



CAT MD5050 SURFACE DRILLS

TECHNICAL SPECIFICATION

Specifications

General Data

Hole diameter	102 mm (4.0 in)
Hole depth	31 m (102.5 ft)
Compressor	7 m ³ /min (250 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

Feed extension	.91 m (3 ft)
Feed channel and chain pulldown	
UFH16 feed capable of using a 6.1 m (20 ft) starter steel	
Adjustable wear pads	
Drill steel thread lubrication	
Feed swing	36° left 37° right
Feed dump	139° (from 0° off boom)

Boom Specifications

Boom up	36°
Boom down	29°
Boom length	2.9 m (9.5 ft)
Non-cab boom swing angle	24° left 19° right
Cab boom swing angle	14° left 19° right
Non-cab boom extension	1.2 m (4 ft)
Cab boom extension	.61 m (2 ft)

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

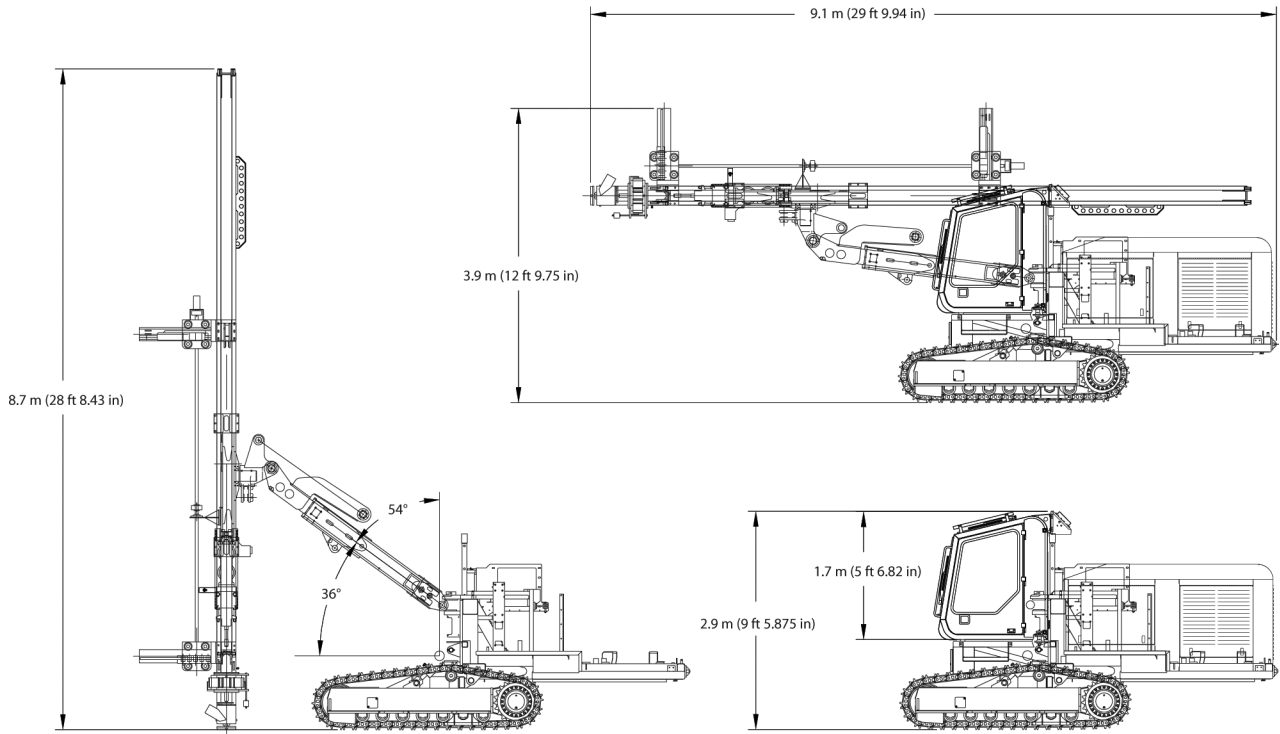
Operator-selected smooth dependent proportional control system for all drilling functions

Minimizes overfeeding

Anti-plug

Anti-plunge

Anti-jam



Shipping Dimensions

Length	10.7 m (35 ft)
Width	2.6 m (8.5 ft)
Height	3.2 m (10.5 ft)
Weight	with cab 12 700 kg (28,000 lb) without cab 11 800 kg (26,000 lb)

Power Unit

MD5050C - Tier III Isuzu 4HK 4-cylinder inline turbocharged, water-cooled, direct injection, 150 kW (203 bhp) at 2,100 rpm

* MD5050 non-cab equipped with Tier II Isuzu engine, 130 kW (174 hp) at 2,350 rpm

28,000 series gearbox	
Complete enclosure with lockable doors	
Dual-element air filters with indicators	
Engine oil sump	35°
Fuel tank	303 l (80 gal)
Fuel capacity	Over 13 hours

Air Compressor

Rotary screw-type compressor
118 l/sec (250 cfm) maximum
10 bar (150 psi) maximum
Dual-element air filters with indicators
Auxiliary air hook-up

Hydraulic System

Pressure-compensated load-sensed piston pump	
Full-flow 3 micron, in-tank filtration	
Sealed hydraulic tank	379 l (100 gal)
Full-flow cooling	
Manual "makeup" fill pump with 10 micron filter	
Hydraulic test ports for troubleshooting	

Cooling Package

Coolers for engine, hydraulic and compressor ambient capability	52° C (125° F)
Fan assembly	762 mm (30 in)
Side-by-side arrangement	

Dust-Collection System

DD950 dust collector	
Precleaner and pickup pot	
Hinge-mounted	
3 filter elements	
Filter area	30.66 m ² (330 ft ²)
Reverse pulsing for cleaning	

Operator's Cab

ROPS - ISO3471 - 1 FOPS - ISO3449	
78 dB(A) noise level inside cab	
3.07 m ² (33 ft ²) total glass	
Model 320 heater/air conditioner	
Cooling – 21,000 btu	
Heating – 28,000 btu	
Comfortable adjustable seat	
Washer and wipers for window	
2-axis electronic inclinor	

Undercarriage

Excavator track pad and chain	
OEM original sideframe design	
Final drive motors	2-speed
Double grousers	300 mm (11.8 in) wide
Hydraulically released spring-applied brakes	
Standard rock guards	
Ground pressure (with cab)	88.3 kps (12.8 psi)
Ground pressure (no cab)	82.0 kps (11.9 psi)
Speed, maximum	4.8 km/h (3.0 mph)
Track oscillation	±10°
Ground clearance	406 mm (16 in)
Track gauge	1,981 mm (83.7 in)

Controls

Pressure-Compensated/Load-Sensed

Drill hammer
Drill rotation
Drill feed
Remote control box with 6.1 m (20 ft) tether cord
Tramming
Boom and feed positioning

Electronics display

Tachometer
Hourmeter
Drill hour meter
Fuel gauge
Voltmeter
Engine-oil pressure
Engine-water temperature
Compressor discharge temperature

Shutdown Features

Low engine-oil pressure
High compressor discharge temperature
High engine-water temperature
Low hydraulic oil level
Emergency stop button on swing arm
Feed-mounted emergency stop cable
Hydraulic test ports for troubleshooting