



CAT MD5075 SURFACE DRILLS

TECHNICAL SPECIFICATION

Specifications

General Data

Hole diameter	127 mm (5.0 in)
Hole depth	31 m (102.5 ft)
Compressor	9.9 m ³ /min (350 cfm)
HPR4519 rock drill	19 kW (25 hp)

Rock Drill HPR4519

Output power	19 kW (25 hp)
Weight	300 kg (660 lb)
Percussion pressure	Up to 200 bar (2,900 psi)
Blow rate	2,500-2,700 bpm
Rotation speed	240 rpm
Rotation torque	908 Nm (670 ft-lb)
Drill steel	38 mm & 45 mm
Optional rock drill HPR5123	23 kW (31 hp)
Optional drill steel	51 mm

Feed System

Model UFH14 heavy-duty chain feed with rod changer for 3.66 m (12 ft) steel change with 5 pot for 45 mm or 51 mm

31.7 mm (1.25 in) pitch roller chain

Resists torsional and thrust loading

High-speed feed up/down maximum 180 ft/minute

Drill mounting slide

Replaceable wear pads

Feed table for inline, offset and 45° angle

Scissors-type centralizer

Optional feeds include UFH16 for single pass capable of holding 6.1 m (20 ft) starter steel for 5.64 m (18.5 ft) hole and/or rod changer for 3.66 m (12 ft) or 4.27 m (14 ft) steel change with 5 pot for 45 mm or 51 mm

Hose reel for hose maintenance mounted so full view of change is accessible

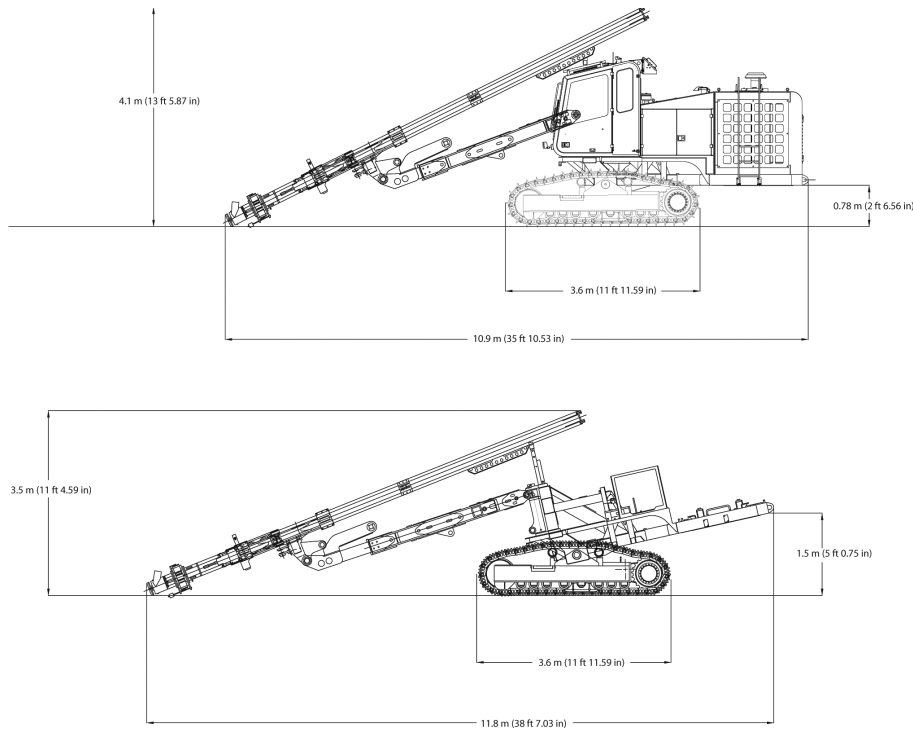
Boom System - Telescopic

Boom up	36°
Boom down	29°
Boom length	3.81 m (12.5 ft)
Boom swing angle	40° left, 21° right
Boom extension	1.5 m (5 ft)
Feed swing	36° left, 37° right
Feed dump	139° (from 0° off boom)

Boom Optional Knuckle

Total reach	5.87 m (19.25 ft)
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Shipping Dimensions

Length	12.3 m (40.4 ft)
Width	2.7 m (8.7 ft)
Height	3.4 m (11.3 ft)
Weight with cab	20 454 kg (45,000 lb)

Rod Changers

Carousel (standard)

Qty. x length	6 rods x 3.66 m (12 ft) or 6 rods x 4.27 m (14 ft), 45 mm or 51 mm steel
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SmartDrill Drilling System

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

Power Unit

Tier III Cat® C9, electronically controlled, 6-cylinder inline turbocharged, air-to-air after-cooled 224 kW (300 bhp) at 1,800 rpm in three-position throttle for fuel consumption

Pumps are direct-driven by the engine through a steel flex coupling

Dual-element air filters with indicators

Engine oil sump 45°

Fuel tank 492 l (130 gal)

Fuel capacity Over 12 hours

Air Compressor

Rotary screw-type compressor

163 l/sec (350 cfm) maximum

10 bar (150 psi) maximum

Dual-element air filters with indicators

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Hydraulic System

Pressure-compensated load-sensed piston pump	
Full-flow 3 micron, in-tank filtration	
Sealed hydraulic tank	405 l (107 gal)
Full-flow cooling	
Electric fill pump	

Cooling Package

AKG coolers for engine, hydraulic and compressor sized for ambient capability of 52° C (125° F)	
Fan assembly	1 067 mm (42 in)
Side-by-side arrangement mounted vertically	

Dust-Collection System

Model HDE900 mounted within the profile of the machine	
Capable of cleaning a 12.7 m (5 in) diameter hole	
Precleaner with diverter shield	
12.7 cm (5 in) suction hose	
Feed-mounted precleaner and pickup pot	
Filter area	28 m ² (304 ft ²)
Reverse pulsing for cleaning	

Operator's Cab

Larger version of the MD5050 cab with controls located in the exact same position; room for trainer to stand behind operator seat; ROPS/FOPS	
Less than 80 dB(A)	
Minimum 3.07 m ² (33 ft ²) total glass	
Heater/air conditioner	
Cooling – 21 000 btu	
Heating – 28 000 btu	
Comfortable adjustable seat	
Washer and wipers for windows	
2-axis electronic indicator	
AM/FM stereo/CD	
Toolbox area	

Undercarriage

Intertractor excavator track pad and chain	
Design side frames	
Final drive assemblies	
381 mm (15 in) wide triple grouser brake pads	
Hydraulically released spring-applied brakes	
Independent track oscillation	
Ground pressure	.82 bar (12 psi)
Speed maximum	4 kph (2.5 mph)
Machine oscillation	±10°
Ground clearance	380 mm (15 in)
Track gauge	2.04 m (6.7 ft)
Gradeability	35°

Controls

Armchair joystick
Pressure-compensated
Drill hammer
Remote control box with 6.1 m (20 ft) tether cord (optional)
Drill feed
Tramming
Boom and feed positioning

Electronic display

Engine hour meter
Drill hour meter
Voltmeter
Engine oil pressure
Engine water temperature
Engine fuel
Compressor discharge
Temperature feed pressure
Hammer pressure
Rotation pressure
Main hydraulic system pressure
Air pressure
Hydraulic oil level
Hydraulic oil temperature (sight glass)

Shutdown Features

Low engine oil pressure
High compressor discharge temperature
High engine water temperature
Feed-mounted emergency stop cable
Emergency stop in the cab