

MD5075

Track Drill



General Data

Hole Diameter Range	76.2 mm-127 mm	3.0-5.0 in
Hole Depth Maximum	31 m	102.5 ft
Engine C9 Tier 3	224 kW (300 hp) at 1,800 rpm	
Compressor	9.9 m ³ /min	350 ft ³ /min
Rock Drill HPR4519	19 kW	25 hp

MD5075 Features

Pattern Coverage

With a heavy-duty 3.81 m (12.5 ft) boom and 1.5 m (5 ft) extension, exceptional pattern coverage is achieved.

Rock Drill

World-class Cat Rock Drills offer the fewest internal parts in the industry. Simple enough to be owner serviced yet renowned for their strength and long life in hard rock drilling.

Carousel Rod Changer

Improve your productivity with the Cat Carousel Rod Changer which substantially reduces overall rod change time.

Power Group

Fast cycle times are achieved through substantial horsepower, air capacity, and time-saving systems that enhance efficiency.

Operator Safety and Comfort

Pressurized dust free cab environment keeps operators safe and productive.

Serviceability and Customer Support

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

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Equipped To Go Further

Hard-working, Dependable, Easily Maintained

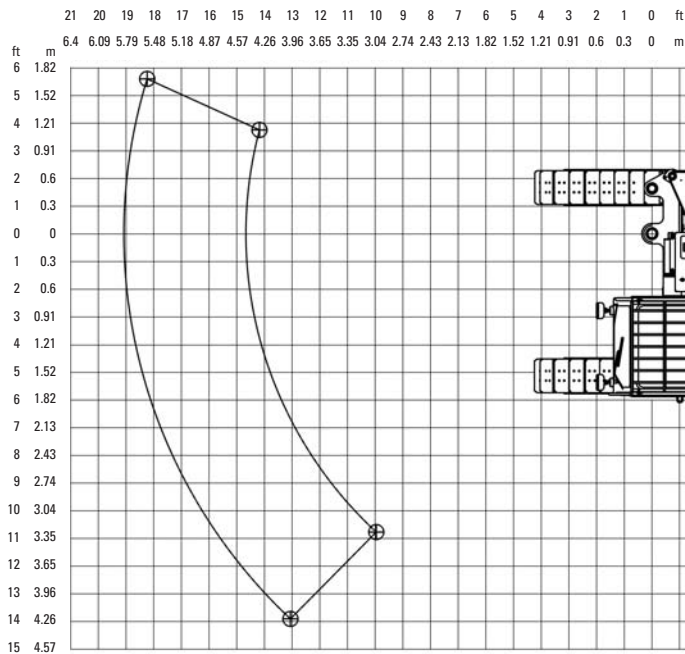
The Cat® MD5075 achieves large pattern coverage with a sturdy extendable boom and reduces your cycle time with an efficient carousel rod changer. Its powerful rock drill, durable Cat components, and ease of maintenance contribute to the exceptional value of this proven machine.

Pattern Coverage

Far Reaching



The exceptional pattern coverage provided by the MD5075 allows you to drill more with less set-up time.

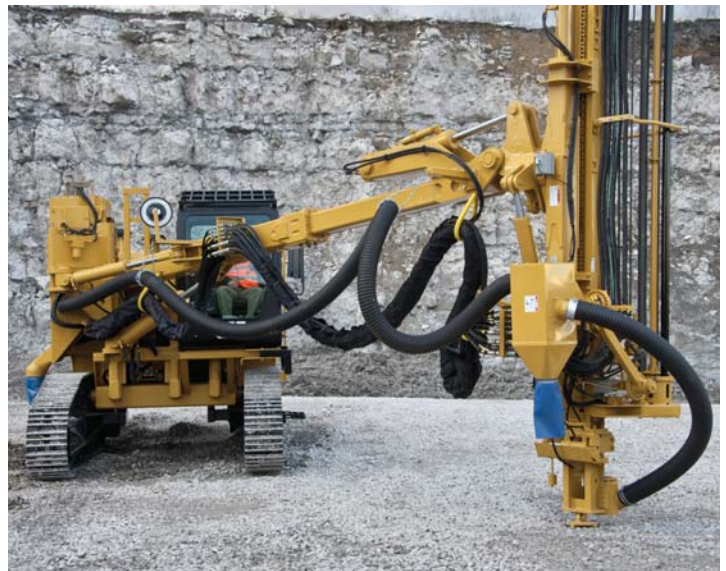
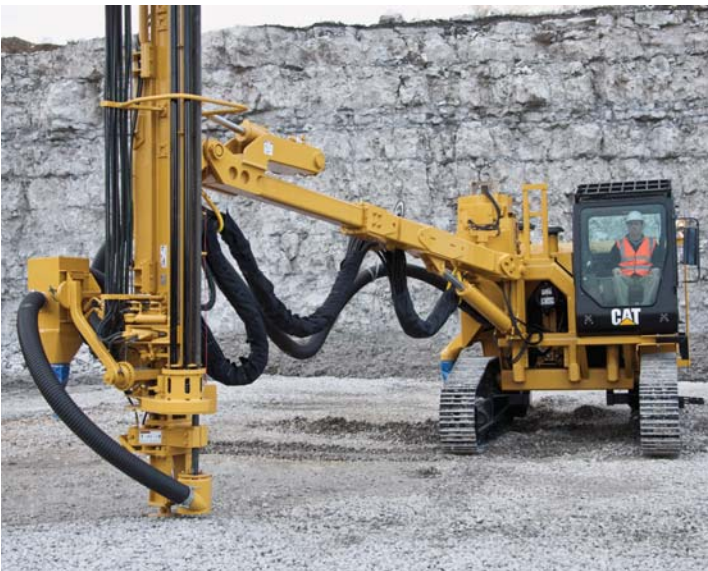


Boom and Feed

Reach Further

A Sturdy boom and feed support the carousel rod changer providing excellent pattern coverage and fewer required setups. The heavy-duty boom is constructed of thick square tubing with steel plate reinforcements in key areas to add strength. Built with high strength steel channels with diagonal internal bracing, the feed system resists torsion and thrust loads.

- Boom length 3.81 m (12.5 ft)
- Boom extension adds 1.5 m (5 ft)
- Boom swing capability is 45° L to 24° R
- Boom angle capability is 36° lift angle to 29° below horizontal angle
- Optional knuckle boom 5.9 m (19.25 ft)
- Feed table is 2.7 m (9 ft) with a 0.9 m (3 ft) extension
- Planetary gearbox feed drive is capable of 3347 kg (7,379 lb) feed force and 27.7 m/min (91 ft/min) speed
- Lighting on the feed illuminates the carousel and hole site for around the clock drilling
- Adjustable wear pads



Reliable Performer

Low cost of ownership and reliability are yours with renowned Cat Rock Drills. Building on a legacy of simplistic power, these drills have long life expectancy and are field serviceable.

This combination of sturdy design and easy maintenance means more hours of reliable, low-cost operation. For added efficiency, the pistons are matched to the cross section of the rod so the wave form is properly matched for maximum energy transfer.

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
- Long life alloy bushings
- Fast response accumulators provide a smooth and efficient hydraulic oscillation
- Long leakage paths of the oscillator bearings yield high volumetric efficiency

Owner Serviceable

- Cat Rock Drills are so simple that owner serviceability is a viable alternative and cost savings
- Other models require downtime for round trip transportation to a clean room environment
- Only their OEM service technicians can perform the maintenance and repairs
- All maintenance and rebuilds can be done in your shop and some maintenance can even be done with the rock drill still mounted to the feed
- Accumulator assemblies may be replaced in the field
- Troubleshooting is easy since there are half the components of other drills

Automated Rock Drill Lube System – Optional

Peak performance is sustained when your rock drill is kept lubricated, cool, and automatically maintained with our new Auto Rock Drill Lube System. Operators no longer have to stop drilling to manually grease the rock drill every two hours.

- Saves more than forty hours a year over manual greasing
- Components reach full life expectancy at proper lube intervals
- Grease reservoir capacity can hold enough for up to five 10 hour shifts
- A timer board cycles the grease pump throughout the day eliminating maintenance time
- High and low pressure conditions are continually monitored

Standard on the MD5075 is the HPR4519 hydraulic powered percussion rock drill rated at 19 kW (25 hp) output energy with dual hydraulic variable rotation motors producing 908 N·m (670 lbf-ft) torque.

A low-angle, vertical photograph of a yellow rock drill rig against a clear blue sky. The rig is composed of several interconnected yellow metal components, including a large cylindrical motor housing at the top, a series of hydraulic cylinders, and a long vertical shaft. A black flexible hose runs down the side of the rig. The rig is mounted on a yellow metal frame with a series of circular holes. The overall appearance is that of a heavy-duty industrial machine.


Rock Drills

Strong Achievers –
Lower Your Cost of Ownership

Carousel Rod Changer

Improve Your Productivity





Dramatically reduce your change time with our new carousel rod changer. Unlike linear alternatives, our carousel rod changer weighs less and holds more rods allowing the boom extension to reach further and drill deeper while maintaining stability. The feed and carousel rod changer can accommodate multiple lengths and diameters of drill steel.

Additional Features

- Drill steel diameter 45 mm
- Drill steel lengths 3.66 m or 4.27 m (12 ft or 14 ft) with a 6.1 m (20 ft) starter rod
- Six rod carousel
- Deep multi-pass hole depth to 31.1 m (102.5 ft)
- Unique gate design always keeps a rod in position; ready to load
- Multiple functions are run simultaneously to save process time
- Heavy-duty, dual rod grippers assist with rod changes and are designed to last
- Precise positioning function indexes and locks, eliminating the need for troublesome switches and sensors that are failure prone due to the elements and vibration
- Corrosion resistant and self-lubricating pivot points eliminate manual lubrication



Power Group

Delivers Efficiency

The MD5075 Power Group delivers fast cycle times and maximum efficiency with its generous engine horsepower, air capacity, and optimal temperature management.

Engine

Powered by a six (6) cylinder Cat C9 Tier 3 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
- Engine oil sump 45°
- Fuel tank 492 L (130 gal)
- Over 12 hours fuel capacity



Compressor

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
- MD5075 cooler is equipped with ATAAC side by side arrangement
- Easy troubleshooting and cleaning of coils

Hydraulics

Simple and efficient

- Piston pump runs all functions in either mode – pressure compensated in drill mode and load sensing in tram mode
- In tram mode the compressor runs at minimum pressure valve setting
- Large hydraulic tank with greater cooling capacity for longer intervals between circulation of oil (405 L or 107 gal)



Undercarriage

Maximize Your Maneuverability



Our proven and reliable undercarriage is designed to tram challenging terrain. Your operator can quickly and precisely position the MD5075 thanks to its low center of gravity and high ground clearance.

Your operators will be equipped to overcome the tough environment of navigating and drilling in irregular terrain with our proven, reliable structures.

- Hydraulic motor-driven track assemblies
- Tram max speed 4.0 km/h (2.5 mph)
- Gradeability 35°
- 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

The pressurized Cat cab is a quiet and safe work environment with sound levels less than 80 dB(A). To minimize vibration, the MD5075 cab is isolator mounted while ergonomic responsive controls reduce your operator's fatigue. Safety features include numerous shut down methods and a front window with push-out egress, providing a second exit in case of emergency.

Features

- Climate control system maintains a consistent temperature
- Air is filtered to the operator
- Defrost/defog air is supplied to windows
- Operator's seat is adjustable six ways
- Armrests, controls and switches are ergonomic
- Easy access to cab air filter
- AM/FM Radio IPOD/MP3 player ready
- Communications radio ready
- Easy to clean finishes
- External 12V plug

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 assist in moving the machine
- Ground level shutdowns
- Heavy duty handles
- Fire extinguishers
- Three speed window wipers

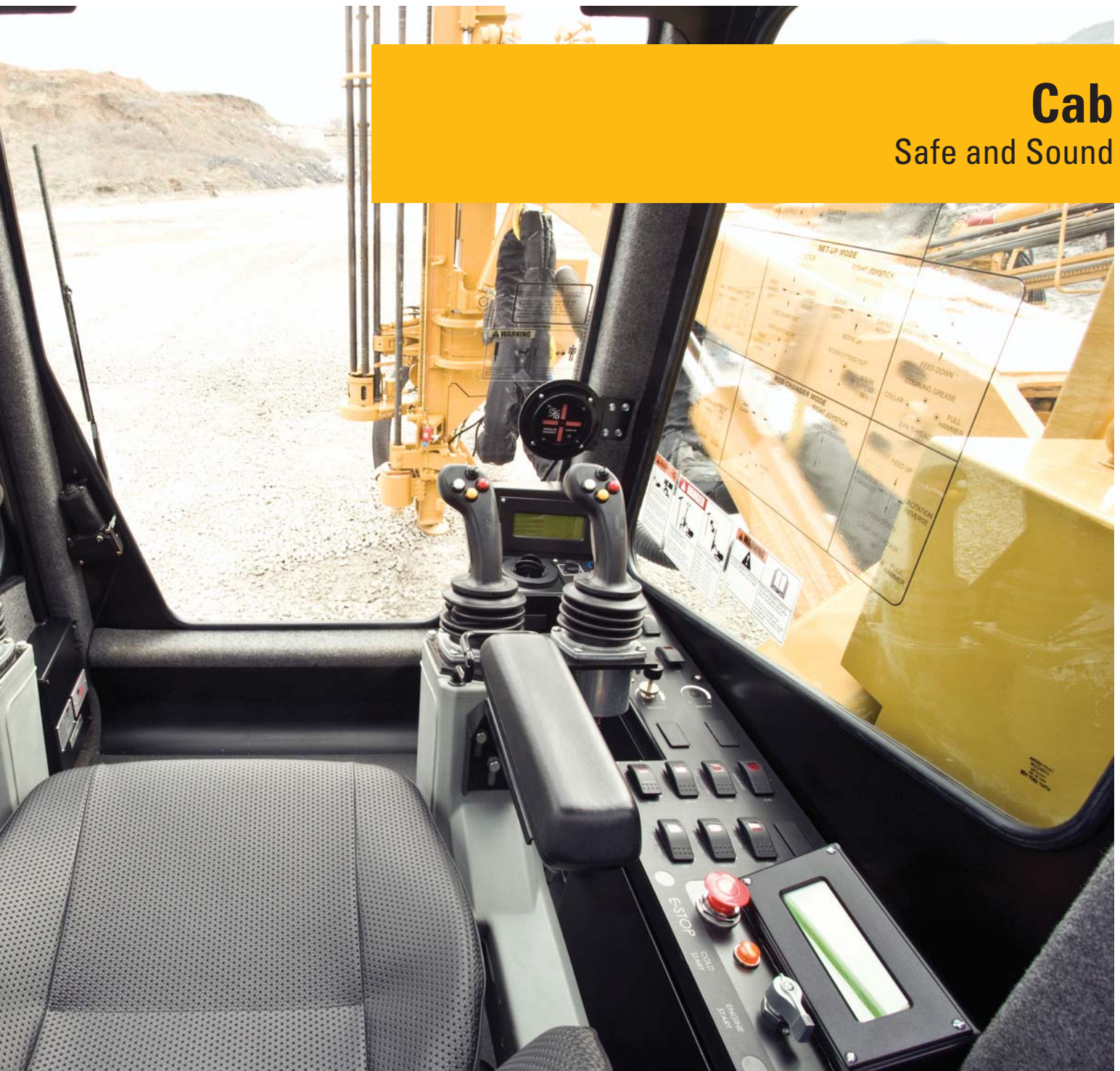
Safety Through Controls

- 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



Cab

Safe and Sound



Smart Drill Monitoring System

Developed to assist novice drillers, the smart drill monitoring system increases your overall drill production in difficult drilling conditions. The system monitors changes in rock formation and adjusts the impact and feed pressure to the hardness of the rock. It incorporates anti-jam, anti-plunge, and anti-plug and increases overall life of drill string.

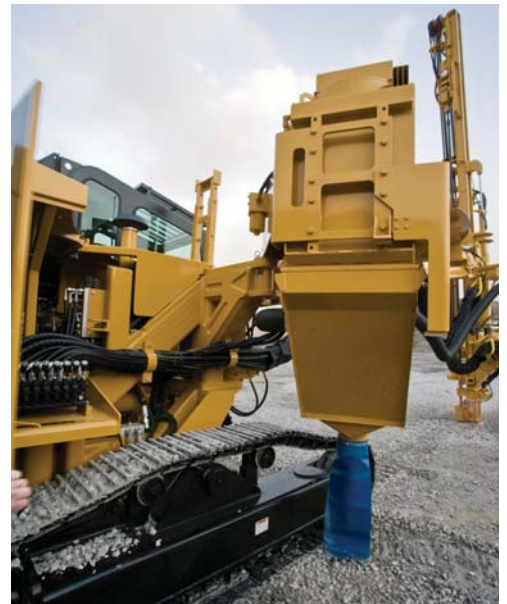
Dust Collection

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 12.7 m (5 in)
- Timed cleaning 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 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
- Feed mounted swipe string
- Fire extinguishers

In-Cab Safety Features

- High visibility with 3.07 m² (33 ft²) of tinted safety glass
- Slim structure members minimize visual obscurity
- Skylight allows viewing the top of the feed
- Front window push-out for emergency egress
- Mirrors assist in safely moving the machine
- Three speed window wipers
- ROPS/FOPS certification
- Ground level shutdowns
- Heavy duty handles

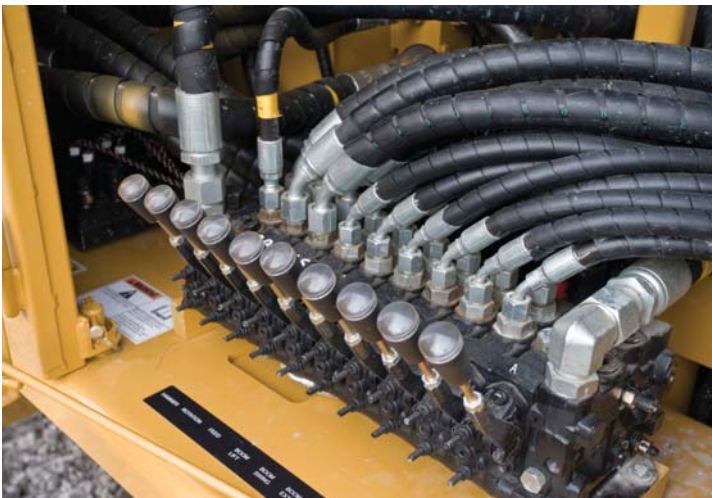
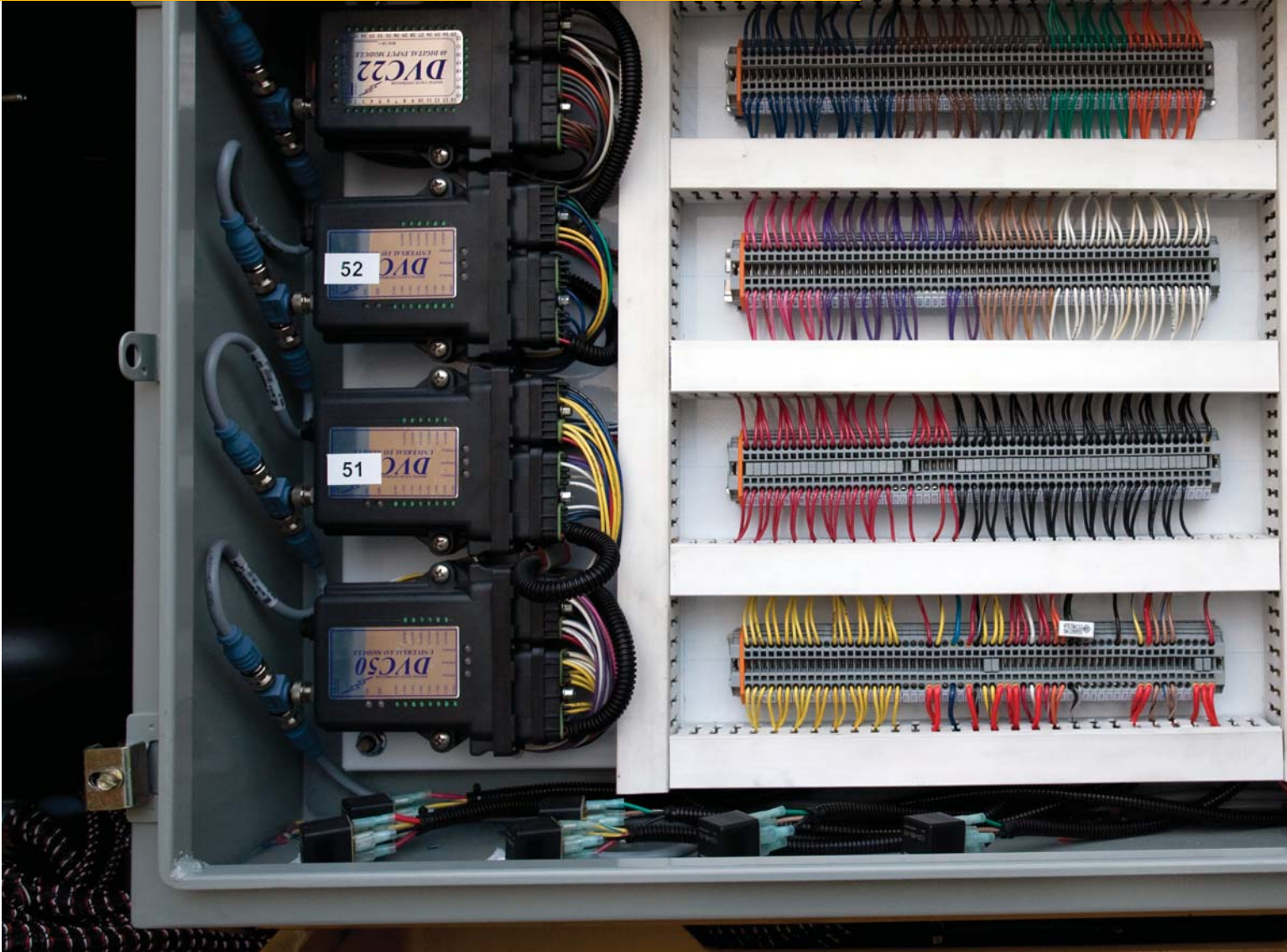
Operator Training for Safety

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



Serviceability

Smart and Simple





Serviceability

With the maintenance friendly designs, service access is safe and efficient. Cat Track Drills have well-organized electrical and hydraulic arrangements. Logically located components contribute to its simplicity and ease of maintenance. The combined result is longer equipment life cycle, lower operating costs, and higher re-sale value for you.

Features

- Well organized electrical and hydraulic designs
- Color coded valves and blocks for easy identification and troubleshooting
- Point to point wiring reduces mean time to repair
- Bulk head fitting to allow for shorter run hoses
- Hydraulic hoses labeled by diameter and length and spaced for easy wrench access
- Manual valve bank for operating in the event of an electrical loss also helps isolate issues with electronics or hydraulics
- Portable interior halogen light for underneath the canopy
- Two exterior rear facing lights
- Enclosure has doors lifted with gas springs
- The canopy can be completely removed via four pinning points and lifting lugs
- 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

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
- Genuine Cat Remanufactured Parts are available

Sustainability

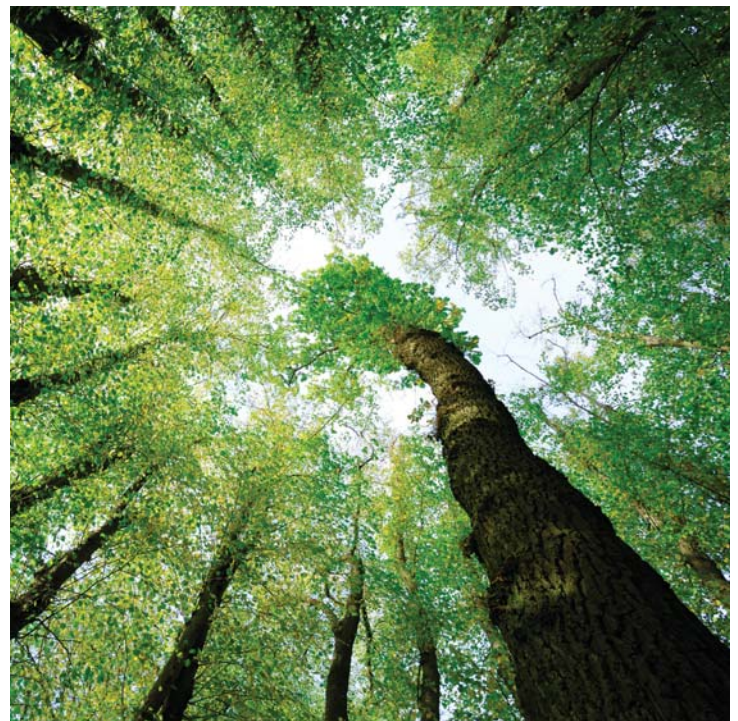
Tomorrow's World



While helping you increase the efficiency and productivity of your operation, Cat Drill designs leverage technology and innovations that also help minimize the environmental impact of mining. We continually strive to develop equipment that has respect for the air we breathe and the earth we share.

MD5075 Sustainability Features

- Smart Drill System 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 Tier 3 engine and three speed throttle control
- Remanufactured components are available
- Lube systems are automatic, less accident prone and more efficient because operator time and attention is not required to regularly stop drilling to lubricate the machine
- Major components can be rebuilt



MD5075 Track Drill Specifications

General Data

Hole diameter range	76.2 mm- 127 mm	3.0- 5.0 in
Hole depth maximum	31 m	102.5 ft
Engine	Cat C9 Tier 3, 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 HPR4519	19 kW	25 hp

Dimensional Specifications and Weights

Shipping length	12.3 m	40.4 ft
Shipping width	2.6 m	8.6 ft
Shipping height	3.4 m	11.2 ft
Shipping weight	20 412 kg	45,000 lb

Undercarriage

Hydraulic motor-driven track assemblies with towing disconnects.

Spring applied disc brakes		
Triple rock grousers		
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 Tier 3, 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 – dual fill	492 L	130 gal

Cooler Package

AKG 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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Hydraulic System

Two pressure compensated, load sensing axial piston pumps

Hydraulic test ports

Smart Drill drilling control system

Convenient pressure gauges and test taps installed

Full flow 3 micron filtration

Fill pump	405 L	107 gal
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Full flow cooling

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

Shutdown Features

Low engine-oil pressure

High compressor discharge temperature

High engine-water temperature

Feed-mounted emergency stop cable

Low hydraulic oil level

Dust Collecting System

Dust collector sized to clean holes up to 12.7 m (5.0 in) in diameter

Hydraulic motor powered, dry dust collecting system

Filter area	28 m ²	304 ft ²
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Pneumatic filter purge system

Abrasive resistant suction hose	12.7 m	5 in
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Reverse pulse filter cleaning system

Bottom change filter elements quantity

Feed-mounted dual axis precleaner

Hydraulically operated and positional dust pickup pot

MD5075 Track Drill Specifications

Cab

ROPS/FOPS certified		
Digital engine and drill readout system		
Joysticks in both armrests		
Noise rating	less than 80 dB(A)	
Total glass	3.07 m ²	33 ft ²
Tinted sliding windows		
Heater/AC pressurizer and coils mounted in cab		
Front washer and wiper		
AM/FM radio		
Auxiliary input		
CB Radio (optional)		
12V plug		
Six way adjustable seat; forward/back, up/down and reclining		
Emergency egress		
Electric inclinorator		

Smart Drill Drilling System from 5150

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	45° L to 24° R	
Boom lift above horizontal	36°	
Boom dump below horizontal	29°	

Feed System

Model UFH-16 hydraulic motor driven steel channel feed		
Power centralizer		
Manual inclinorator		
Will accept 6.1 m (20 ft) starter steel		
Set up for 45 mm drill steel		
Feed extension	0.91 m	3 ft
Feed swing	36° L to 37° R	
Dump	139° from 0° of boom	
Feed channel	177.8 mm	7 in
Feed rate	27.74 m/min	91 ft/min
Chain force	3347 kg	7,379 lb
Replaceable wear pads with adjusters		
Drill steel thread lubrication		

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

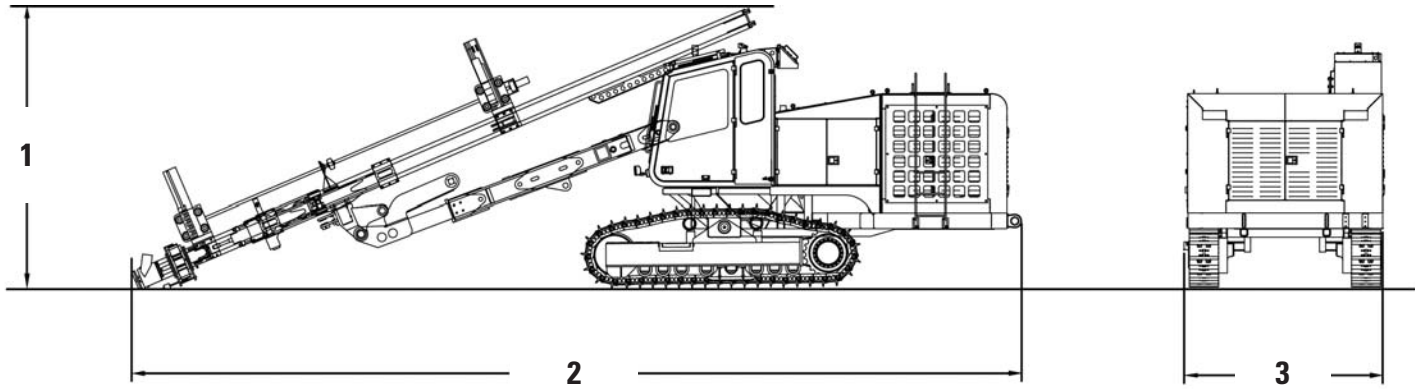
HPR4519 hydraulic powered percussion rock drill		
Output energy @ 240 rpm	19 kW	25 hp
Dual hydraulic variable rotation motors producing 908 N·m (670 lbf-ft) torque		
Weight	299 kg	660 lb
Rod diameter	45 mm	
Percussion pressure	Up to 200 bar	Up to 2,900 psi
Blow rate	2500-2700 bpm	
Rock drill auto lube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

Safety

Feed swipe rope engine shut off		
Standard cabs have front window push-out for emergency egress		
Emergency stop in the cab and on the feed		
All proper guards in place		
Spring-applied, hydraulically released brakes		
Ground-level access to service points and well-organized electrical and hydraulic designs		
Heavy duty steps and handles are strategically placed and non-slip		
Three points of contact at all steps		

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

MD5075 Standard Equipment

Standard Equipment

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

TRACK UNDERCARRIAGE

- 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 Tier 3, 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 intake heater for cold weather starting.
- 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.
- Smart Drill drilling control system.

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

- Model UFH16 hydraulic motor-driven steel channel chain feed complete with the power centralizer. The UFH16 feed will accept a 6.1 m (20 ft) steel for single pass with a hose reel, which is standard.
- 45 mm drill steel.
- Pre-split capabilities.
- Emergency shut down line.

ROCK DRILL

- Model HPR4519 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 CD player.

ROD CHANGER

- Unique 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 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

Optional Equipment

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

- HPR5123 Rock Drill in lieu of HPR4519
- Rod changer conversion kit
- CE kit
- Single bar grousers
- Auto lube for rock drill
- Arctic oil
- Cold weather package
- Rear-mounted 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.

MD5075 Track Drill

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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