**MD6540C**
Rotary Blasthole Drill
16 or 20 m (52.5 or 65.6 ft)
Mast Configuration

### Basic Specs

<table>
<thead>
<tr>
<th>Specification</th>
<th>Mast Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hole diameter range</td>
<td>229-406 mm 9-16 in</td>
</tr>
<tr>
<td>Hole depth range</td>
<td></td>
</tr>
<tr>
<td>16 m/52.5 ft mast</td>
<td>Single pass 16.15 m 53 ft</td>
</tr>
<tr>
<td></td>
<td>Multi-pass Up to 84.73 m Up to 278 ft</td>
</tr>
<tr>
<td>Hole depth range</td>
<td>20 m/65.6 ft mast</td>
</tr>
<tr>
<td></td>
<td>Single pass 19.86 m 65 ft</td>
</tr>
<tr>
<td></td>
<td>Multi-pass Up to 56.4 m Up to 185 ft</td>
</tr>
<tr>
<td>Engine model</td>
<td>Cat® 3512C HD, 1,800 rpm</td>
</tr>
<tr>
<td>Bit Load</td>
<td>53,845 kg 118,719 lb</td>
</tr>
<tr>
<td>Emissions</td>
<td>U.S. EPA Tier 2/EU Stage II equivalent</td>
</tr>
<tr>
<td>Rated horsepower</td>
<td>957 kW 1,283 hp</td>
</tr>
<tr>
<td>Compressor</td>
<td>101.9 m³/min @ 6.9 bar, 3,600 ft/min @ 100 psi, 1,800 rpm 1,800 rpm</td>
</tr>
<tr>
<td>Angle drilling</td>
<td>30° (in 5° increments)</td>
</tr>
</tbody>
</table>

### Mast 16 or 20 m (52.5 or 65.6 ft)

- Up to 406 mm (16 in) hole diameter
- Up to 489 kN (110,000 lbf) rated capacity single cylinder pulldown/hoist system
- Rotary head gear box, motors choice in attachment packages
- Dust hood with hinged quick change dust seal
- 30 degree angle drilling in 5° increments and mast locks with indicator in cab [25 degree limit for 406 mm (16 in) holes]
- Auto cable tensioning system (attached on pull down side)
- Sliding deck wrench, hydraulic fork
- HOBO (Hydraulic Operated Break-Out Wrench)
- Mast lanyard mounting plates
- Sheave/feed rope guards
- Remote drill pipe thread lube system, operated from the cab
- Cable pipe catcher
- Winch 5,443 kg (12,000 lb) lift capacity
- Pipe positioner
- Roller deck bushing
- Mast access ladder and floor grating

### Pull-down/Hoisting Capacity

<table>
<thead>
<tr>
<th>Specification</th>
<th>Mast Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull-down capacity Up to</td>
<td>489 kN 110,000 lbf</td>
</tr>
<tr>
<td>Hoist capacity Up to</td>
<td>39,009 kN 86,000 lbf</td>
</tr>
<tr>
<td>Drilling feed rate</td>
<td>0-33.5 m/min 0-110 ft/min</td>
</tr>
<tr>
<td>Retract rate</td>
<td>0-33.5 m/min 0-110 ft/min</td>
</tr>
<tr>
<td>Head travel (16 m/52.5 ft mast)</td>
<td>18.29 m 720 in</td>
</tr>
<tr>
<td>Head travel (20 m/65.6 ft mast)</td>
<td>21.9 m 866 in</td>
</tr>
</tbody>
</table>
### Mast Carousel

**Pipe Rack (Inside the Mast)**
Carousel with stationary pods and breaker plates
- 16 m/52.5 ft mast, 5 × 13.7 m (45 ft) pipe carousel
  - Pipe diameter 219 mm (8½ in)
  - Total hole depth 84.73 m (278 ft)
- 16 m/52.5 ft mast, 5 × 13.7 m (45 ft) pipe carousel
  - Pipe diameter 235 mm (9¼ in)
  - Total hole depth 84.73 m (278 ft)
- 16 m/52.5 ft mast, 4 × 13.7 m (45 ft) pipe carousel
  - Pipe diameter 273 mm (10¾ in)
  - Total hole depth 71.02 m (233 ft)
- 20 m/65.6 ft mast, 5 × 9.14 m (30 ft) pipe carousel
  - Pipe diameter 219 mm (8½ in)
  - Total hole depth 65.5 m (215 ft)
- 20 m/65.6 ft mast, 5 × 9.14 m (30 ft) pipe carousel
  - Pipe diameter 235 mm (9¼ in)
  - Total hole depth 65.5 m (215 ft)
- 20 m/65.6 ft mast, 4 × 9.14 m (30 ft) pipe carousel
  - Pipe diameter 273 mm (10¾ in)
  - Total hole depth 56.4 m (185 ft)
- 20 m/65.6 ft mast, 2 × 9.14 m (30 ft) pipe carousel
  - Pipe diameter 339 mm (13¾ in)
  - Total hole depth 38.1 m (125.2 ft)

### Rotary Drive System

<table>
<thead>
<tr>
<th>Type</th>
<th>Power (N·m)</th>
<th>Power (lbf ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Speed/Low Torque</td>
<td>0-17,219</td>
<td>0-12,700</td>
</tr>
<tr>
<td>Rotary Head, dual motors</td>
<td>0-150 rpm</td>
<td>0-124 rpm</td>
</tr>
<tr>
<td>High Speed/Low Torque</td>
<td>20,880</td>
<td>0-15,400</td>
</tr>
<tr>
<td>Rotary Head, dual motors</td>
<td>0-124 rpm</td>
<td>0-124 rpm</td>
</tr>
</tbody>
</table>

### Compressor (Standard)

<table>
<thead>
<tr>
<th>Type</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge air flow (sea level)</td>
<td>101.9 m³/min</td>
</tr>
<tr>
<td>Maximum operating pressure</td>
<td>6.9 bar</td>
</tr>
</tbody>
</table>

### Engine

<table>
<thead>
<tr>
<th>Model</th>
<th>C3512 HD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated horsepower</td>
<td>957 kW</td>
</tr>
<tr>
<td>Fuel tank</td>
<td>3289 L</td>
</tr>
</tbody>
</table>

*The C3512 HD engine meets Tier 2/Stage II equivalent emission standards

### Cooling

- Low coolant level switch
- Two coolers (split coolers) Maximum ambient cooling capacity of 52° C (125° F)
- Variable speed cooler fans, ECM controlled

### Operating Temperature

<table>
<thead>
<tr>
<th>Minimum ambient rating (standard)</th>
<th>Maximum ambient rating (standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>–1° C 30° F</td>
<td>52° C 125° F</td>
</tr>
</tbody>
</table>

### Operator’s Cab

- 24V to 12V converter
- All electric controls for drilling, tramping, leveling plus auxiliary functions
- HMI touch screen control
- Trainer’s seat
- Electric horn
- Full front drill window
- Heavy duty door latches
- Roof mounted air conditioning/heating/pressurizing unit; hydraulic driven
- Cab ladder, roof platform and railing
- Roof window with protective cage
- Rubber shock mounted and insulated two-man extra-large FOPS cab
- Slope indicators
- Split operator’s console with stainless steel panels and back-lit gauges
- Twelve (12) windows
- Two (2) swing out hinged doors with heavy duty door latching system
- Windshield wipers and washer tank kit
- Overhead interior dome lights
- Dash light on each panel
- Cat operator’s seat with inertia reel seat belts, mechanical suspension or option with seat belt, heat, ventilation and air suspension
MD6540C Rotary Blasthole Drill Specifications

**Controls**

- All manuals stored in control system, service, operators and schematics
- Engine shut down sequence
- Drill performance and monitoring/diagnostics system
- Electro-pneumatic compressor control system
- Filter indicators (air, hydraulic, and compressor), component status indicators, oil, fuel and water level indicators
- High/low tram speed select (high only when mast is down) interlock
- Mast lock indicator
- Electronic controls provide fast and reliable control of all drill functions
- ECM proportional fan speed control system
- Pump drive gearbox temperature sensor
- Rotary head RPM gauge – digital
- Tram interlock, machine outside stability limits
- Tram interlock, pipe in hole
- Tram interlock, mast up and locked or down and parked
- Jack/tram interlock
- Cab environment control (AC, filter, heat, fan speeds)
- Pipe positioner sensor
- Drill depth meter
- Drill function interlock, carousel in load position
- Drill function interlock, carousel not parked
- Drill function interlock, mast up and locked
- Drill function interlock, rod catcher not closed
- Rotary torque control
- Head clear interlock, rotary drive clear of carousel
- Winch not parked – tram interlock
- Jack pressure sensors
- Virtual rotary head travel stops

**Technology Group**

- **Basic**, includes Base Machine Control Group features
- **Standard**, includes Basic Control Group plus Auto Level/Retract and Auto Mast Angle
- **Ultra**, includes Standard plus Auto Drill (Rotary, Single Pass)
- **Cat Terrain for Drilling – Production**, includes Cat Terrain Mining System Interface
- **Cat Terrain for Drilling – Guidance**, requires Cat Terrain for Drilling – Production
- **Cat Terrain for Drilling – Strata**, requires Cat Terrain for Drilling – Production
- **Terrain Light**
- **Full Autonomy**
- Interface for third party mining systems

**Undercarriage**

Cat 374F undercarriage with full length rock guards and tram distance meter, 900 mm (35 in) triple grousers and auto tensioning.

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of rollers on each side</td>
<td>11</td>
</tr>
<tr>
<td>Rock guards/chain guards</td>
<td>Standard full-length guards</td>
</tr>
<tr>
<td>Maximum drive horsepower per track</td>
<td>300.5 kW 403 hp</td>
</tr>
<tr>
<td>Brakes</td>
<td>Spring set, hydraulic release</td>
</tr>
<tr>
<td>Brake release</td>
<td>Automatic</td>
</tr>
<tr>
<td>Tram speed maximum</td>
<td>1.93 km/h 1.2 mph</td>
</tr>
<tr>
<td>Gradeability</td>
<td>51%</td>
</tr>
<tr>
<td>Front</td>
<td>Three-point oscillating type</td>
</tr>
<tr>
<td>Track adjustment means</td>
<td>Automatic track tensioning system</td>
</tr>
<tr>
<td>Track drive disconnect</td>
<td>Standard (manual)</td>
</tr>
</tbody>
</table>

**Hydraulics**

- Auxiliary circuit pump
- Fan pump
- Two primary pumps

**Mainframe, Decks and Walkways**

Jacks, mast pivot and deck Welded integrally to mainframe

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine deck</td>
<td>Access both sides</td>
</tr>
<tr>
<td>Jack pressure sensors</td>
<td></td>
</tr>
<tr>
<td>Winch not parked – tram interlock</td>
<td></td>
</tr>
</tbody>
</table>

**Cat Terrain for Drilling – Production**

- **Standard**, includes Basic Mainframe and Deck features plus fixed ladder to main deck cab area, on right side of frame
- **Ultra**, includes Basic Mainframe and Deck features plus cascading, self-leveling stairs to main deck cab area, on right side of frame with switched walkway lighting at ground and deck levels
  - Includes two (2) lights
  - Includes ECM control tram interlock if ladder is down

- Interface for third party mining systems
**Base Machine**

- **Standard**, includes Basic Mainframe and Deck features plus fixed ladder to main deck cab area, on right side of frame
- **Ultra**, includes Basic Mainframe and Deck features plus cascading, self-leveling stairs to main deck cab area, on right side of frame with switched walkway lighting at ground and deck levels
  - Includes two (2) lights
  - Includes ECM control tram interlock if ladder is down
- Thermal protection of exhaust system and turbo lines
- Engine frame with hood
- Guard between engine and hydraulic drive
- Fuel tanks separated with check valves
- Hydraulic tank with isolation valves and interlocks
- Slip resistant decks and walkways
- 3289 L (869 gal) fuel, [2 tanks mounted under power train]
- Bolt-on hand rails with kick plates
- Cat maintenance free batteries
- Stainless battery box, sliding drawer type
- Heavy duty tow hooks (front end)
- Lift lugs
- Pipe loading guide roller
- Stationary rear deck
- Left rear swing gated handrail to allow for loading/unloading drill deck
- Rear deck bit storage box
- Walkways around the drill, 360 degrees
- Swing up cable steps, egress at each corner of drill
- Spring loaded self-closing gates
- Vertical mast rest at front of drill
- Fixed dust curtains – four side
- Mounting frame for pressure washer with port in fuel tank and water tank for DPO of washer
- Four (4) Cat maintenance free batteries
- Hydraulic viewing hatch with hatch viewing spot light

**Leveling Jacks**

- Lift capacity – each 68 344 kgf 150,670 lbf
- Four leveling jacks to provide stability drilling with 7° bench angle

**Drill Table and Work Deck**

- Table height off ground 1.79 m 5.87 ft
- Pipe loading guide roller
- Stationary rear deck
- Left rear swing gated handrail (dual gate design)
- Rear deck bit storage box with hinged aluminum cover
- Hydraulic viewing hatch with hatch viewing spot light

**Dust Control**

- Hydraulic curtain lifters front and back
- Water injection, 2921 L (1771 + 1150 L) [772 gal (468 + 304 gal)] below deck tanks
- Optional ECM control of water injection pump interlock, water flow meter/current control and tank level
- 2.271 L (600 gal) water tank mounted on deck

**Optional Dust Control Choices**

- No dust suppression
- Fixed curtains (left and right sides)
  - Auto raise hydraulic lifted curtains for rear and front
  - Includes ECM control tram interlock if dust skirts are not lifted up
- Water injection, 2921 L (1771 + 1150 L) [772 gal (468 + 304 gal)] below deck tanks [1150 L (304 gal) not functional in Cold Weather Level 4]
  - Includes ECM control of water injection pump interlock, water flow meter/current control and tank level
- Water injection, 5193 L (1,372 gal) (not available with Cold Weather) 2922 L (772 gal) below deck tanks plus 2271 L (600 gal) deck mounted tank (3 tanks)
  - Includes ECM control of water injection pump interlock, water flow meter/current control and tank level
- Dust collector, 101.9 m³/min (3,600 ft³/min) [tandem 50.9 m³/min (1,800 ft³/min)] with precleaner
  - Water injection, 2921 L (772 gal) [1771 + 1150 L (468 + 304 gal)] below deck tanks
  - Includes ECM control of water injection pump interlock, water flow meter/current control and tank level
- Water injection fast fill
## Rotary Tooling
- Rotary package for 219 mm (8 7/8 in) diameter pipes (drill pipe not included) on 16 m/52.5 ft mast, carousel plates, HOBO inserts, top sub, deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling with Shock Sub
- Rotary package for 219 mm (8 7/8 in) diameter pipes (drill pipe not included) on 16 m/52.5 ft mast, carousel plates, HOBO inserts, shock sub with adapter, deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling
- Rotary package for 235 mm (9 1/4 in) diameter pipes (drill pipe not included) on 16 m/52.5 ft mast, carousel plates, HOBO inserts, top sub, deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling with Shock Sub
- Rotary package for 235 mm (9 1/4 in) diameter pipes (drill pipe not included) on 16 m/52.5 ft mast, carousel plates, HOBO inserts, shock sub with adapter, deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling
- Rotary package for 273 mm (10 3/4 in) diameter pipes (drill pipe not included) on 16 m/52.5 ft mast, carousel plates, HOBO inserts, top sub, deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling with Shock Sub
- Rotary package for 273 mm (10 3/4 in) diameter pipes (drill pipe not included) on 16 m/52.5 ft mast, carousel plates, HOBO inserts, shock sub with adapter [total], deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling
- Rotary package for 273 mm (10 3/4 in) diameter pipes (drill pipe not included) on 20 m/65.6 ft mast, carousel plates, HOBO inserts, top sub, deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling with Shock Sub
- Rotary package for 273 mm (10 3/4 in) diameter pipes (drill pipe not included) on 20 m/65.6 ft mast, carousel plates, HOBO inserts, shock sub with adapter [total], deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling
- Rotary package for 339 mm (13 7/8 in) diameter pipes (drill pipe not included) on 20 m/65.6 ft mast, carousel plates, HOBO inserts, shock sub with adapter [total], deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub

## Rotary Tooling with Shock Sub
- Rotary package for 339 mm (13 7/8 in) diameter pipes (drill pipe not included) on 20 m/65.6 ft mast, carousel plates, HOBO inserts, shock sub with adapter [total], deck wrench, hoist plug, horse shoe wrench, universal bit basket, deck seals, chock bars, pipe rack inserts and bit sub
MD6540C Rotary Blasthole Drill Specifications

Winch System

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winch lift capacity</td>
<td>5443 kg</td>
</tr>
<tr>
<td>Cable weight rating</td>
<td>1588 kg</td>
</tr>
<tr>
<td>Cable size</td>
<td>13 mm</td>
</tr>
<tr>
<td>Winch lift capacity</td>
<td>12,000 lb</td>
</tr>
<tr>
<td>Cable weight rating</td>
<td>3,500 lb</td>
</tr>
<tr>
<td>Cable size</td>
<td>0.5 in</td>
</tr>
</tbody>
</table>

Pipe Handling

- Sliding deck wrench
- Fixed cable pipe catcher or optional hydraulic safety arm/pipe catcher with drill function interlock, when pipe catcher is not closed
- Basic or optional hydraulically operated bit basket
- Lifting bail for hoisting drill pipe/bit sub

Safety

- Alloy drill deck covers, for servicing when mast in mast rest, with storage provision
- Air hose safety sleeves (whip socks)
- Full battery disconnect or starter isolation only with lock outs
- Remote jump start terminals
- Seven (7) engine shut down buttons, by each drill egress/access point, in cab, in engine area, on drill deck
- Tram alarm, with tram engagement
- Strobe beacon on cab and left side of drill
- Hinged protective cage for full length front drill window
- LED night perimeter flood lighting – four sides LED spot lighting power group area; drill deck; mast carousel; access ladder and walkways for night drilling
  - Luminesces to meet Cat light standards
- A printed copy of the Operation and Maintenance Manual(s) is provided with each machine, installed at the factory, and available in the legal language(s) of the country where the machine is to be placed in service
  - The language specified on the factory order shall be provided
- A separate, weather-resistant literature compartment in the operator’s station is provided for the Operation and Maintenance Manual and other items related to safe operation and maintenance of the machine
- Burn protection from exhaust pipes and turbo lines

Service Features

- Loop filters between hydraulic pumps and motors
- Two (2) hydraulic return filters, one (1) hydraulic case drain strainer, two (2) hydraulic charge filters, compressor oil filters, automatic 45 point lubrication system, centralized
- Hydraulic pressure test points
- Fast fill refueling system
- Self contained, Jib Crane mounted on the drill deck with pedestal controls

Service Packages

- **Standard**, includes Basic Service features plus: full service center (fill and evacuation), fuel, compressor, coolant, engine oil, hydraulic, and gear box with fill only for rock bit oil and central lubrication
  - Jib crane, with pedestal controls
- **Ultra**, includes Standard Service features plus: mast access ladder, mast grating, posts only (for lanyard attachment to use with cable for traveling hook and harness)
  - Jib crane, with pedestal controls

Miscellaneous

- Tool oiler
- Drill pipe
- Blowdown hose with nozzle and reel
- Remote winch control
- Tram remote control (pendant/cable) for operation of tram controls from ground
- Foot brush
- Tow bar assembly
- Interface for third party mining systems
- Remote jump start terminals
<table>
<thead>
<tr>
<th>Climate Choices</th>
<th>Dealer Attachments Available</th>
</tr>
</thead>
</table>
| **Standard Climate Range**  
• Ambient temperature range: –1° C (30° F) to 52° C (125° F)  
  – Cab cooling to 19° C (66° F)  
  – Window shades  
  – Safety laminated tinted glass  
| • Customer labeling  
• Lanyard attachment – cable with travelling hook on mast and harness for personnel  
• Fire suppression system  
• Kitchenette  
• Power connections and brackets for third party module system  
• Sound suppression system  
• CB radio with antenna |
| **Cold Climate Level 2**  
• Ambient temperature range: –18° C (–1° F) to 52° C (125° F)  
  – Wind up to 96 km/h (60 mph)  
  – Cab heating to 27° C (81° F)  
  – Safety laminated tinted glass  
  – Cab glass defroster  
  – Ether starting aid  
  – Cab floor heater |
MD6540C Rotary Blasthole Drill Specifications

Dimensions
All dimensions are approximate.

<table>
<thead>
<tr>
<th></th>
<th>16 m/52.5 ft Mast</th>
<th>20 m/65.6 ft Mast</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.31 m 23.6 ft</td>
<td>7.31 m 23.6 ft</td>
</tr>
<tr>
<td>2</td>
<td>23.35 m 76.6 ft</td>
<td>26.95 m 88.4 ft</td>
</tr>
<tr>
<td>3</td>
<td>14.75 m 48.4 ft</td>
<td>14.75 m 48.4 ft</td>
</tr>
<tr>
<td>4</td>
<td>17.03 m 55.9 ft</td>
<td>17.03 m 55.9 ft</td>
</tr>
</tbody>
</table>

Weights

<table>
<thead>
<tr>
<th></th>
<th>153 903 kg</th>
<th>339,297 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working weight</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Standard Equipment

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

**BASE MACHINE**
- Cat 3512C HD, 957 kW (1,283 hp), 1,800 rpm engine meets Tier 2/Stage II equivalent emission standards
- Thermal protection of exhaust system and turbo lines
- Engine frame with hood
- Guard between engine and hydraulic drive

**COMPRESSOR**
- 101.9 m³/min @ 6.9 bar (3,600 ft³/min @ 100 psi), 1,800 rpm, butterfly inlet, spiral valve control

**COOLING**
- Low coolant level switch
- Two coolers (split coolers)
- Maximum ambient cooling capacity of 52° C (125° F)
- Variable speed cooler fans, ECM controlled

**HYDRAULIC**
- Auxiliary circuit pump
- Fan pump
- Two primary pumps

**CAB**
- Spacious cab is 4.85 m² (52.22 ft²)
- 24V to 12V converter
- All electric controls for drilling, tramming, leveling plus auxiliary functions
- HMI touch screen control
- Trainer’s seat
- Electric horn
- Full front drill window
- Heavy duty door latches
- Roof mounted air conditioning/heating/pressurizing unit; hydraulic driven
- Cab ladder, roof platform and railing
- Roof window with protective cage
- Rubber shock mounted and insulated two-man extra large FOPS cab
- Slope indicators
- Split operator’s console with stainless steel panels and back-lit gauges
- Twelve (12) windows (see Climate Groups for glass selection)
- Two swing out (2) hinged doors with heavy duty door latching system
- Windshield wipers and washer tank kit
- Overhead interior dome lights
- Dash light on each panel
- Lighting package includes 4,200 lumen perimeter flood lights and 1,950 lumen area spotlights

**CONTROL**
- All manuals stored in control system, service, operators and schematics
- Engine shut down sequence in control
- Drill performance and monitoring/diagnostics system
- Electro-pneumatic compressor control system
- Filter indicators (air, hydraulic, and compressor)
- High/low tram speed select (high only when mast is down) interlock
- Mast lock indicator
- Electronic controls provides fast and reliable control of all drill functions
- ECM proportional fan speed control system
- Pump drive gearbox temperature sensor
- Rotary head RPM gauge – digital
- Tram interlock, machine outside stability limits
- Tram interlock, pipe in hole
- Tram interlock, mast up and locked or down and parked
- Jack/tram interlock
- Cab environment control (AC, filter, heat, fan speeds)
- Pipe positioner sensor
- Drill depth meter
- Drill function interlock, carousel in load position
- Drill function interlock, carousel not parked
- Drill function interlock, mast up and locked
- Drill function interlock, rod catcher not closed
- Rotary torque control
- Head clear interlock, rotary drive clear of carousel
- Winch not parked – tram interlock
- Jack pressure sensors
- Virtual rotary head travel stops

*(continued on next page)*
Standard equipment may vary. Consult your Cat dealer for details.

**FRAME**
- Fuel tanks separated with check valves
- Hydraulic tank with isolation valves and interlocks
- Slip resistant decks and walkways
- 3289 L (869 gal) fuel, (2 tanks mounted under power train)
- Bolt-on hand rails with kick plates
- Four (4) Cat maintenance free batteries
- Stainless battery box, sliding drawer type
- Four leveling jacks to provide stability drilling with 7° bench angle
- Heavy duty tow hooks (front end)
- Lift lugs
- Pipe loading guide roller
- Stationary rear deck
- Left rear swing gated handrail
- Rear deck bit storage box
- Hydraulic viewing hatch with hatch viewing spot light
- Walkways around the drill, 360 degrees
- Swing up cable steps, egress at each corner of drill
- Spring loaded self closing gates
- Vertical mast rest at front of drill
- Mounting frame for pressure washer with port in fuel and water tanks

**UNDERCARRIAGE**
- Cat undercarriage with full length rock guards and tram distance meter, auto tensioning and 900 mm (35 in) triple grousers

**MAST**
- Up to 49 895 kg (110,000 lb) rated capacity single cylinder pulldown/hoist system
- Rotary head gear box, motors choice in attachment packages
- Dust hood with hinged quick change dust seal
- 30 degree angle drilling in 5° increments and mast locks and indicator in cab [25 degree limit for 406 mm (16 in) holes]
- Auto cable tensioning system (attached on pull down side)
- Sliding deck wrench, hydraulic fork
- HOBO (Hydraulic Operated Break-Out wrench)
- Mast lanyard mounting plates
- Sheave/feed rope guards
- Cable pipe catcher
- Winch 5443 kg (12,000 lb) lift capacity
- Pipe positioner

**MISCELLANEOUS**
- Standard Caterpillar colors

**SAFETY**
- Alloy drill deck covers, for servicing when mast in mast rest
- Air hose safety sleeves (whip socks)
- Battery disconnect and starter isolation only with lock outs
- Seven (7) engine shut down buttons, by each drill egress/access point, in cab, and in engine area on drill deck
- Tram alarm, with tram engagement
- Strobe beacon on cab and left side of drill
- Hinged protective cage for full length drill window
- LED night perimeter flood lighting on four sides, LED spot lighting power group area; drill deck; mast carousel; access ladder and walkways for night drilling

- A printed copy of the Operation & Maintenance Manual(s) shall be provided with each machine, installed at the factory, and available in the legal language(s) of the country where the machine is to be placed in service
  - The language specified on the factory order shall be provided
- A separate, weather-resistant literature compartment in the operator’s station shall be provided for the Operation & Maintenance Manual and other items related to safe operation and maintenance of the machine
  - The compartment shall be lockable or be inside a lockable cab
  - A lanyard should be used to attach the manual to the machine
- Burn protection from exhaust pipes and turbo lines

**SERVICE**
- Loop filters between hydraulic pumps and motors (2) Hydraulic return filters, (1) hydraulic case drain strainer, (2) hydraulic charge filters, compressor oil filters, automatic 45 point lubrication system, centralized
- Hydraulic pressure test points
- Fast fill refueling system

**ROTARY ACCESSORIES**
- Rotary package for up to 339 mm (13⅜ in) OD pipe diameter pipes (drill pipe not included) carousel plates, HOBO inserts, 914 mm (36 in) top sub, deck wrench hoist bell, horse shoe wrench, universal bit basket, deck seals, chock bars pipe rack inserts, bit sub and roller deck bushing
Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

MISCELLANEOUS

• Tow bar assembly
• Interface for third party mining systems
• Drill pipe thread lubrication
• Bit lubricator
• Remote jump start terminals
• Factory service engineer on site
  (18 working days) days to direct start-up
  and commissioning
• Cat 374F undercarriage with 750 mm
  (29.53 in) triple grousers for hard rock
• Operator aides
  – Mast crown clearance light
  – Two (2) closed circuit camera
    (front and left side) with monitor in cab
  – Hydraulic pipe catcher