

Boomer M20 S

Maximized productivity and machine utilization
with the world's first hoseless boom design



A true development rig

The new booms of the Boomer M20 S jumbo drill rig feature internal hydraulics and a hoseless design. This means less unplanned down time for hose repairs which will increase productivity and machine utilization as well as facilitate planning of your mining operations.

+ Main benefits

Excellent precision and productivity giving lower cost per meter thanks to smart features integrated with protected system components

Reduced maintenance costs and increased predictability with less unplanned stops and improved up time thanks to stronger, hoseless booms with internal hydraulics

Improved safety and operator working conditions with eyes on task at all times using multifunctional joysticks, better visibility and less cabin noise thanks to the new design of booms and cabin

+ Highlighted rig features



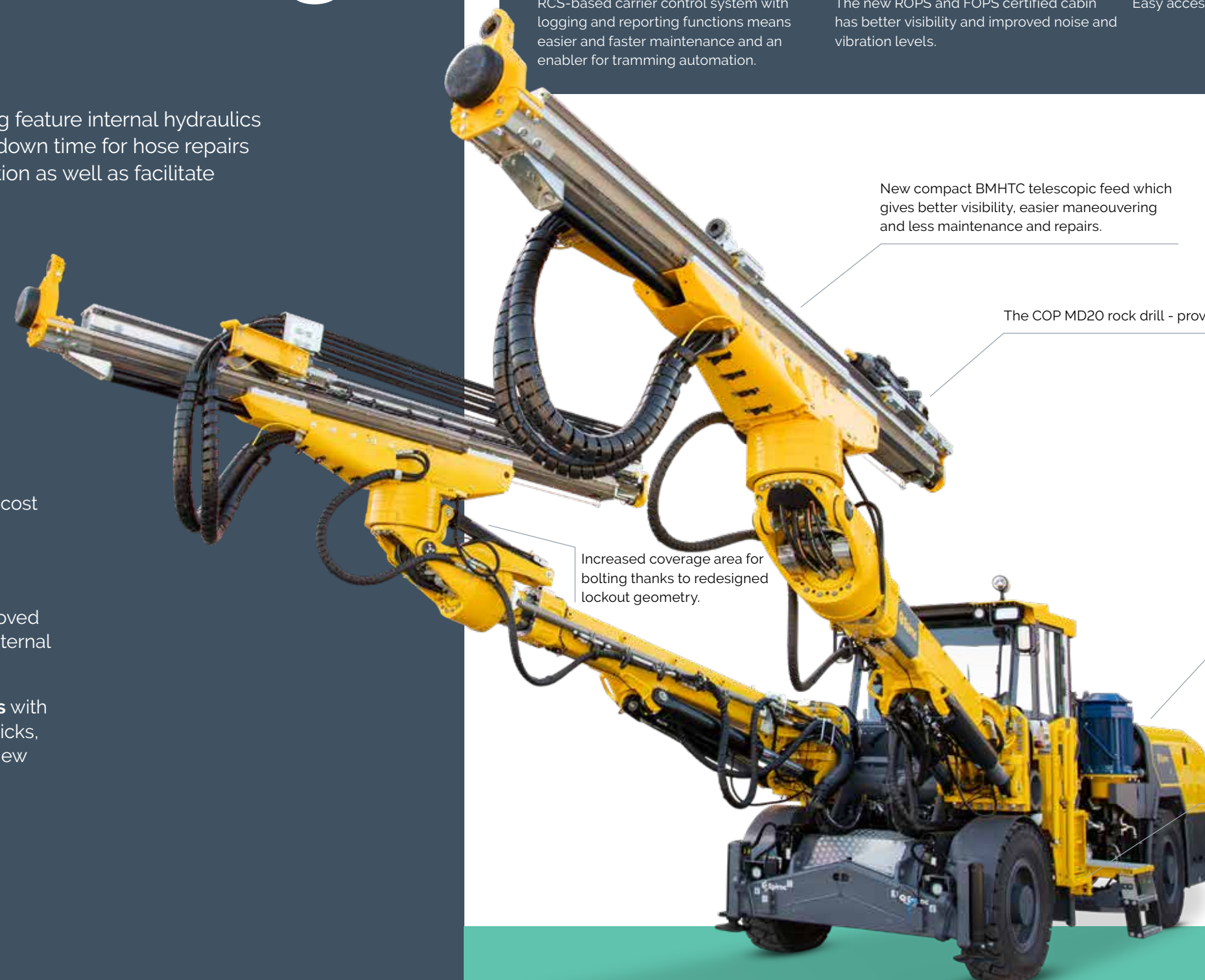
RCS-based carrier control system with logging and reporting functions means easier and faster maintenance and an enabler for tramming automation.



The new ROPS and FOPS certified cabin has better visibility and improved noise and vibration levels.



Easy access for service and maintenance.



New compact BMHTC telescopic feed which gives better visibility, easier maneuvering and less maintenance and repairs.

The COP MD20 rock drill - proven in field.

Increased coverage area for bolting thanks to redesigned lockout geometry.

Optional battery electric driveline.

Optional safe bolting platforms. No need for operator to stand under unsupported rock when loading bolts.

S – Smart

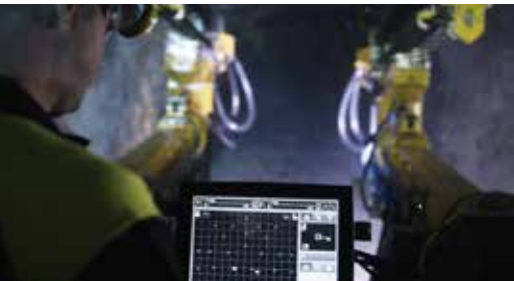
Machines within the Smart series are equipped with Epiroc's Rig Control System, RCS, which makes them ready for automation and remote control.

SG – Smart and Green

Smart and Green means that machines feature both Epiroc's Rig Control System and exhaust-free technologies.

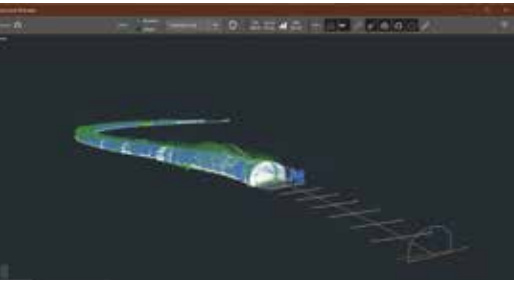
A multi-purpose drill rig

The Boomer M20 S combines high technology and productivity increasing features with the benefits from an RCS rig.



+ ABC Regular

This automation option enables the use of digital drill plans (drill plan handling) on the rig. Productivity increasing benefits are less overbreak/underbreak, longer drill rounds and better drilling precision.



+ Underground Manager

A software for production planning and creating drill plans for the drill rig. The drill plans can be transferred to the rig via USB or RRA (Rig Remote Access). Use the log files to create reports for evaluation and optimization.



+ Quality controlled rock bolting

Underground Manager is logging position, angle and depth of each bolt installed. This gives you quality control of the rock bolting to ensure proper bolt installation has been performed.



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 = Boomer M20 S B = Boomer M20 SG

Drilling system	A	B
COP 1638HD*	○	○
COP 1838HD*	○	○
COP 2238HD*	○	○
COP MD20	●	●
Hole blowing kit	●	●
Water mist flushing, external water and air supply*	○	○
Water mist flushing, external water, internal air supply*	○	○
Rock drill lubrication warning kit	●	●
Lubrication air filtration system	○	○
* With BUT M		

Boom	A	B
BUT M	●	●
BUT M Pro	○	○
Automatic boom lubrication for positioning unit	○	○

Feed	A	B
BMH 6000-Series 12 ft, 14 ft, 16 ft, 18 ft	●	●
Telescopic feed BMHT 6000-series (max 18 ft)	○	○
Extension drilling set BSH 110 (BMH feeds only)	○	○
Rod Adding System, RAS (BMH feeds only)	○	○

Air/watersystem	A	B
Hydraulically driven Atlas Copco screw compressor GAR 5 Max boost flow 26L/s@10bar	●	●
Hydraulically driven Atlas Copco screw compressor GAR 30 Max boost flow 58L/s@10bar *	○	○
Hydraulic water booster pump, max capacity at 135 bar boost 200 L/min. Minimum water inlet, 2 bar at 200 L/min**	●	
Electric driven water booster pump, max capacity at 15 bar boost 200 L/min. Minimum water inlet, 2 bar at 200 L/min**		●
Water hose reel	○	○
Water hose (Ø1.5 inch 70 m)	○	○
* Might require a larger electrical motor		
** Depending on selected rock drill		

Hydraulic system	A	B
Oil level sensor	●	●
Oil temperature gauge on oil tank, electronically supervised	●	●
Filtration 10 µm	●	●
Oil filter indicator	●	●
Extra filtration package for water and fine particle removal	○	○
Mineral hydraulic oil	●	●
Biodegradable hydraulic oil	○	○
Electrical oil filling pump	●	●
Heater kit for hydraulic oil tank, diesel engine and electric motors	○	○
Ni-Cr plated piston rods (limitations exist)	○	○

Control system	A	B
Epiroc Rig Control System (RCS 5)	●	●
Advanced Boom Control (ABC) Regular	●	●
Advanced Boom Control (ABC) Total	○	○
Measure While Drilling (MWD)	○	○
Underground Manager PRO (PC software)	●	●
Underground Manager MWD (PC software) for analysis of drill data	○	○
Bolt view	●	●
Two operator panels (for standing operation only)	○	○
Rig access control	●	●
Rig Remote Access (RRA), LAN or WLAN connection	○	○
Total station navigation	○	○
Certic Professional	○	○
Dynamic Tunneling Package (DTP)	○	○

Electrical system	A	B
Total installed drilling power 118 kW	●	●
Main motors, Sf 115 2x75 kW*	●	
Main motors, Sf 115 2x55 kW*		●
Voltage 380–1 000 V 50/60 Hz	●	●
Starting method, star/delta (400–690 V)	●	●
Starting method, direct start (1 000 V)	●	●
Starting method soft start (not for 1 000 V)	○	○
Transformer 8 kVA	●	●
Transformer for charging 100 kW		●
Electronic overload protection for electric motors	●	●
Digital voltmeter/ampere meter in electric cabinet	●	●
Percussion hour meter on operator display	●	●
Phase sequence and eart fault indicator	●	●
Cable reel, diameter 1 600 mm	●	●
Electric outlet for accessories, 16 A (CE)/32 A (CE) (380–690 V)	○	○
Extra transformer 3-phase, 15 kVA (230/400 V outlet) (690–1 000 V)	○	○
PC4 or PC5 plug	○	○
Battery charger	●	●
Dual controls for cable reel	●	●
Stainless steel electrical enclosure	○	○
Carrier Control System	●	●
24 V Batteries 2x125 Ah	●	●
700 V Battery 280 Ah		●
Tramming lights 8x22 W LED	●	●
Working lights 4x150 W, 24 V DC	●	●
Illuminated stairs LED	●	●

* Depending on selected rock drill

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Carrier	A	B
Deutz TCD 2013 L04, Stage IIIA/Tier 3, 120 kW	●	
Deutz TCD 4.1 L04, Stage V, 115 kW	○	
Deutz TCD 6.1 L06, CN4, 129 kW	○	
Traction motor, 150 kW		●
Articulated steering ±41° steering angle	●	●
Four-wheel drive	●	●
Hose/cable guiding at water/cable reel	○	○
Dana 113 (short) axle	●	●
Automatic differential lock on axles, limited slip	●	●
Tires 12.00xR24	●	●
Clearance outside axles 13° rear, 22° front	●	●
Fuel tank, volume 110 l	●	
Central lubrication system	●	●
Fire suppression system ANSUL (Manual, checkfire or automatic)	○	○
Fire suppression system FORREX (Automatic)	○	○
Rig washing kit	○	○
Manual lubrication kit	○	○
Boot washing kit	○	○

Cabin	A	B
ROPS and FOPS certified cabin, noise level <65 dB(A)	●	●
Mounting height -140/+250 mm	○	○
Low profile cabin -150 mm	○	○
Air conditioning unit	●	●
Heating function for air conditioning (water transferred)	○	○
Electrical heater, 1,2 kW, 230 V (CE)	○	○
Electrical heater, 10 kW, 700 V (CE)	○	○
Reversing camera with monitor	●	●
Fixed seat	●	●
Swingable seat for drilling and tramming	○	○
Cabin body made of stainless steel	○	○
Joystick-controlled spotlights left and/or right, 70 W	○	○
Front window 22 mm (P8B safety classed)	●	●
Media player	○	○
Grizzly bars	○	○

Drifter rods

Rock drill	Rod	Min. hole diameter (mm)
COP 1838 COP 2238 COP MD20	SR35-H35-T38 Speedrod	38
	SR35-H35-T38	38
	SR35-R39-T38	38

Extension rods for injection drilling/RAS

Rock drill	Rod	Min. hole diameter (mm)
COP 1838 COP 2238 COP MD20	Rnd 32 Speedrod	38
	Rnd 39 Speedrod	38

Shank adapters

Rock drill	Rod	Min. hole diameter (mm)
COP 1838 COP 2238 COP MD20	R38	38
	T38	38
	R32*	38

*Intended for RAS and extension drilling with BSH 110

Couplings

Rock drill	Rod	Diameter (mm)	Length (mm)
COP 1838 COP 2238 COP MD20	R38	55	170
	T38	55	170

Recommended cable size and length

Voltage	Type	Dimension (mm²)	Diameter (mm)	Length (m)	Rock drill
380-400 V	Buflex	3x185+3G35	56	90	COP MD20 COP 1838 COP 2238
440-500 V	Buflex	3x150+3G25	52	100	COP MD20 COP 1838 COP 2238
550 V	Buflex	3x120+3G25	46	120	COP MD20 COP 1838 COP 2238
660-690 V	Buflex	3x95+3G16	45	150	COP MD20 COP 1838 COP 2238
1 000 V	Buflex	3x50+3G10	33	200	COP MD20 COP 1838 COP 2238

Recommendations are given for surrounding temperature of 40°C and up to a height of 2 000 m. Cable dimension for battery version depends on charging cycle.

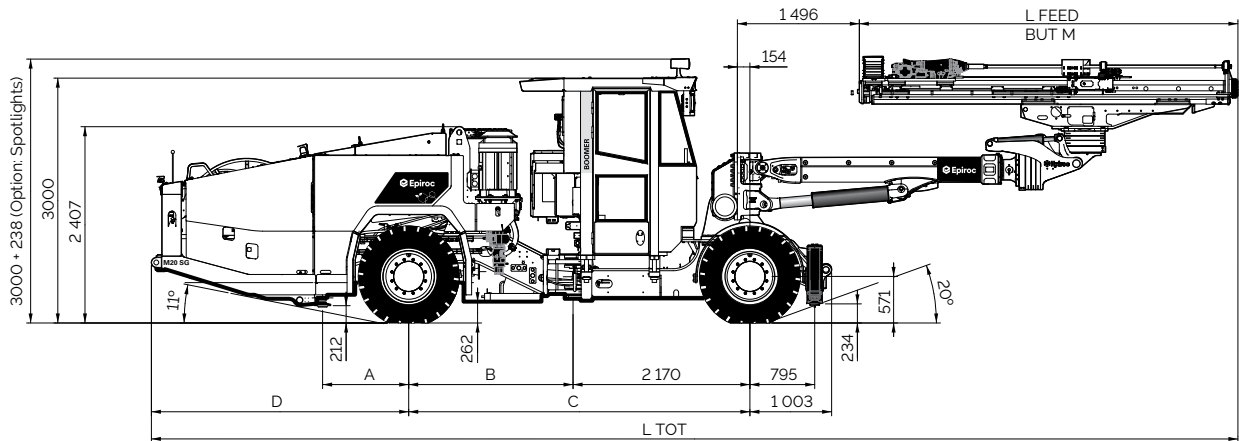
Noise and vibration

Operator sound pressure level in cabin, drilling, free field (ISO 11201)	65±3 dB(A) re 20 uPa
Operator sound pressure level working close to machine, drilling, free field	104±6 dB(A) re 20 uPa
Sound power level (ISO 3744), drilling, free field	128 dB(A) re 1 pW*
Vibration levels seated, drilling (ISO 2631-1) cabin	0.07±0.07 m/s²
Vibration levels standing, drilling (ISO 2631-1) cabin	0.07±0.07 m/s²

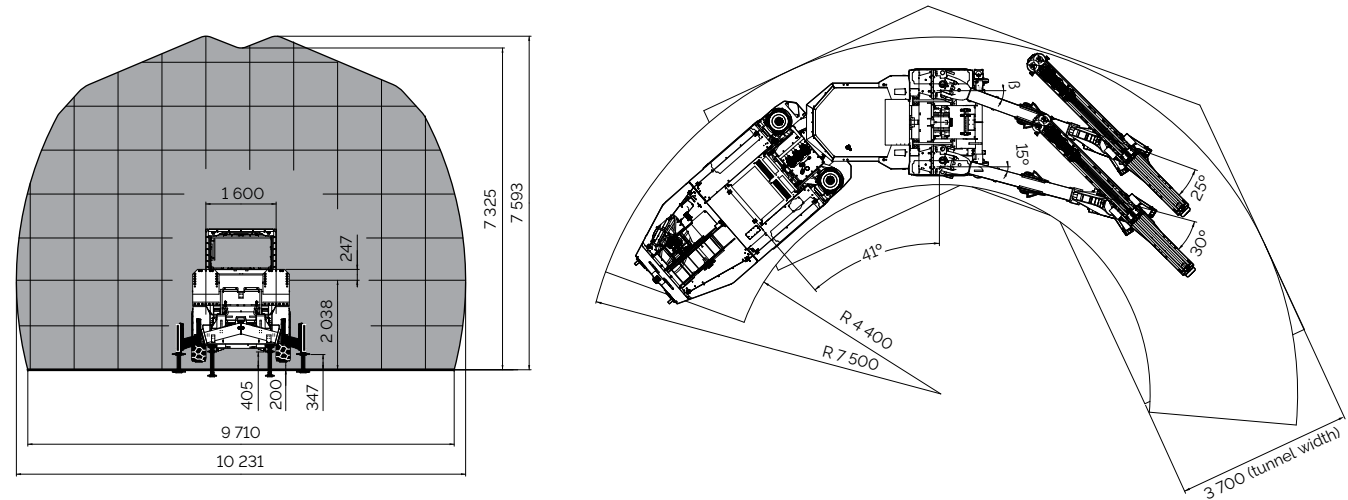
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Dimensions in millimeters



Boomer M20 SG equipped with COP MD20.



Boomer M20 S coverage area.

Boomer M20 S turning radius.

Dimensions	A	B
Width	2 245 mm	2 245 mm
Height with cabin	3 000 mm	3 000 mm
Length with BMH 6X14 feed(s)	13 985 mm	14 449 mm
Ground clearance	260 mm	260 mm
Turning radius outer/inner (equipped with COP MD20/COP 1838/COP 2238)	7 500/4 400 mm	7 500/4 400 mm

Tramming speed

On flat ground (rolling resistance 0.05)*	>15 km/h
On incline 1:8	>5 km/h

* Electric driveline >12 km/h

Gross weight (depending on configuration)

Rig type	Total	Boom side	Engine side
Two boom rig	23 500-29 000 kg	17 500-19 000 kg	6 000-10 000 kg

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.

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