length drill window with guard
- -Window shades (option)
- -Windshield wiper with a common washer tank
- Manometer Pressure Gauge (option)
- Lighting:
  - -LED interior lights, backlit joysticks and keypads
  - -Flood lights for the drill perimeter; area spotlights
  - Mast beacon and tram flashing strobe light (option)
- HVAC:
- -Floor heating vent
- -Filter access from deck, 500 hour service interval
- Defogging HVAC vents on main window
- Cameras:
- Three (3) CC cameras (front and left side) providing 360° vision coverage from operators seat; camera on the mast to view pipe carousel/top drive operation

# **MD6200 Specifications**

# **Operating System Controls (Standard)**

- Electric controls for drilling, tramming, leveling plus auxiliary functions
- Rotary torque control
- Virtual rotary head travel stops
- · Pipe positioner engaged/disengaged indicator
- Drill depth meter
- Drill performance and display system
- Delayed engine shut down
- Filter indicators for hydraulic, fuel, compressor and engine
- Jack pressure sensors
- Data logging of machine health with warnings and fault code records with export capability
- Dust suppression control
- Mast lock indicator
- ECM 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
- Tram interlock, winch parked
- Cab environment controls (AC, heat, fan speeds)
- Pre wired for Terrain and Autonomous Operation

# **Automation and Technology**

- · Autonomous ready
- -Line of Sight, Single Row, Semi Autonomous Package
- -Remote Operator Station, Full Autonomous Package
- Drill depth meter
- Drill Assist (auto level, auto retract jacks, auto mast raise and lower, optional, single-pass auto drill)
- Cat Terrain ready
- Product Link Elite<sup>TM</sup>

### **Dust Control Choices**

Water injection – tank mounted below front deck	757 L	200 gal
Water flow meter, volume co	ntrol, tanl	k fill level indicator
Water injection plus dust collect	etor	
76.5 m <sup>3</sup> /min (2,700 ft <sup>3</sup> /min) du water injection	st collector	r; includes standard
Self-cleaning filters, dust chu	ite clean-o	out door
High volume water injection (maximum) – tanks total capacity	1514 L	400 gal
Tank below deck – capacity	757 L	200 gal
Tank above deck – capacity	757 L	200 gal

- Static dust curtains, four sides boxed enclosed
- Dust curtain hydraulic lifters raise front and rear dust curtains (option) (recommended with dry dust collector)
- Tram off spray system (option)

# **Safety and Security**

- Approach angle of 15 degrees facilitates loading and unloading on a lowboy
- Seven (7) emergency stop buttons
- Hinged window guard over the full length of the front drill window
- Conditional safety interlocks
- Self-closing gates
- Electric horn activated by push button in the cab
- Automatic, audible tram alarm
- Battery disconnect and starter switches can be locked out
- Air hose retention devices
- Slip resistant platform surfaces
- Machine lifting provisions
- FOPS Certified Operator Cab

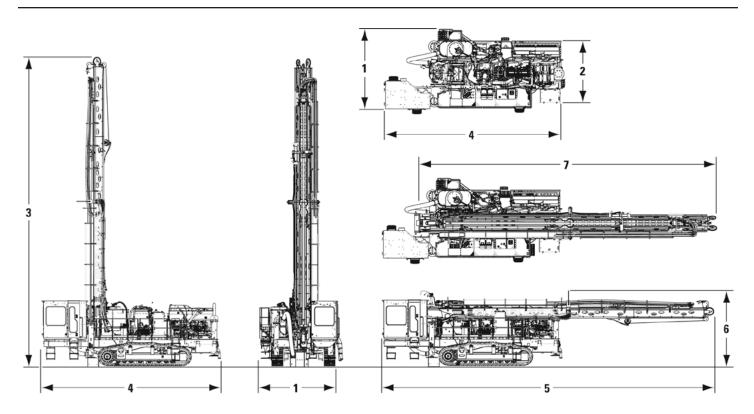
# **Service Packages**

- Basic Centralized manual lubrication for all pivot points, gravity fill for fuel and water
- Standard Automated lubrication system, fast fill for fuel and water (option)
- Premium Automated lubrication system, fast fill fuel and water, service center for lubricant drain and fill plus blowdown hose (option)

# **MD6200 Specifications**

# Dimensions

All dimensions are approximate.



1 Width cab end*	4.18 m	13.7 ft	
2 Width non-cab end	3.57 m	11.7 ft	
<b>3</b> Height mast up	16.54 m	54.3 ft	
4 Body length	9.44 m	31.0 ft	
5 Length mast down	17.54 m	57.5 ft	
6 Height mast down	3.98 m	13.1 ft	
7 Mast only length	15.89 m	52.1 ft	

\*For width with platform access to cab or service platform walkway contact the factory.

# Weights

Working weight range

37 552-42 752 kg

82,789-94,253 lb

# **Mandatory Choices**

Mandatory choices may vary. Consult your Cat dealer for details.

### ENGINE

- C18 ACERT, Tier 4 Final
- C18 ACERT, Tier 2 equivalent

### **COMPRESSOR/RECEIVER TANK**

- Rotary/Low Pressure:
- 32.6 m<sup>3</sup>/min (1,150 ft<sup>3</sup>/min) @ 8.6 bar (125 psi); with Low Pressure Receiver Tank; rotary tool oiler (optional)

• DTH/High Pressure:

-29.7 m<sup>3</sup>/min (1,050 ft<sup>3</sup>/min) @ 24.1 bar (350 psi), with High Pressure Receiver Tank; hammer storage and 113.5 L (30 gal) tool oiler

### FRAME ACCESS

- Fixed access steps (option) to the cab area
- Small platform to the cab includes access steps
- Platform access to the cab with full-length service access walkway includes access steps (option) and self-closing gates

### UNDERCARRIAGE

- Cat 336 excavator type
- · Track chain guards and guides

### MAST

- Single-pass depth 11 m (36 ft)
- Multi-pass depth Up to 47.58 m (156 ft)
- Standard angle drilling package for (0 to 30°)
- Optional negative angle/presplit drilling package for (0 to -15 degrees) for a total range of (30 to -15 degrees)

### MAST ACCESSORIES

• Manual pipe catcher – One (1) wire rope pipe catcher, manual bit basket (option)

### **PIPE CAROUSEL**

• Accepts quantity of four (4) 9.14 m (30 ft) pipes

#### **BREAK OUT WRENCH**

- Variable grip hydraulic break out wrench grip range:
- -101-152 mm (4.0-6.0 in)

### **DRILL TOOL PACKAGES**

- Rotary 101 mm (4 in); pipe diameter One (1) piece roller deck bushing, pipe positioner clamps, deck wrench, top and bit subs, pipe wiper seal
- Rotary 114 mm (4.5 in); pipe diameter One (1) piece roller deck bushing, pipe positioner clamps, deck wrench, top and bit subs, pipe wiper seal
- Rotary 127 mm (5 in); pipe diameter One (1) piece roller deck bushing, pipe positioner clamps, deck wrench, top and bit subs, pipe wiper seal
- Rotary 140 mm (5.5 in); pipe diameter One (1) piece roller deck bushing, pipe positioner clamps, deck wrench, top and bit subs, pipe wiper seal
- Rotary 152 mm (6 in); pipe diameter One (1) piece roller deck bushing, pipe positioner clamp, deck wrench, top and bit subs, pipe wiper seal
- DTH 101 mm (4 in); pipe diameter Two (2) piece bushing, shock sub, top sub, pipe positioner clamps, deck wrench, cross over sub, pipe wiper seal
- DTH 114 mm (4.5 in); pipe diameter Two (2) piece bushing, shock sub, top sub, pipe positioner clamps, deck wrench, cross over sub, pipe wiper seal
- DTH 127 mm (5 in); pipe diameter Two (2) piece bushing, shock sub, top sub, pipe positioner clamps, deck wrench, cross over sub, pipe wiper seal
- DTH 140 mm (5.5 in); pipe diameter Two (2) piece bushing, pipe positioner inserts, deck wrench, cross over sub, shock sub, top sub, pipe wiper seal
- DTH 152 mm (6 in); pipe diameter Two (2) piece bushing, shock sub, top sub, pipe positioner clamps, deck wrench, cross over sub, pipe wiper seal

# **Mandatory Choices** (continued)

Mandatory choices may vary. Consult your Cat dealer for details.

### **OPERATOR ENVIRONMENT**

- Lighting
- Standard lighting is 1,300 lumens floodlight on perimeter; area spotlights have 1,950 lumens
- Premium lighting is 4,200 lumens floodlight on perimeter; area spotlights have 1,950 lumens, mast clearance light, yellow strobe light plus front mounted tram beacon
- Cab packages
- Standard configuration includes a fabric seat, removable floor mat, single pane window glass, driller window guard, and wiper for the driller window
- Premium configuration includes a leather seat with heat and ventilation, heavy duty suspension, dual pane window driller, window guard and wiper, plus a second removable guard for front window
- Decals/Films
- -ANSI
- -ISO

### SERVICE PACKAGES

- Basic Centralized manual lubrication for all pivot points, gravity fill fuel and water
- Standard Automated lubrication system, fast fill for fuel and water (option)
- Premium Automated lubrication system, fast fill for fuel and water, service center for lubricants drain and fill, plus blowdown hose (option)

### DUST CONTROL

- Water injection system
- -757 L (200 gal) mounted below front deck
- Water injection plus dry dust collector –76.5 m<sup>3</sup>/min (2,700 cfm) dust collector
- -Water storage 757 L (200 gal)
- High volume water injection
- Water storage 1514 L (400 gal)
- -757 L (200 gal) tank mounted below deck
- -757 L (200 gal) mounted above deck

### CLIMATE

- Climate Level 1
- Rated down to  $-1^{\circ}$  C (30° F)
- Withstands high heat up to 52° C (125° F)
- -Standard fluids and lubricants
- Climate Level 2
- -Rated down to -18° C (0° F)
- -Arctic fluids and lubricants
- Engine block manifold heater 120V or 240V

### **TECHNOLOGY AND AUTOMATION**

- Drilling parameters and interlocks
- Drill Assist (auto level, auto retract jacks, auto raise and lower mast, single-pass auto drill)
- Product Link Elite (see selection choices below)

# **Factory Options**

Options may vary. Consult your Cat dealer for details.

### MAST

- Overhead winch assembly with cable and hook, plus remote control; variable speed drive with a 1361 kg (3,000 lb) rating
- Tool lubrication system for Rotary Drilling with 113.5 L (30 gal) capacity
- Pipe thread greaser with reloadable tank or disposable grease bucket
- Manual bit basket

### **SERVICE TOOLS**

- Bushing retention tool 89 to 152 mm (3.5 to 6.0 in) wrench flats
- Lifting bails (available on request; required for commissioning)
- API thread 89 mm (3.5 in)
- API thread 114 mm (4.5 in)
- API thread 140 mm (5.5 in)
- BECO thread 76 mm (3.0 in)
- BECO thread 89 mm (3.5 in)
- BECO thread 101 mm (4.0 in)
- BECO thread 114 mm (4.5 in)

### **OPERATOR ENVIRONMENT**

- Stereo
- Cab pressure gauge
- Window shades
- Drill assist; single pass auto drill

### **TECHNOLOGY PRODUCTS**

- Product Link Elite; satellite, cellular or dual
- Terrain guidance system hardware

### AUTONOMY

- Semi Autonomy Package; line of sight, single row
- Full Autonomy Package; remote operator station

#### DUST SUPPRESSION

- Dust curtains, four sides boxed in, with hydraulic lifters to raise front and rear dust curtains (recommended with dry dust collector)
- Tram off spray system

### **DRILL BITS, ROTARY TRICONE**

- Recommended for rotary applications
- All bits have standard nozzles
- Obtain S/M/H codes from the Rock Formation to Bit Conversion table *https://catpublications.com* search for PEXQ1027
- Ship out plans for each drill configuration allow for one pallet of bits. Additional pallets may require an additional truck.
- -171 mm (6.75 in), Option 1, (S2)
- -171 mm (6.75 in), Option 2, (M1)
- -171 mm (6.75 in), Option 3, (M3)
- -200 mm (7.875 in), Option 1, (S2)
- -200 mm (7.875 in), Option 2, (M1)
- -200 mm (7.875 in), Option 3, (M3)

### DRILL PIPE

- 9.14 m (30 ft) pipes Accepts quantity of four (4)
- -101 mm (4.0 in)
- -114 mm (4.5 in)
- -127 mm (5 in)
- -140 mm (5.5 in)
- -152 mm (6.0 in)

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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