

Simba 1354 production drill rig

Hydraulic production drill rig for long-hole mining,
medium-to-large hole diameter 76-102mm.



Giant, bearable, intelligent and operation friendly

The Simba 1354 is popular in medium-drift mining for long-hole production drilling application. The sturdy carrier DC 15 supports heavy-duty drill tools for the hole ranging from 76-102 mm. The intelligent drilling system EDS 18 and the angle reading system offer easy operation on versatile positioning unit to adapt to various drilling methods.

+ Main benefits

Bearable frame The prestigious frame of carrier DC 15 has been successfully applied on many Epiroc rigs, and has established the fame of simple and safe operation.

Versatility The Simba 1354 with versatile positioning unit and water-mist offers 360° ring drilling and parallel drilling within the width of 3 m. The powerful COP 2550 series rock drill with back hammer function improves your productivity in big hole drilling.

Easy operation and maintenance The operation panel and control system are widely applied on Epiroc rigs, which bring much convenience for the operator. The design concept of visible components offers easy trouble shooting, regular maintenance and monitoring.

ITH option In-The-Hole hammer, is particularly for deep and straight production drilling, for the hole diameter up to 110-178 mm.



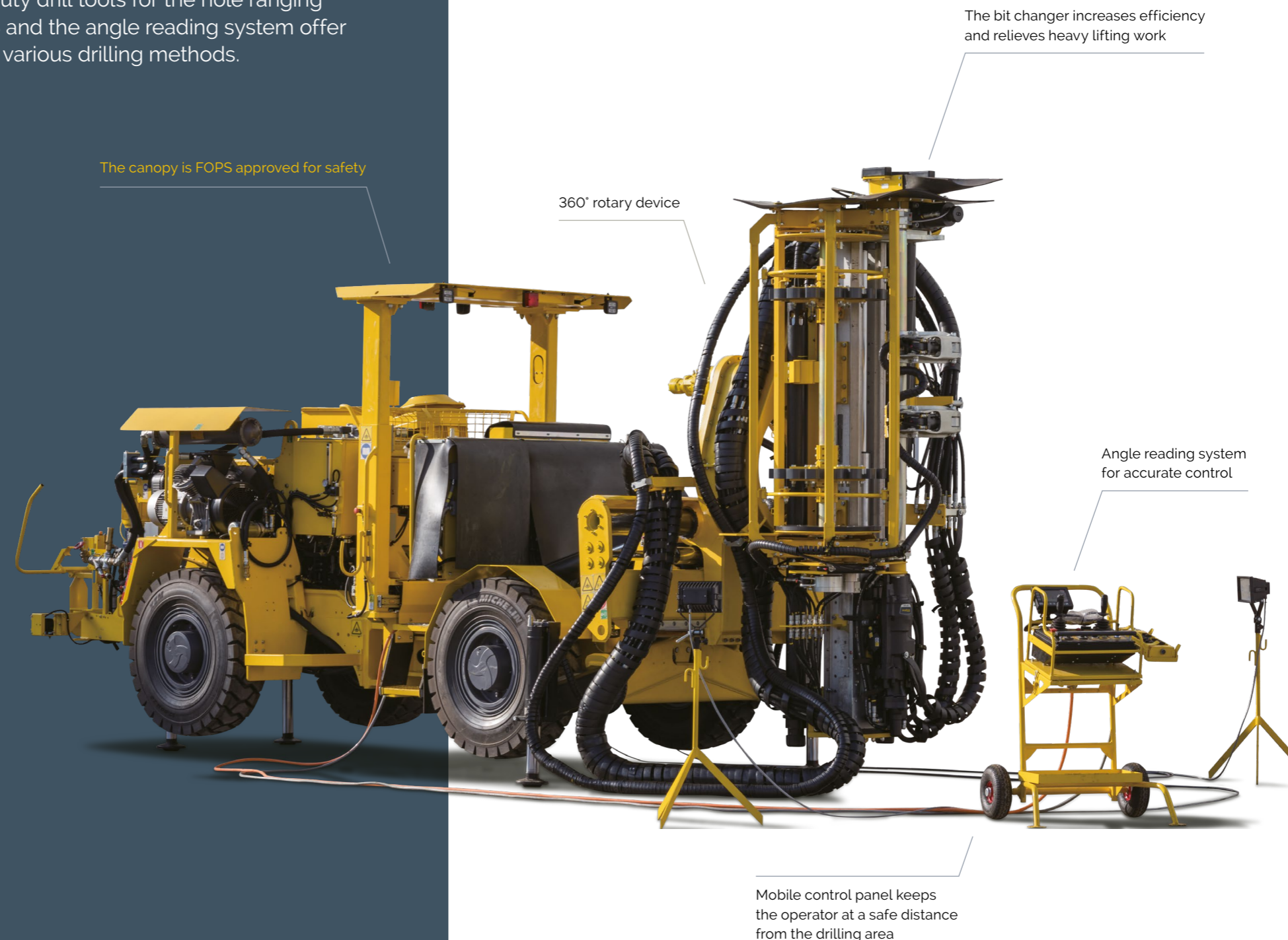
A precise drilling begins at stable carrier, the bearable DC15 carrier is what exactly it.



Digitized angle reading system helps operators to fulfill more accurate hole angle and depth.



Maintenance-friendly design makes the service work safe and easy. All service points are reachable from ground level



The canopy is FOPS approved for safety

360° rotary device

The bit changer increases efficiency and relieves heavy lifting work

Angle reading system for accurate control

Mobile control panel keeps the operator at a safe distance from the drilling area

Support your further requirements in production drilling

The Simba 1354 with various of rock drill options of COP 1838, COP 2550 and ITH kit offers various ranges of hole diameters to meet your further requirements either in different applications, or for deep hole drillings.

+ Powerful COP 2550UX+ rock drill with back hammer

The COP 2550UX+ rock drill has a built-in hydraulic extractor unit for use in the event of jamming in particularly bad rock conditions. A separate flushing head in front of the extractor unit reduces the risk of water working its way into the percussion mechanism.

+ 360° Drilling

The Simba 1354 equipped with water-mist system is capable of both upward and downward drilling, bringing versatile drilling patterns for your needs.

+ Rod handling system

The mechanized rod handling system relieves the operator from heavy lifting work and is therefore an essential feature for maintaining high productivity.

A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.

Technical Specifications

● - Standard ○ - Option A - Simba 1354 B - Simba 1354-ITH

Rock drill

	COP 1838+	COP 2550UX+
Shank adapter	T45E	T51E
Hole diameter	76-89 mm	89-102 mm
Max. impact power	18 kW	25 kW
Impact rate	60 Hz	42-55 Hz
Hydraulic pressure(maximum)	230 bar	230 bar
Torque (maximum)	640/1 000 Nm	1 970 Nm
Rotation motors	Separate rotation	Separate rotation
Rotation speed	0-340/0-215 rpm	0-110 rpm
Lub. air consump.(at 2 bar)	5 L/s	5 L/s
Water consumption 50 L/min	40-120 L/min	150 L/min
Weight	170 kg	250 kg

Rotation unit Simba 1354-ITH

	DHR 6HU 56-3	DHR 6HU 68-3
Adapter type	Floating	Floating
Adapter thread	3½ inch API Reg. Box	3½ inch API Reg. Box
Length	871 mm	887 mm
Torque, max.	3 900 Nm	5 100 Nm
Rotation speed	107 rpm	68 rpm
Pressure drop, max.	210 bar	175 bar
Flow, max.	150 L/min	150 L/min
Weight	245 kg	245 kg

Drill steel Simba 1354

Rock drill	Hole diameter, mm	Drill rod	Shank adapter	Guide tube
COP 1838+	76-89	T45 Speedrod	T45E	TDS 64
COP2550UX+	89 (102)	T51 Speedrod	T51E	TDS 76
COP2550UX+	89-102	TDS76	ST58	N/A

Drill steel Simba 1354-ITH

ITH-hammer	Hole diameter, mm	Drill pipes, mm	Pipe length, mm	Thread pin/box
COP 44 Gold	110-125	76	1 800	2 3/8" API Reg
COP 54 Gold	127-152	102	1 500/1 800	2 3/8" API Reg
COP 64 Gold	156-178	102	1 500/1 800	3 1/2" API Reg

Feed Simba 1354

BMH 200	BMH 214	BMH 215	BMH 216
Total length	3 160 mm	3 465 mm	3 770 mm
Drill rod length	1 220 mm	1 525 mm	1 830 mm
Total length with extractor	3 365 mm	3 670 mm	3 975 mm

Feed Simba 1354-ITH

BMH 200	BMH 235	BMH 236
Total length	3 200 mm	3 510 mm
Drill steel length	1 500 mm	1 800 mm
Total length	3 500 mm	3 810 mm

Drilling system

	A	B
Water mist flushing, water oil cooler, external air supply	○	○
ITH lubrication surveillance system		○

Drilling unit

	A	B
Rod Handling System, RHS 17*1	●	
Rod Handling System, RHS 27*1	○	●
Rod handling system RHS 35 (for drill tube 102mm, max. 26 rods)		○
Adaptable to 4', 5' and 6' rods	●	
Adaptable to T45, T51 Speedrods	●	
Adaptable to TDS 64 and TDS 76 drill tubes	●	
Mechanized drilling up to 32 m	●	
Adaptable to 5' and 6' pipes		●
Adaptable to 76 and 102 mm drill pipes		●
Mechanized drilling up to 51 m		●

Positioning system

	A	B
Feed extension 900mm(with 4' drill steel)	○	
Feed extension 1 200mm(with 5' and 6' drill steel)	○	●
Rotary Acuator BHR 60-2 for 360° ring drilling	●	●
Sliding table BHT 150 gives 1.5 m feed parallel positioning	●	●
Pendulum arm, BHP 150 gives 1.5 m feed parallel positioning in the side walls. Adds additional 1.5 m feed parallel positioning upwards/downwards.	●	●
Stinger backward on feed BSJ 8-200	●	●
Stinger forward on feed BSJ 8-115	●	●
Feed dump, drilling +20° forward and -65°backward	●	●
Rig Alignment Laser RAL650	●	●
Thread lubrication kit	○	○
Automatic lubrication for positioning/drilling system	○	○
Central lubrication for positioning/drilling system	○	○
Additional stinger backwards BSJ 8-200	○	○

Control system

	A	B
Electrical Direct System, EDS	●	●
Basic functions such as semi-automatic drilling and anti-jamming included	●	●

Power pack

	A	B
Hydraulic pump for percussion, positioning, feed	●	●
Hydraulic pump for rotation	●	
Pumps unloaded at start	●	●
System pressure, max 230 bar	●	●
Hydraulic oil tank, 160 l	●	●
Low oil level indicator and shut-down	●	●
Oil temperature gauge on oil tank	●	●
Electric oil filling pump	●	●
Filtration, absolute 16 µm	●	●
Oil filter indicator	●	●
Water cooled oil cooler in stainless steel	●	●
Mineral hydraulic oil	●	●
Rock drill lubrication warning kit	●	
Hydraulic oil thermostat	●	

Electrical system	A	B
Total installed power 70KW	●	
Total installed power 65KW		●
Main motor at 50 Hz, 55 kW	●	●
Voltage 380-1 000 V	●	●
Frequency 50-60 Hz	●	●
Starting method, star/delta (380-690 V) direct (1 000 V)	●	●
Thermal overload protection for electric motors	●	●
Percussion hour meters on A-panel	●	●
Digital volt/ampere meter in electric cabinet	●	●
Phase sequence indicator	●	●
Earth fault indicator	●	●
Battery charger	●	●
Transformer 4 kVA	●	●
Cable reel	●	●
Limit switch for cable reel	●	●
Working lights on tripods, 2 x 200 W, 24 V	●	●
ARI 6C angle reading system, with hole depth measurement	●	●
Electrical cable on reel, Buflex	●	●
Plug PC4	○	○
Socket PC4	○	○
Switch gear	○	○
Electrics according to local standards	○	○

Air system	A	B
Lubricated air for the rock drill	●	
Compressor Atlas Copco LE7, 5400rpm, 7bar, 12L/s	●	
Air pressure gauge	●	●
Adjustable flow/pressure	●	●
Air flow guard	●	●
2-inch system		●
High and low percussion		●
HECL lubrication system with electric filling pump		●
Hole blowing kit with external air	●	

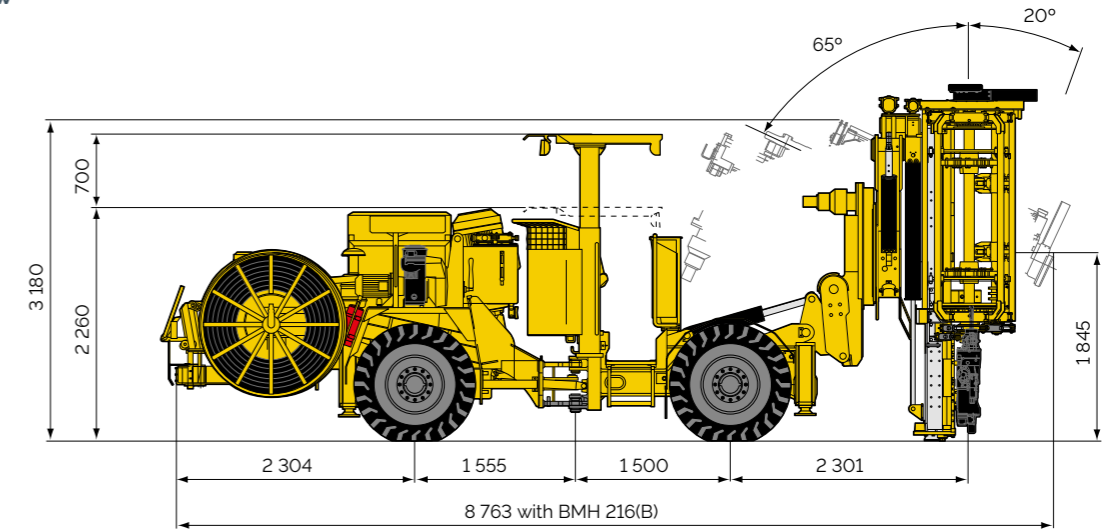
Water system	A	B
Electrically driven water booster pump, max 100 L/min at 10bar	●	
Water injection pump, max 50 l/min		●
Min water inlet pressure 2 bar	●	●
Hydraulic drive, axial piston motor, 10 cc		●
Water pressure gauge	●	●
Water flow guard	●	●
Waterhose reel	○	○

Carrier	A	B
Deutz TCD3.6 L4, China Stage III	●	●
55.4kW at 2300rpm	●	●
390Nm at 1300rpm	●	●
Fixed seat for tramping, including safety belt	●	●
±41° articulated steering	●	●
Four-wheel drive	●	●
FOPS-approved protective roof	●	●
Hydrostatic power steering system	●	●
Hydrodynamic transmission, Clark 12 000	●	●
Front axle, Dana 123	●	●
Rear axle, Dana 123, ±6° oscillation	●	●
Tyres, 12.00 x R20	●	●
15' clearance outside axles	●	●
Hydraulic jacks, 2 extendable in front	●	●
Hydraulic jacks, 2 in the rear	●	●
Service brakes, 2 separate circuits (hydraulically applied, fully enclosed wet disc brakes)	●	●
Emergency and parking brakes, SAHR	●	●
Fuel tank, 60 l	●	●
Electric system, 24 V	●	●
Batteries, 2 x 70 Ah	●	●
Tramming lights, 8 x LED	●	●
Brake lights	●	●
Illuminated stairs for platform	●	●
Central lubrication system	●	●
Catalyser and silencer	●	●
Fire extinguisher	●	●
Spirit levels	●	●
Gradeability at max load on drive wheels, 1:4	●	●
Tramming speed >10 flat ground, >4 km/h incline 1:8	●	●
Horn, beacon and reverse alarm	●	●
12V outlet	●	●

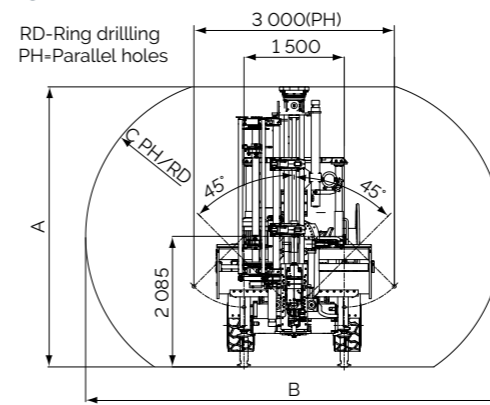
Miscellaneous	A	B
Manual rig washing kit	○	○
Manual lubrication kit	○	○
Rig washing kit	○	○
KA certificate	○	○

Measurements

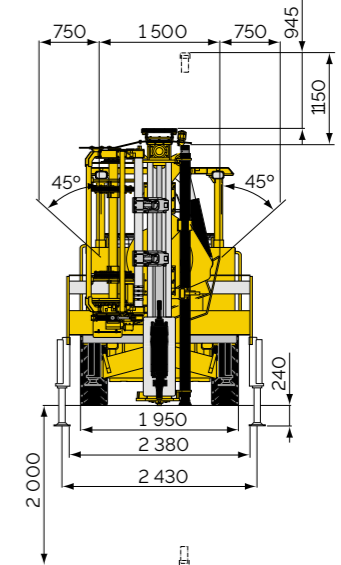
Side view



Coverage area



Front view



	BMH 214	BMH 215	BMH 216
A	3 970	4 275	4 580
A (extractor)	4 175	4 480	4 785
B	5 270	5 880	6 490
B (extractor)	5 680	6 290	6 900
C	1 885	2 190	2 495
C (extractor)	2 090	2 395	2 700

Weight

Gross weight		
kg	Total	15 000

Turning radius

Depending on surface		
mm	Outer	5 440
	Inner	2 890

Dimensions

mm	Width	2 380
	Height tramming	3 180
	Height roof up	2 960
	Length (with BHM 214/215/216)	8 209/8 486/8 763
	Ground clearance	280

Recommended cable size and length

Voltage	Type	Dimension, mm ²	mm	Length, m
380-400 V	Buflex	3x70+3G16+2x1.5	37 mm	95 m
440-575 V	Buflex	3x50+3G10+2x1.5	32 mm	140 m
660-690 V	Buflex	3x35+3G6+2x1.5	28 mm	185 m
1 000 V	Buflex	3x35+3G6+2x1.5	28 mm	185 m

Recommendations are given for surrounding temperature of 40°C and up to a height of 2 000 m.

United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.
epiroc.com

