

MD5075C

Track Drill



General Data

Hole Diameter Range	76.2 mm-114.3 mm	3.0 in-4.5 in
Hole Depth Maximum	31.2 m	102.5 ft
Engine C9	224 kW (300 hp) at 1,800 rpm	
Compressor	9.9 m ³ /min	350 ft ³ /min
Rock Drill HPR5123	23 kW	31 hp

MD5075C Features

Rock Drill

With three times the lifespan and less than half of the parts cost of competitive rock drills, you cannot overlook the value of the Cat® Rock Drill for reaching maximum uptime at low total cost of ownership.

Carousel Rod Changer

Cat Track Drill rod handling system is 100% electronics-free so uptime is maximized.

Power Group

Cat drills power group is designed by Cat experts providing the most efficient power.

New Cab, Controls, More Technology

MD5075C has a cab with superior safety features and a new operating system for drill monitoring.

Serviceability and Customer Support

MD5075C is easy to service with ground-level access to all major service points and well-organized electrical and hydraulic arrangements.

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MD5075C High Productivity

More Drilling. Less Cost. Better Support.



The new MD5075C Track Drill includes new features that are aligned with these main customer needs: Reducing Downtime and Cost, Enhancing Productivity, and being Fully Supported.

High productivity is a direct result of its best-in-class rock drill, fast and electronics free carousel rod changer, and a Cat engineered power train with a large, variable air compressor. Several technology products assist with optimum operations and equipment management. Troubleshooting is easy because MD5075C is equipped with Cat electronics that allow the use of Cat ET.

Drill uptime can make or break your operation, because without drilling there can be no loading, hauling or crushing. If high mechanical availability is one of your top concerns, the MD5075C is an ideal solution thanks to its enhanced durability, improved serviceability and lower maintenance requirements.

Best-in-class Rock Drills

More Drilling. Less Cost.

What is the Cat Rock Drill Advantage?

Cat Rock Drills are power matched to the application for energy-efficient drilling. They are simple and durable, with extended service intervals, and service on the feed is quick. Major components are designed to last the life of the machine, and Caterpillar offers rock drills that can be serviced on-site. With triple the lifespan and less than one-half of the parts costs of competitive rock drills, you cannot overlook the value of a Cat Rock Drill for reaching maximum uptime and low costs.

Standard and Optional Choices

The MD5075C uses an HPR5123 Rock Drill, which accepts 45 or 51 mm drill steel. Alternatively, it can be equipped with an HPR4519 Rock Drill which accepts 45 mm drill steel.

Rock Drill Service Cost Advantage

Cat Rock Drills require 3.5 times less service hours per year because they are robust and require fewer service intervals. Each service takes only half of the time of other rock drills due to simplistic design with four housings and only half of the internal parts of other brands. Overall the Cat Rock Drills service cost is 60 percent less than competitive models year over year.

Durable Design

A simple design coupled with high strength materials yields exceptional durability. Having only half of the components of competitive models, there are fewer internal parts to wear. There are four major housings bolted together with high strength flanges eliminating troublesome long tie rods and the bushings are alloy for long life. Major rock drill components are designed to last the life of the machine.

Owner Serviceable

Cat Rock Drills are the only owner serviceable rock drill. That is a significant cost savings because others require downtime for round trip transportation to a clean room environment for service. With Cat Rock Drills, stocking multiple or back up rock drills is not required and all maintenance can be done in your shop and on the feed including, and up to, a major rebuild.

Automated Rock Drill Lube System – Optional

While other rock drills use oil, Cat Rock Drills use grease which is cleaner and easier to manage. The Automated Lube System keeps the rock drill greased at ideal intervals which helps to achieve peak performance, extends component life and is a tremendous time saver over manual greasing. The grease reservoir capacity is for up to eight 10-hour shifts.



Rock Drill HPR5123 – 23 kW (31 hp)

The Cat Rock Drills are powered matched to application, simple and durable, they have long service intervals, short service hours, 25k hour life cycle and are 100% serviceable on the feed. With three times the lifespan and less than one half the parts cost of competitive rock drills, you cannot overlook the value of the Cat Rock Drill for reaching maximum uptime at low total cost of ownership.

Carousel Rod Changer

Electronics-free for More Uptime



Fast and Electronics-free for Maximum Uptime

Cat Carousel Rod Changers are a reliable mechanical design with no sensitive electronic sensors that cause excessive downtime.

One of the largest contributors to downtime on a track drill is electronics failures on carousel rod changers. This frequently occurs because electronics system sensors are vulnerable to dust, vibration and movement. Conversely, Cat Track Drills' carousel rod-handling system is 100 percent electronics-free. Everything is mechanical for maximum uptime and easier troubleshooting.

Additional Features

- Six rod carousel accepts 45 or 51 mm diameter drill steel
- Deep multi-pass hole depth to 31.2 m (102.5 ft)
- Unique gate design always keeps a rod in position; ready to load
- Heavy-duty, dual rod grippers assist with rod changes and are designed to last
- Two drill steel length options available:
 - 3.66 m (12 ft) drill steel rods
 - 4.27 m (14 ft) drill steel rods
 - 6.1 m (20 ft) starter rod

Drill Depth Indicator

The new drill depth indicator ensures all holes in a pattern are drilled to the planned depth to promote a better floor, reduce secondary blasting, and reduce accelerated wear on equipment which collectively improves the total cost of ownership for the customers.



Power Group

Delivers Efficiency

Power Train

Cat track drill's power group is designed by Caterpillar experts to get power where it's needed as efficiently as possible. The MD5075C's fuel-efficient C9 engine has a high-efficiency fuel filtration system with electronic priming. Ether is an option for cold weather starting. The compressor features widely variable air control and the power to meet any drilling application. The cooler is optimized for thermal management, and its side by side design allows for easy cleaning and maintenance.

Engine

Powered by a six (6) cylinder Cat C9 engine that is electronically controlled, turbocharged, and air-to-air after-cooled producing 224 kW (300 hp) @ 1,800 rpm. Fuel conservation, and the resulting lower operating cost, is achieved with three-speed engine throttle control.

Additional engine features:

- Pumps are direct driven by the engine through a steel flex coupling
- Dual element air filter with indicators
- Fuel tank 492 L (130 gal)
- Over 12 hours fuel capacity



Compressor

Hydraulic driven compressor reduces the load on the C9 engine and improves engine life

- Abundant air provides excellent flushing power
- Reliable rotary screw-type compressor
- High pressure rating 163 L/sec (350 ft³/min) @ 10.2 bar (150 psi)
- Dual-element air filters with indicators

Cooler

Coolers for engine, hydraulic, compressor systems

- 52° C (125° F) ambient temperature
- MD5075C cooler is equipped with ATAAC side by side arrangement
- Easy troubleshooting and cleaning of cores

Hydraulics

Simple and efficient

- Piston pump runs all functions in either mode – pressure compensated in drill mode and tram mode
- In tram mode the compressor is turned off to reduce fuel consumption
- Large hydraulic tank with greater cooling capacity and deaeration of oil (405 L or 107 gal)



Undercarriage

Maximize Your Maneuverability



Our proven and reliable Cat 315 undercarriage is designed to tram challenging terrain. Your operator can quickly and precisely position the MD5075C thanks to its low center of gravity and high ground clearance.

- Hydraulic motor-driven track assemblies
- Tram maximum speed 4.0 km/h (2.5 mph)
- Hydraulically released spring applied disc brakes
- Excavator-type track rollers
- Ground clearance 380 mm (15 in)
- Ground pressure 0.82 bar (12 psi)
- Track gauge 204 cm (80 in)
- Wide triple grouser track pads 380 mm (15 in)
- Oscillation $\pm 10^\circ$
- Robust strut design is resistant to failures
- Easy installation and removal of shoes
- Can be rebuilt
- Single grouser option available

Customers like the MD5075C cab because it is pressurized to minimize sounds levels and to minimize vibration, the cab is isolator mounted while ergonomic controls reduce operator fatigue. Safety features include ROPS/FOPS, numerous shut down methods and a front window with push-out egress, providing a second exit in case of emergency.

Features

- Updated larger monitor display
- Advanced operating system
- Hammer adjustment from cab
- Air pressure control from cab
- Drill depth indicator and monitoring
- Climate control system maintains a consistent temperature
- Air is filtered to the operator
- Defrost/defog air is supplied to windows
- Operators seat is adjustable six ways
- Armrests, controls and switches are ergonomic
- Easy access to cab air filter
- AM/FM Radio, IPOD/MP3 port
- Communications radio ready
- Easy to clean finishes
- External 12V plug

Drill Assist

Electronic control system has been designed to ensure smooth rotation, solid rock contact and fast penetration in different rock conditions. It monitors pressures and automatically adjusts to pre-programmed parameters. Anti-jam, anti-plunge and anti-plug capabilities keep the track drill working efficiently and extend drill string life.

Loaded with Safety Features

- High visibility with 3.07 m² (33 ft²) tinted safety glass windows
- Slim structure members minimize visual obscurity
- Skylight provides excellent visibility of the drill string
- Mirrors and camera assist in moving the machine
- Ground level shutdowns
- Window wipers

Safety Through Controls

- Dual joystick controls are ergonomic and seat-mounted
- For heightened precision, the position and shape of the joysticks match the operator's natural expectations
- Auto-thread greaser is operated from within the cab
- Operator has total control of hammer power and hole flushing



Cab

Safe and Sound



Operating System

Touch screen navigation for Drill Assist, rearview camera, tram, water, rock drill auto-lube, alerts, drilling and target depth, angle inclinometer, penetration rate, machine performance, total hours, and service. The display shows constant performance monitoring of pressures, rotation and depth. Operating system is high-resolution and features simple icons for easy viewing and adjustments.

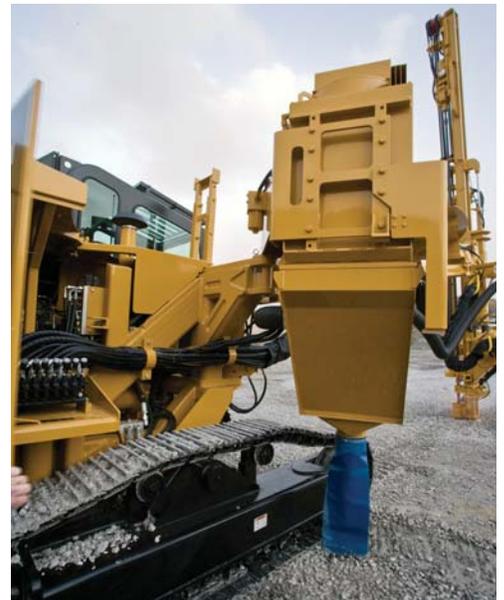
Dust Collection

Robust and Efficient

The Cat HDE 900 Dust Collector is a highly capable dry dust collection system. Powered to clear holes up to 12.7 cm (5 in), the heavy duty system effectively manages rock fragments and dust. It is also easy to clean and service which adds to your uptime and overall productivity.

Features

- Swing out design for interior access
- The sealed pick up pot prevents cuttings from escaping above the hole
- Abrasive resistant dust hose is 127 mm (5 in) in diameter
- Timed cleaning of filters is continual through reverse-pulses of air
- Vacuum generated air flow carries the materials
- Pivoting separator is feed mounted and separates cuttings from dust
- Filtration area is 28 m² (304 ft²) and separates the solid particles from the clean air
- Mounted within the slim profile of the machine
- Optional water injection system can be used to suppress dust and hole-collaring or mudding the top hole to create a natural seal
- The suction fan design limits the power requirement to correspond with the application
- Easy bottom access to filters and air valves



Safety

Protect Your Investments



Equipped with numerous safety features, Cat Track Drills are designed to provide a safe working environment for operators as well as maintenance and service technicians.

Safety Features

- Emergency stop in the cab, at the rear of the machine and on the feed
- Ground-level access to service points and well-organized electrical and hydraulic designs so no step ladder required
- Spring applied, hydraulically released brakes
- Non-slip, heavy duty steps and handles are strategically placed
- Three points of contact at all steps

Extension Boom Reach Creates a Safe Zone

Largest in-class, the MD5075C has a 3.81 m (12.5 ft) boom, plus a 1.5 m (5 ft) boom extension. This keeps operators a total of 5.334 m (17.5 ft) away from a ledge or highwall. The boom is constructed of thick square tubing with steel plate reinforcements in key areas to add strength for supporting the feed and carousel rod changer.

Operator Training for Safety

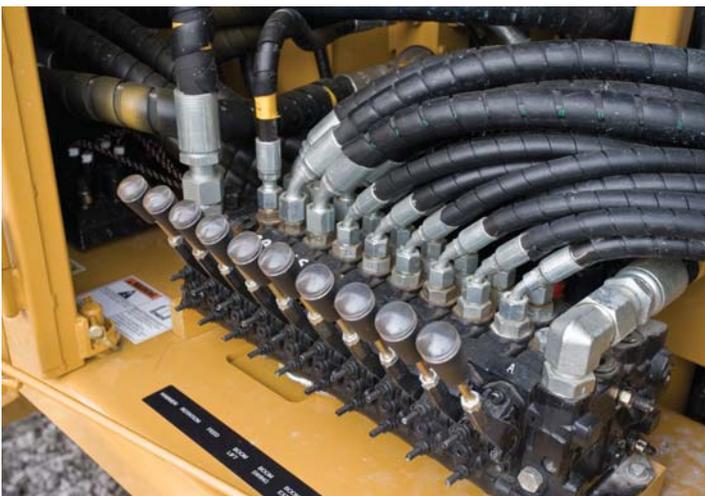
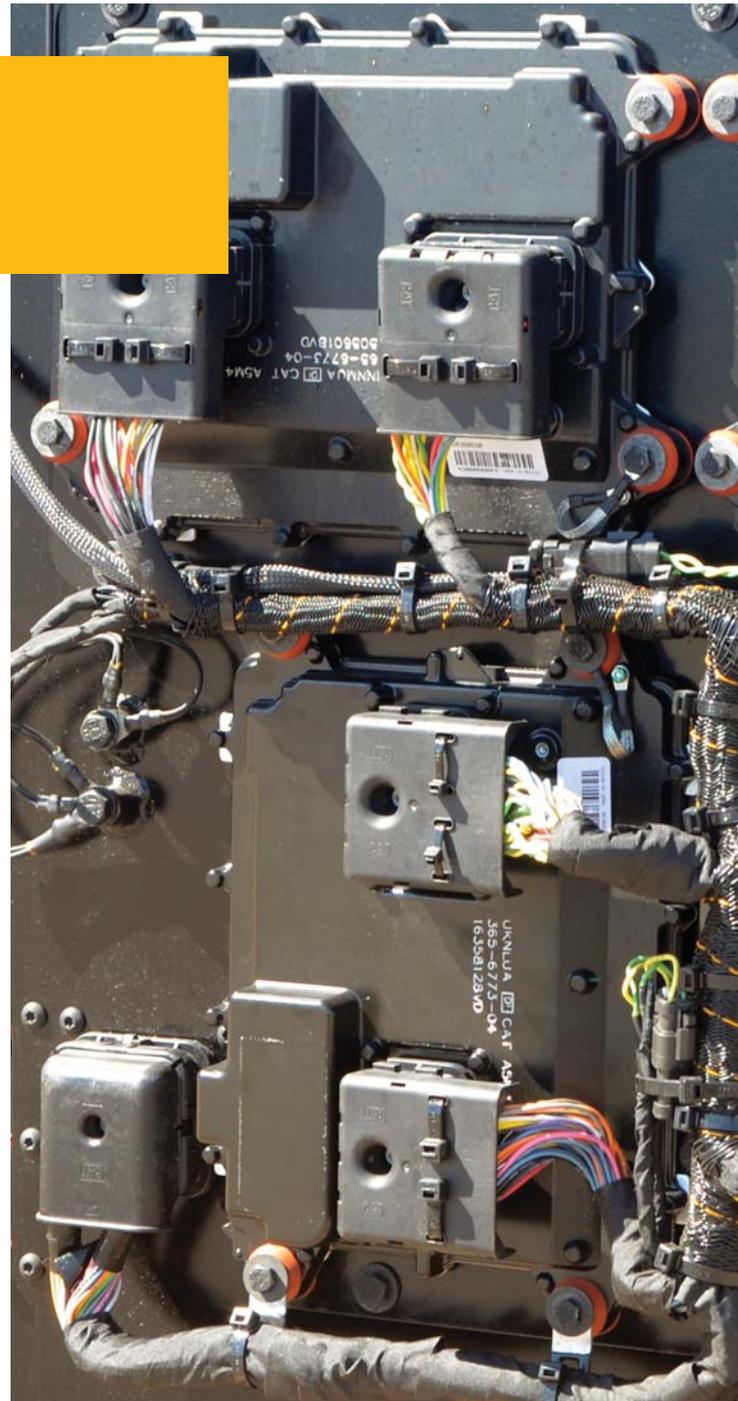
- Classroom style training available
- High quality manuals for operation, maintenance, and service
- Hands-on training with your local Cat dealer



Serviceability

Smart and Simple

Cost control is easier with Cat Drills simple and well-organized electrical/hydraulic arrangements, logically located components, ground level service, and operator friendly systems. MD5075C is equipped for Cat ET, Drill Assist, and has a touchscreen with fault code monitoring and built in joystick mapping for easy troubleshooting. 100% of all the rock drill service can be completed without removal from the feed. Easy maintenance greatly contributes to the low total cost of ownership.





Features

- Equipped for Cat Electronic Technician (ET) to troubleshoot the entire machine
- Well organized electrical and hydraulic designs
- Color coded valves and blocks for easy identification and troubleshooting
- Bulk head fitting to allow for shorter run hoses
- Hydraulic hoses labeled by diameter and length and spaced for easy wrench access
- Two exterior rear facing lights
- Pump for filling hydraulic tank
- Service areas are designed with three points of contact for safety
- The grease reservoir is easily accessible for changing coupling grease
- New fuel location is easier to access over the former model

Fully Supported by World-class Cat Dealer Network

From helping you choose the right machine to keeping your equipment up and running, your Cat dealer provides the best in sales and service.

- Best-in-class parts availability because Cat dealers understand the value of your uptime
- Preventive maintenance programs are available to maximize your return on investment, achieve full equipment life cycle, and managing costs
- Guaranteed maintenance contracts help you forecast your businesses needs and strategically plan for service and parts expenses
- Operator training to help boost your productivity

Technology

That makes life easier.



To assist you in your operations and equipment management, we provide technology systems that aid in safety, utilization, tracking, planning as well as equipment maintenance and performance monitoring.

Product Link™

Reduce your owning and operating costs by maximizing your utilization. Product Link achieves this through remote fleet monitoring, asset tracking, maintenance management which are reported via satellite and cellular networks. This system allows you to monitor daily fuel usage, route fuel trucks for maximum efficiency and track equipment utilization day by day, hour by hour.

Cat Monitoring System

Cat Track Drills are equipped with the Cat Monitoring System (Cat MS) which keeps watch over the health of your engine. It monitors critical engine system functions and will derate the engine to protect itself from damage if needed. When critical conditions arise, the Cat MS monitor displays warning lights and sound audible alarms.



Drill Assist

Developed to assist novice drillers, the Drill Assist system increases your overall drill production when drilling in difficult conditions. It monitors main hydraulic systems and automatically adjusts to pre-programmed parameters. It incorporates anti-jam, anti-plunge, and anti-plug and increases overall life of drill string.

Electrical System – Cat (ET) Electronic Technician

For easy troubleshooting of the entire machine, Cat Track Drills are equipped for using the Cat ET (Electronic Technician System) that is familiar to and favored by service technicians around the world.

Drill Depth Indicator

The depth indicator ensures all holes are drilled to the planned depth to promote a better floor, reduce secondary blasting, and reduce wear on equipment which collectively improves the total cost of ownership for the customers.

Automatic Lubrication System

Auto-lube for the rock drill ensures grease is delivered at set intervals and has the capacity for up to eight 10-hour shifts.

Sustainability

Tomorrow's World



MD5075C Sustainability Features

- Drill Assist automatically adjusts power to the rock condition requirements which extends the life of the drill string, bit, and major components of the drill
- Fuel economy is achieved with an efficient U.S. EPA Tier 3/EU Stage IIIA equivalent engine and three speed throttle control
- Remanufactured components are available
- Lube system is automatic, less accident prone and more efficient because operator time and attention is not required to regularly stop drilling to lubricate the rock drill
- Major components can be rebuilt

MD5075C Track Drill Specifications

General Data

Hole diameter range	76.2 mm- 114.3 mm	3.0 in- 4.5 in
Hole depth maximum	31.2 m	102.5 ft
Engine	Cat C9, six (6) cylinder, electronically controlled, water-cooled, turbocharged and air-to-air after-cooled diesel engine rated at 224 kW (300 hp) at 1,800 rpm	
Compressor	9.9 m ³ /min @ 10.2 bar	350 ft ³ /min @ 150 psi
Rock Drill HPR5123	23 kW	31 hp

Cat 315 Undercarriage

Hydraulic motor-driven track assemblies with towing disconnects.

Spring applied disc brakes		
Wide triple grouser pads	380 mm	15 in
Gradeability	35°	
Ground clearance	380 mm	15 in
Ground pressure	0.82 bar	12 psi
Track gauge	204 cm	80 in
Tram maximum speed	4 km/h	2.5 mph
Track oscillation	± 10°	

Power Train

Cat C9, six (6) cylinder, electronically controlled, water-cooled, turbocharged and air-to-air after-cooled diesel engine	224 kW @ 1,800 rpm	300 hp @ 1,800 rpm
Dual element air filter		
Fuel tank	492 L	130 gal

Cooler Package

Four vertical sections; compressor, engine, hydraulic and air after cooler

Sized for ambient capability of 52° C (125° F)

Fan assembly	106 cm	42 in
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Air Compressor

Hydraulic motor driven

Screw-type compressor	9.9 m ³ /min @ 10.2 bar	350 ft ³ /min @ 150 psi
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Intake check valve and receiver-separator combination tank

Dual filter elements

Dust Collecting System

Dust collector sized to clean holes up to 127 mm (5.0 in) in diameter

Hydraulic motor powered, dry dust collecting system

Filter area	28 m ²	304 ft ²
Abrasive resistant suction hose	127 mm	5 in

Cab

Updated larger monitor display:

- Technology advances
- Hammer adjustment from cab
- Air pressure control from cab

Drill depth monitoring

Electro-hydraulic controls:

- Joysticks
- Bright displays
- Common to MD5150C

Total operator control of:

- Hammer power
- Hole flushing

ROPS/FOPS certified

Digital engine and drill readout system

Joysticks in both armrests

Total glass	3.07 m ²	33 ft ²
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Six way adjustable seat; forward/back, up/down and reclining

Drill Assist from MD5150C

Operator-selected, smooth, electrical control system for all drilling functions
Monitors main hydraulic system (hammer, feed, air and rotation pressure) and automatically adjusts to pre-programmed parameters
Minimizes overfeeding
Anti-plug
Anti-plunge
Anti-jam

Boom System

Boom length	3.81 m	12.5 ft
Boom extension	1.5 m	5 ft
Boom swing	51° L to 15° R	
Boom lift above horizontal	38°	
Boom dump below horizontal	27°	

Carousel Rod Changer System

3.66 m (12 ft) Rod Changer
45 mm – 6 Rod +1 or 51 mm – 6 Rod +1
Total hole depth 27.4 m (90 ft) with 6.1 m (20 ft) starter steel
4.27 m (14 ft) Rod Changer
45 mm – 6 Rod +1 or 51 mm – 6 Rod +1
Total hole depth 31 m (102 ft) with 6.1 m (20 ft) starter steel

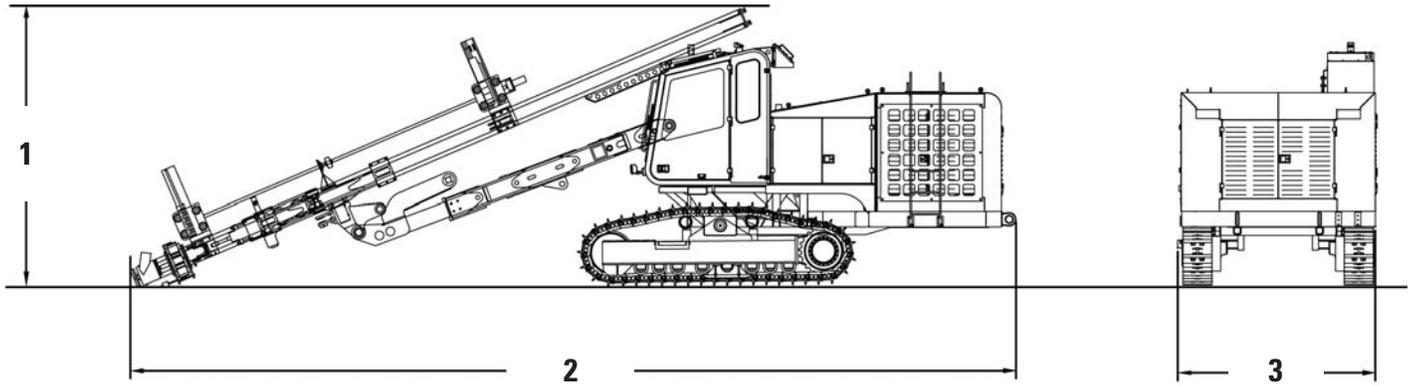
Rock Drill

HPR5123 hydraulic powered percussion rock drill		
Output energy @ 160 rpm	23 kW	31 hp
Dual hydraulic variable rotation motors producing 1356 N·m (1,000 lbf-ft) torque		
Weight	397 kg	877 lb
Rod diameter choices	45 or 51 mm	
Percussion pressure	Up to 200 bar	Up to 2,900 psi
Blow rate	2500-2700 bpm	
Rock drill auto lube system option		
Optional HPR4519 Rock Drill		
Output energy @ 240 rpm	19 kW	25 hp
Dual hydraulic variable rotation motors producing 908 N·m (670 lbf-ft) torque		
Weight	299 kg	660 lb
Rod diameter	45 mm	
Percussion pressure	Up to 200 bar	Up to 2,900 psi
Blow rate	2500-2700 bpm	

MD5075C Track Drill Specifications

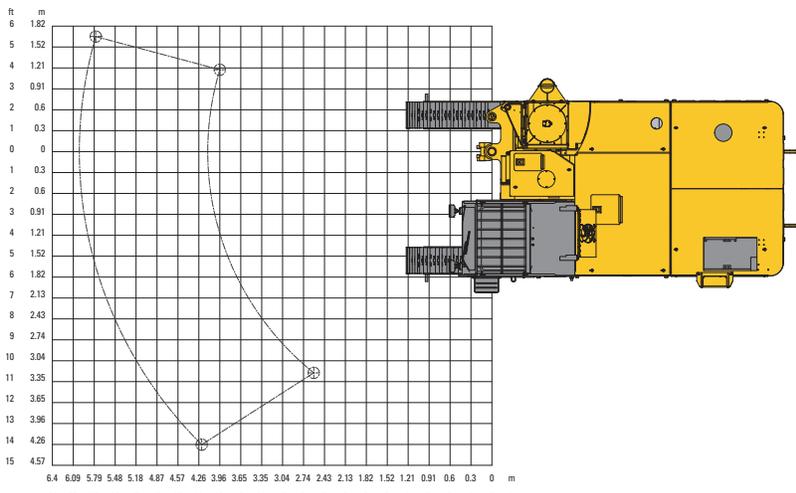
Dimensions

All dimensions are approximate.

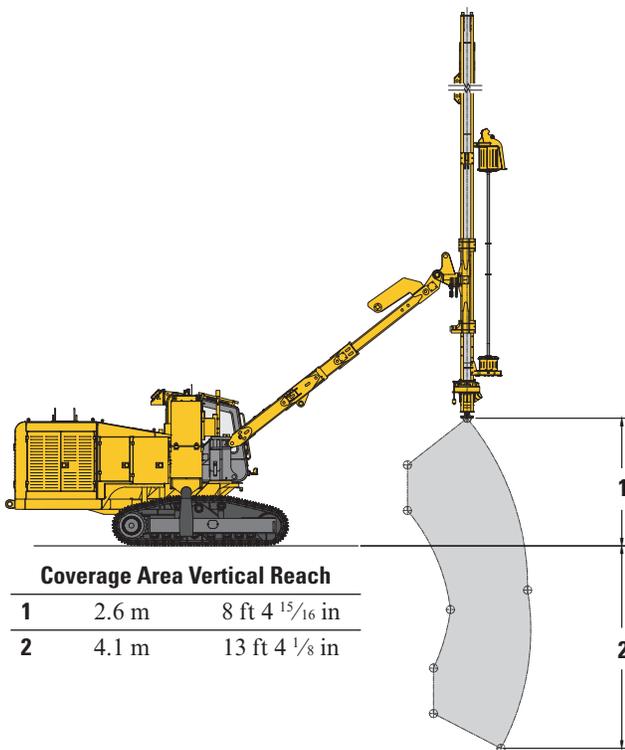


1 Shipping Height	3.4 m	11.2 ft
2 Shipping Length	12.3 m	40.4 ft
3 Shipping Width	2.6 m	8.6 ft
Shipping Weight	19 504 kg	43,000 lb

MD5075C Track Drill Specifications

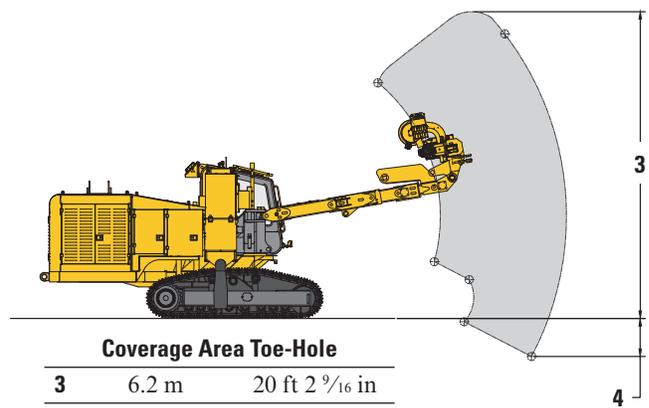


Coverage Area Vertical Feed



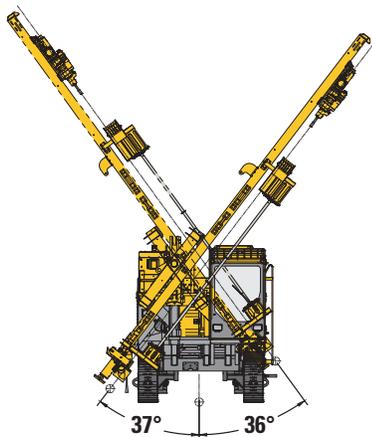
Coverage Area Vertical Reach

1	2.6 m	8 ft 4 ¹⁵ / ₁₆ in
2	4.1 m	13 ft 4 ¹ / ₈ in

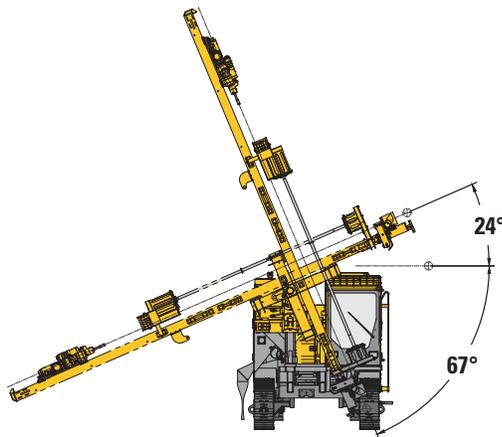


Coverage Area Toe-Hole

3	6.2 m	20 ft 2 ⁹ / ₁₆ in
4	0.8 m	2 ft 6 ¹ / ₁₆ in



Drill Angle, Feed



Drill Angle, Toe-Hole

MD5075C Standard Equipment

Standard Equipment

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

TRACK UNDERCARRIAGE

- Cat 315 excavator components.
- Hydraulic, motor-driven, track assemblies with 380 mm (15 in) grousers, hydraulic cylinder controlled track oscillation, hydraulic released, spring applied, disc brakes and triple rock grousers.

POWER

- Cat C9, six (6) cylinder, electronically controlled, water-cooled, turbocharged and air-to-air after-cooled diesel engine rated at 224 kW (300 hp) at 1,800 rpm includes ether for cold weather starting.
- Cat C9 engine meets Tier 3/Stage IIIA equivalent emission standards.
- The engine speed is automatically controlled by power demand.

HYDRAULIC SYSTEM

- Two (2) pressure compensated load sensing axial piston pumps, two (2) fixed displacement traction two-speed drive motors and a fixed displacement compressor drive motor.
- Hydraulic test ports conveniently located.

COMPRESSOR

- Hydraulic motor-driven 9.9 m³/min @ 10.2 bar (350 ft³/min @ 150 psi) screw-type compressor.

BOOM SYSTEM

- 3.81 m (12.5 ft) telescopic boom with 1.5 m (5 ft) extension.
- 0.91 m (3 ft) feed extension complete with drill positioner and universal feed table.

FEED SYSTEM

- Hydraulic motor-driven steel channel chain feed complete with the power centralizer. The feed will accept a 6.1 m (20 ft) steel for single pass with a hose reel, which is standard.
- 45 or 51 mm drill steel.
- Pre-split capabilities.
- Emergency shut down line.

ROCK DRILL

- Model HPR5123 hydraulic powered percussion drill with an energy/frequency combination that covers a wide range of applications.
- Hydraulic motor powered variable speed rotation.

CAB

- Certified ROPS/FOPS pressurized, fixed cab complete with heater, air conditioner, wipers, drilling lights, electronic two (2) axis angle indicator and all necessary drilling controls.
- AM/FM Stereo with Bluetooth and USB.

ROD CHANGER

- Carousel rod changer design for 4.26 m (14 ft) drill steel.
- Carousel will hold 6 rods.
- With one rod in the feed the total drill string length is 31.7 m (104 ft).
- 45 or 51 mm drill steel is standard.

DUST COLLECTING SYSTEM

- Multiple element, hydraulic motor powered, dry dust collecting system; complete with feed mounted precleaner and power pick up pot.

OTHER STANDARD FEATURES

- Power coupling greaser.
- Complete sheet metal enclosure.
- Collaring circuit.
- Toe hole capabilities.

Optional Equipment

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

- HPR4519 Rock Drill in lieu of HPR5123
- Rod changer conversion kit
- Single bar grousers
- Drill depth indication
- Auto lube for rock drill
- Arctic oil
- Water injection system utilizing a 303 L (80 gal) pressurized tank
- Carousel rod changer designed for 3.66 m (12 ft) drill steel. Carousel will hold 6 rods.

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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Replaces AEHQ7683-01

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