

MD6250

ROTARY DRILL



Pull-down Capacity: Up to 20 411 kg (Up to 45,000 lb)
Hole Diameter: 165-250 mm (6.5-9.875 in)
Engine: Cat® C27





Reliable performance
backed by expert support.

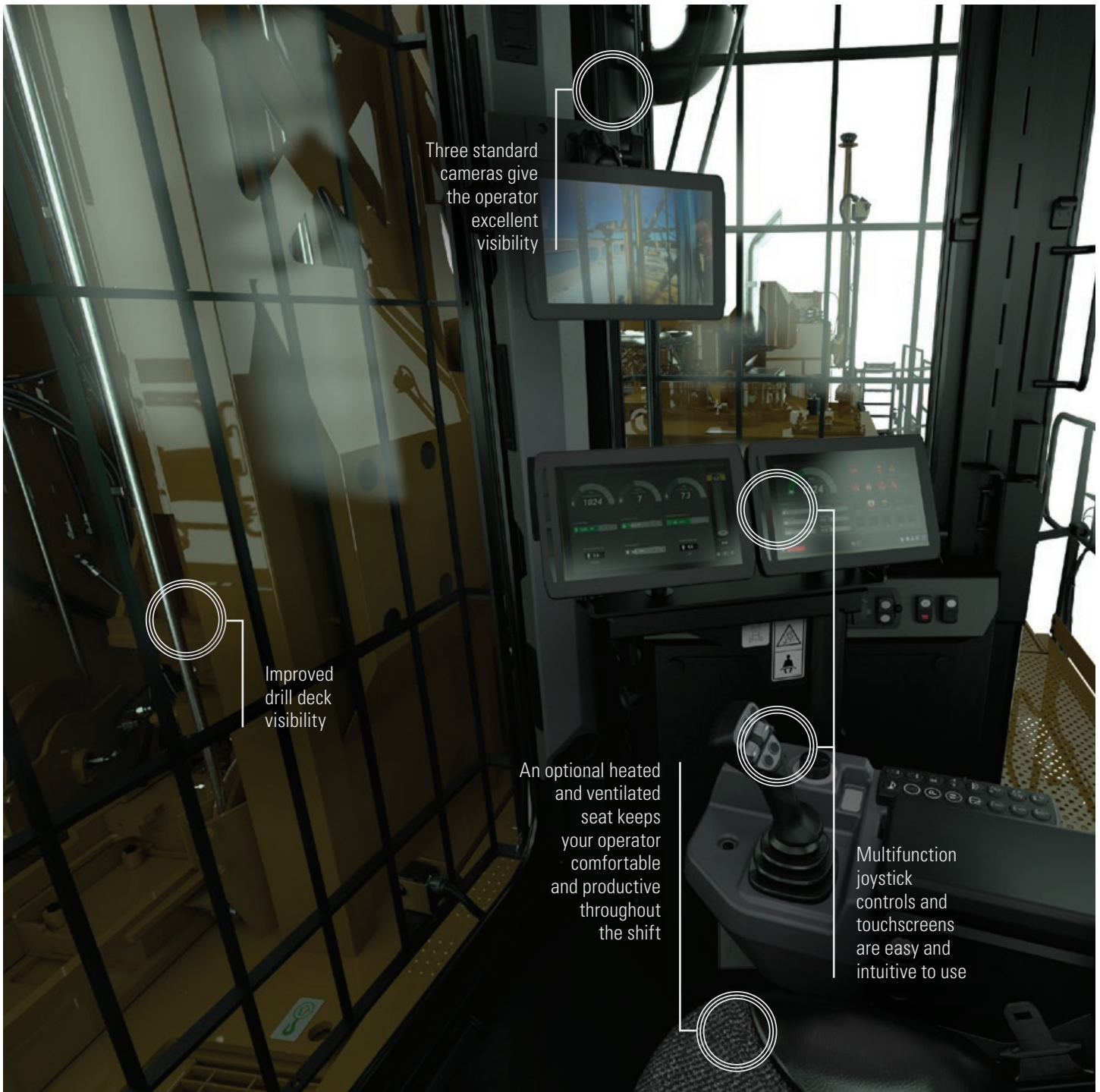
THE CAT® MD6250



The Cat® MD6250 is a next-generation rotary blasthole production drill with a wide variety of features, technologies and options that help you configure a machine to suit your application. It's easy to own and operate, with improved serviceability and the reliable performance you expect from Caterpillar — backed by the world-class support of the Cat dealer network.

CAB AND OPERATOR STATION FOR SAFETY AND COMFORT

The MD6250 cab offers
the comfort and control you
expect from a Cat machine



Three standard
cameras give
the operator
excellent
visibility

Improved
drill deck
visibility

An optional heated
and ventilated
seat keeps
your operator
comfortable
and productive
throughout
the shift

Multifunction
joystick
controls and
touchscreens
are easy and
intuitive to use



**CAT® ELECTRONICS —
THE BACKBONE OF
THE MACHINE**

The MD6250 is controlled through proven Cat electronics, with an electronic architecture your technicians are familiar with from other Cat machines. Integrated machine protection features and interlocks help keep your operators safe, and the machine up and running by preventing potential failures or misuse.

With Cat Electronic Technician (Cat ET), troubleshooting is quick and easy. The MD6250's electronics also provide a common platform for the integration of a number of future autonomy solutions.



ENHANCED BY TECHNOLOGY

BUILT FOR AUTONOMY

The MD6250 offers a number of standard and optional technologies to help enhance your efficiency, productivity and safety. At the push of a button, your operators can enable the on-board Drill Assist automation functionalities, including:

- + Auto Level (with auto jacks retract)
- + Auto Mast (raises/lowers and locks/unlocks the mast)
- + Auto Drill (automates a complete drilling cycle)



CAT® MINESTAR™ SOLUTIONS TERRAIN FOR DRILLING

Improve drilling accuracy with high-precision GPS guidance, ensuring that holes are drilled in the right place and to the right depth. Terrain for drilling improves pattern accuracy and reduces over- and under-drilling, reducing the amount of rework — leading to lower costs and faster, smoother operation.



CAT MINESTAR SOLUTIONS COMMAND FOR DRILLING

Command for drilling implements a building-block approach to autonomy that offers multiple solutions to meet your site's needs. From onboard autonomous drill cycles to offboard non-line-of-sight remote control or autonomous operations, Command for drilling can improve the safety and productivity of your operation dramatically.



MORE TIME DRILLING

LESS TIME SERVICING

The MD6250 was designed from the ground up to offer easy service access and extended preventive maintenance intervals. Neat and uniform hydraulic hose and wiring harness runs, grouped service points and open access to components help your maintenance personnel keep the machine running for superior uptime and availability

Large water and fuel tanks reduce time spent refilling. Commonality of consumables between the Cat drill family mean you can keep fewer parts on hand, further simplifying service. And with onboard drill health monitoring and Cat Electronic Technician, troubleshooting is quick and simple.

Caterpillar's onboard drill health and performance monitoring help mine management plan for both operations and maintenance.



PART OF THE CAT DRILL FAMILY

The MD6250 is a wholly integrated Caterpillar design, meaning it uses Cat parts, technologies and components, with a wide variety of customizable options that help you build the ideal drill for your application. Backed by the world-class support of the Cat dealer network, this drill offers the reliability and parts availability you expect from a Cat machine.

Common parts and components, as well as similar systems and controls, make for a unified owning and operating experience that helps reduce time spent training and improves operator performance while simplifying service.

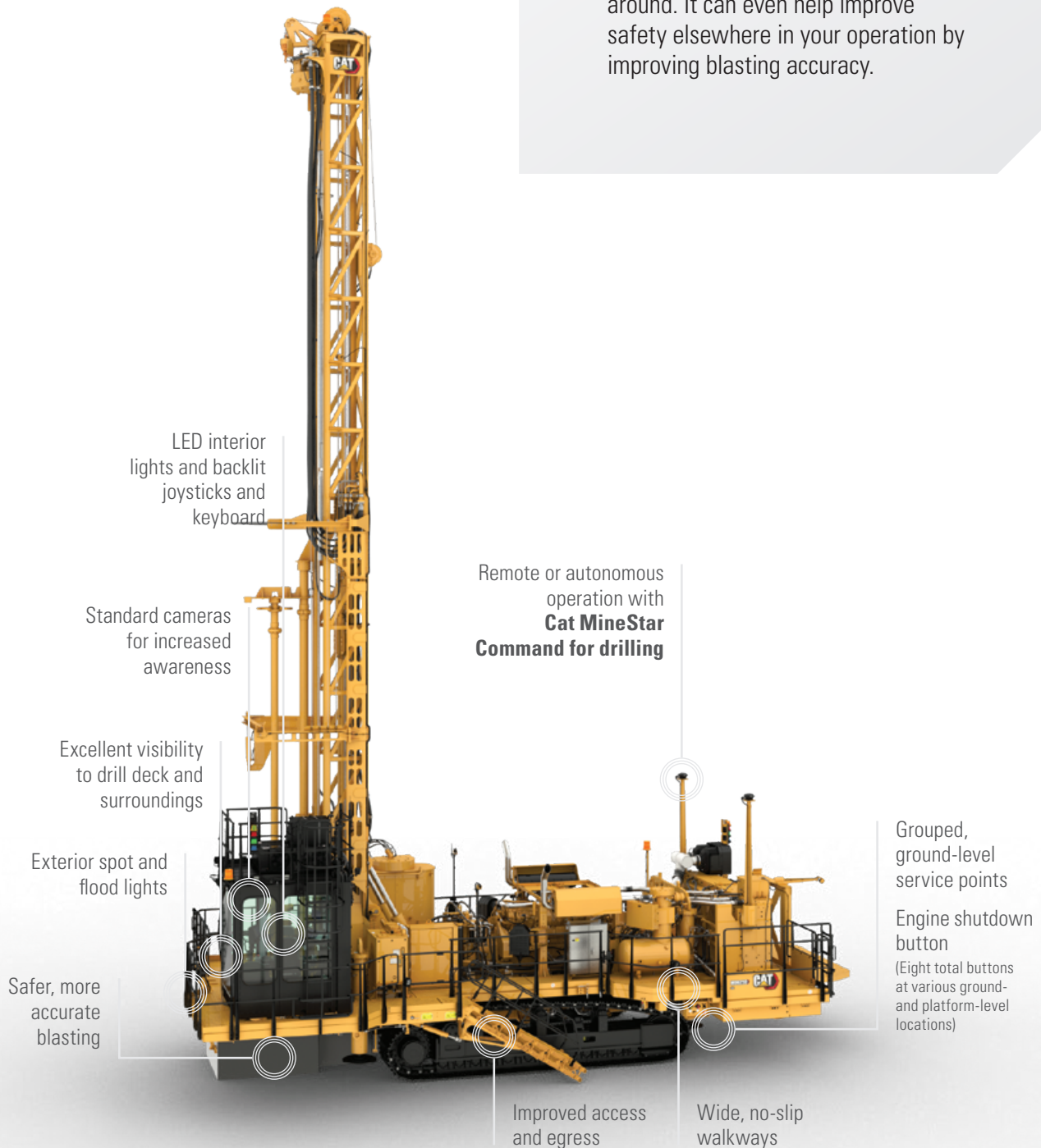


MATCHED POWER

Caterpillar's new Electronic Compressor Controls (ECC) modulate both working pressure and air volume flow, matching the drill's compressed air output to requirements specific to tooling used and how it interacts with ground conditions and operating environment — leading to efficient operation and lower fuel consumption. That means lower costs and higher profitability for your operation.

SAFETY-INFUSED DESIGN

Safety is your first priority, and the MD6250 helps you meet your most important goal — getting everyone home safely at the end of every shift. We've packed it with features that make it safer to operate and work around. It can even help improve safety elsewhere in your operation by improving blasting accuracy.





MINING FOR A **BETTER WORLD**

Governments and regulatory agencies mandate that you establish and follow environmentally sound policies and practices as you meet the demand for mined materials. We're focused on doing our part to make sure our drills help you meet those regulations.

The MD6250 is designed to use less fuel, which reduces engine emissions. It also reduces consumable use, ultimately producing less waste — and with longer maintenance intervals and the option to use rebuilt or remanufactured components, you can get longer machine life with less impact on the environment.

PARTNERS

IN YOUR PERFORMANCE

Our commitment to your success doesn't end when your MD6250 starts drilling. We immediately start looking for ways to make your machine work more efficiently, safely and productively. From addressing performance issues, to training operators and technicians, to calibrating onboard technologies — our support of your drill productivity is ongoing.





YOUR PARTNER FOR THE COMPLETE EQUIPMENT LIFECYCLE

No one knows more about how to get the most from a piece of Cat equipment than Caterpillar and your local Cat dealer. Our partnership starts with validation and testing of the machine and continues through the complete lifecycle of the drill.

The one-of-a-kind Cat dealer support network delivers expert service, integrated solutions, after-sales support, fast and efficient parts fulfilment, world-class rebuild and remanufacturing capabilities and more. Cat dealers operate as nearly 200 local businesses — each one fully embedded in and committed to the geographic area it serves. That means you work with people you know, who know your business, and who respond on your timeframe.

Caterpillar and Cat dealer personnel will partner with you on site to improve the performance not only of your drill but of your entire operation. You'll have

access to parts and service, as well as technicians who are focused on helping you optimize repairs to keep machines productive. And we help with training to ensure your operators have the skills and knowledge they need to work as efficiently and productively as possible.

We also work alongside you to ensure you achieve maximum value throughout the life of your equipment. Together with our Cat dealer network, we customize service offerings to provide a maintenance solution that fits your operation — whether you want to perform the majority of service yourself, or you're looking for an onsite partner to manage your maintenance organization. We're also consultants who can help you make smart decisions about buying, operating, maintaining, repairing, rebuilding and replacing equipment.

TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

ENGINE OPTIONS

Emissions: Equivalent to U.S. EPA Tier 2			
Engine Power		C27 @ 1,800 rpm	
ISO 14396	616 kW		826 hp
ISO 14396 (DIN)			838 mhp (PS)
Emissions: U.S. EPA Tier 4 Final			
Engine Power		C27 @ 1,800 rpm	
ISO 14396	650 kW		872 hp
ISO 14396 (DIN)			884 mhp (PS)
+ Dual starter motors			
+ Scheduled Oil Sampling (S-O-S SM) ports			
+ Ether starting aid (ether bottle supplied locally)			

COMPRESSOR / RECEIVER OPTIONS

Compressor			
Rotary drilling	56.6 m ³ /min (2,000 ft ³ /min)	@ 8.6 bar (125 psi)	
DTH Drilling	38.2 m ³ /min (1,350 ft ³ /min)	@ 34.4 bar (500 psi)	
DTH drilling	42.4 m ³ /min (1,500 ft ³ /min)	@ 24.1 bar (350 psi)	
+ With the compressor's variable volume control, the operator can limit air output resulting in reduced fuel consumption			
+ Electronic compressor control and regulation			
+ DTH selection includes tool oiler			
Receiver Tank			
+ Low pressure 8.6 bar (125 psi) for ASME/CRN/AU or CE			
+ High pressure 24.1 or 34.4 bar (350 or 500 psi) for ASME/CRN/AU or CE			

COOLING

- + Coolers with easy cleaning access
- + Separate engine cooling module
- + All cooler core sections are replaceable
- + Functional in ambient temperature up to 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)	
+ Withstands high heat to 52° C (125° F)	
Climate Level 2 Arctic Fluids and Lubricants	
+ Rated down to -18° C (-0.4° F)	
Climate Level 4 Arctic Fluids and Lubricants	
+ Rated down to -40° C (-40° F)	
+ Diesel fired heating system that heats and circulates engine coolant through engine block, below deck water tank, heating elements for battery trays	
+ Full Arctic lubricant package to include engine and hydraulic oil	
+ Electric heating package with breaker panel to power: 120V heating blanket for compressor receiver tank, heat trace for hosing from water tank to water pump and water fast-fill assembly, plus primary tank	
+ Shore power connection box with switchable 240-600V (50 amp) connection (diesel gen set and/or plug supplied locally).	
+ Box includes standard 50 hz battery charger, if 60 hz charger required, to be ordered via after market, refer to P-n 540-4271	
+ Breaker panel includes five (5) additional breakers for locally supplied heating elements if needed	
Batteries, Sealed – Quantity: Four (4)	
+ Batteries, Sealed – Quantity: Six (6) (required for cold weather Level 2 and 4 and/or semi autonomy packages)	

FRAME AND WORK DECK

- + Leveling Jacks, A-frame/mast pivot and drill deck are welded integrally to mainframe for maximum durability and long life
- + Stationary drill deck; for vertical and angle drilling
- + Four leveling jacks provide leveling on a 7° bench (any orientation)
- + Primary fuel tank capacity 1416 L (374 gal)
- + Fuel capacity expansion for additional 1416 L (374 gal) optional for total capacity of 2832 L (748 gal); (required for autonomy packages)
- + Three (3) egress points on deck areas in addition to main access
- + Heavy duty tow hooks (front end)
- + Four (4) lift lugs, for use with cables or chains
- + Fixed access stairs to the cab area
- + Sturdy guardrails with toe guards, self-closing gates

UNDERCARRIAGE

Model	Cat 336E	
Lower Rollers	Twelve (12)	
Carrier Rollers	Three (3)	
Track Chain Guards and Guides	Level two	
Drawbar Pull	417 000 N	93,745 lbf
Travel Speed	2.45 kph	1.5 mph
Triple Grousers for Hard Rock; Ground Bearing Pressure 0.88 bar (12.7 psi)	600 mm	23.6 in
Triple Grousers for Soft Rock; Ground Bearing Pressure 1.10 bar (15.9 psi)	750 mm	29.5 in

HYDRAULICS

- + Two (2) primary pumps – 145 cc (piston, with proportional electronic controls)
- + One (1) auxiliary circuit pump – 110 cc (piston, load sensing)
- + Two (2) fan pumps – 74 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

TOOL PACKAGE ROTARY

- + One-piece roller deck bushing
- + Pipe positioner rollers
- + Deck wrench
- + Top sub
- + Bit sub
- + Pipe wiper seal

TOOL PACKAGE DTH

- + Two-piece roller deck bushing
- + Pipe positioner rollers
- + Deck wrench
- + Shock sub
- + Top Sub
- + Hammer Sub
- + Pipe wiper seal
- + Drill tool lubricator is included with selection of DTH Compressor

ROTARY HEAD TOP DRIVE SYSTEM

Torque, Single Motor	11 700 N·m	8,629 lbf·ft
Rotation Speed	0-160 rpm	

- + Spindle – 140 mm (5.5 in) API regular thread with splined collar
- + Rotary torque control
- + Virtual rotary head travel interlocks

MAST AND PIPE RACK CAROUSEL FEATURES

11.2 m (36.7 ft) Mast

Hole Diameter Range	165-250 mm	6.5-9.875 in
Single-Pass Depth	11.2 m	36.7 ft
Multi-Pass Depth	53.9 m	176.7 ft

Pull-Down Capacity	20 411 kg	45,000 lb
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Hoist Capacity	20 411 kg	45,000 lb
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Hoist Speed	0.81 m/sec	2.65 ft/sec
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Bit Load (single pass)	22 321 kg	49,210 lb
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13.6 m (44.6 ft) Mast

Hole Diameter Range	165-250 mm	6.5-9.875 in
Single-Pass Depth	13.6 m	44.6 ft
Multi-Pass Depth	37.9 m	124.6 ft

Pull-Down Capacity	29 483 kg	65,000 lb
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Hoist Capacity	22 113 kg	48,750 lb
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Hoist Speed	0.66 m/sec	2.16 ft/sec
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Bit Load (single pass)	32 655 kg	71,993 lb
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- + Mast configurations complete with pipe rack carousel and angle drilling package (vertical, out to 30 degrees in 5-degree increments)
- + Hydraulically actuated, self-indexing pipe rack carousel accepts pipe diameters from 127 mm (5.0 in) to 194 mm (7.625 in)
- + Drill strings configured for bit changes (above the deck)
- + Single Hydraulic Cylinder and cable system for pulldown/hoist
- + Auto tensioning of pull down and hoist cables
- + Sliding deck wrench assembly
- + Configured with roller deck bushing for tricone applications, two-piece deck bushing for DTH
- + Closed circuit camera in mast is used to view pipe rack carousel/top drive operation while racking pipes
- + Drill pipe positioner

MAST PACKAGES

Mast Accessories Manual 11.2 m (36.7 ft) or 13.6 m (44.6 ft) Mast	Wire rope pipe catcher, manual bit basket
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Mast Accessories Hydraulic 11.2 m (36.7 ft) Mast	One (1) hydraulically actuated pipe catcher, hydraulically operated bit basket
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Mast Accessories Hydraulic 13.6 m (44.6 ft) Mast	One (1) hydraulically actuated pipe catcher, plus one (1) wire rope pipe catcher, hydraulically operated bit basket
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Angle Drilling	Included with either mast
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CAROUSEL (MAST SIZE AND PIPE DIAMETER DEPENDENT)

Pipe rack carousel, standard:

- + 11.2 m (36.7 ft) Mast: holds quantity of four (4) 10.6 m (35 ft) pipes
- + 13.6 m (44.6 ft) Mast: holds quantity of four (4) 6.1 m (20 ft) pipes

Dual purpose carousel pipe:

- + 11.2 m (36.7 ft) Mast: holds quantity of two (2) 10.6 m (35 ft) pipes and quantity of two (2) 7.62 m (25 ft) pipes, and adaptors to connect to DTH hammer and tricone bit (DTH hammer and tricone not included)
- + Dual purpose pipe carousel accepts 140 mm (5.5 in) or 168 mm (6.625 in) pipe — contact factory for additional pipe diameters

HYDRAULIC BREAK OUT WRENCH

Variable Grip Hydraulic	114-152 mm (4.5-6.0 in)
Break Out Wrench Grip Ranges	152-216 mm (6.0-8.5 in)

DRILL PIPE

10.6 m (35 ft) Pipes for 11.2 m (36.7 ft) Mast – holds quantity of four (4)

127 mm	5.0 in
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140 mm	5.5 in
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152 mm	6.0 in
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165 mm	6.5 in
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178 mm	7.0 in
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194 mm	7.625 in
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6.1 m (20 ft) Pipes for 13.6 m (44.6 ft) Mast – holds quantity of four (4)

127 mm	5.0 in
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140 mm	5.5 in
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152 mm	6.0 in
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165 mm	6.5 in
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178 mm	7.0 in
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194 mm	7.625 in
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M106250 ROTARY DRILL

For more complete information on Cat products, dealer services and industry solutions, visit us at www.cat.com

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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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