

Boomer M-series

Face drilling rig for tunneling and mining applications with a coverage area up to 65 m²



Reloaded to meet your conditions

The Boomer M-series face drilling rigs have become a key piece of equipment for mining and tunneling applications. As part of our commitment to continuous improvement, the face drilling rig has benefitted from a comprehensive upgrade, focusing on improved safety, increased robustness and lower operational costs. The end result is a new Boomer M-series that truly is "reloaded".

+ Main benefits

Upgraded safety and ergonomics with ROPS and FOPS certified cabin, improved interior and safe bolting boom function

Better durability and robustness with overall improvements to the entire rig such as strengthened components, better protection of parts and better protection against internal wear

Lower operational costs thanks to longer service intervals and less unplanned downtime

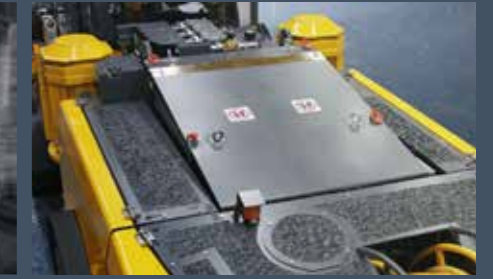
+ Battery driveline benefits



The 150 kW electric drive train of the Boomer M2 Battery emits 80% less heat during tramming than its diesel-driven counterpart's 120 kW diesel engine.



The complete drive train and battery are based on commercial, well-tested components that enable high performance and efficiency.



Automatic battery management and the industry's safest battery solution make it ideal for optimal production in demanding underground work environments.



Significant improvements in reliability with upgraded feeds

Rock drills upgraded to COP 1838HD+ or COP MD20

ROPS and FOPS certified cabin for added safety (optional)

The new heavy-duty BUT 36S boom is optimized for tough conditions

Stronger axle for a longer life

Filtration package designed to protect the key assets on the drill rig (optional)

The good just got better

There are always ways to improve and evolve equipment design. When contemplating what to focus on with the Boomer M-series upgrade, we utilized customer focused workshops, site visits and feedback from operators and service technicians to identify what equipment areas should be enhanced.



+ Safe bolting boom function

The Boomer M-series is unique in the mining and construction world because it offers a safe bolting boom function for the semi-mechanized installation of rock bolts. Due to the design of the BUT 36S booms and the side platforms on both sides of the operator station, it is possible to swing the feed all the way back to a position where the operator can safely load bolts into the feed without having to pass in front of the machine into areas with an unsupported roof.



+ COP MD20 is more productive and more robust

The new generation of rock drills are more durable than ever, with improved penetration rate, drill steel economy, up to 30% less RDT consumption, less vibrations, higher hydraulic efficiency, up to 15% faster penetration rate than closest competitor and a recommended service interval of 1000 impact hours. This means more uptime, increased productivity and lower running cost.



+ Epiroc Rig Control System

The reloaded rig offers the latest Rig Control System, the fifth generation of the RCS, so as to simplify the operator's work and contribute to increased productivity. With a new intuitive interface, upgraded software and user-friendly environment, the aim is – as always – to create more productive conditions for rock drilling, and to improve drilling rate and drill steel economy.



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 M1 B - Boomer M2 C - Boomer M2 Battery

Drilling system	A	B	C	Control system	A	B	C
COP 1638HD+	●	●	●	Direct Control System 2 (DCS2)	●	●	●
COP 1838HD+	○	○	○	Feed Angle Measurement, FAM 1	○	○	○
COP 2238HD+	○	○	○	Feed Angle Measurement with hole depth, FAM 2	○	○	○
COP 3038*	○	○	○	Epiroc Rig Control System (RCS 5)	○	○	○
COP MD20	○	○	○	Advanced Boom Control (ABC) Pure	●	●	●
Hole blowing kit	●	●	●	Advanced Boom Control (ABC) Regular	○	○	○
Water mist flushing, external water and air supply**	○	○	○	Advanced Boom Control (ABC) Total	○	○	○
Water mist flushing, external water, internal air supply**	○	○	○	Measure While Drilling (MWD)	○	○	○
Rock drill lubrication warning kit	●	●	●	Underground Manager PRO (PC software)	●	●	●
Lubrication air filtration system	○	○	○	Underground Manager MWD (PC software) for analysis of drill data	○	○	○
* Requires RCS and may require a larger electrical motor				Bolt view	●	●	●
** Not in combination with COP 3038				Two operator panels (for standing operation only)	○	○	○
Boom	A	B	C	Rig access control	●	●	●
BUT 35 SL	●	●	●	Rig Remote Access (RRA), LAN or WLAN connection	○	○	○
BUT 36 S T	○	○	○	Total station navigation	○	○	○
Automatic boom lubrication for positioning unit	○	○	○	Certic Professional	○	○	○
				Dynamic Tunneling Package (DTP)	○	○	○
Feed	A	B	C	Electrical system	A	B	C
BMH 6000-Series 12 ft, 14 ft, 16 ft, 18 ft	●	●	●	Total installed power 83 kW, Main motors, Sf 1.15 75 kW	●	○	○
Telescopic feed BMHT 6000-series (max 18 ft)	○	○	○	Total installed drilling power 118 kW, Main motors, Sf 1.15 2x55 kW*	○	○	●
Extension drilling set BSH 110 (BMH feeds only)	○	○	○	Total installed power 158 kW, Main motors, Sf 1.15 2x75 kW	○	●	○
Rod Adding System, RAS (BMH feeds only)*	○	○	○	Total installed power 198 kW, Main motors, Sf 1.3 2x95 kW**	○	○	○
Water spraying kit on cradle	○	○	○	Voltage 380-1 000 V 50/60 Hz	●	●	●
* Not in combination with COP 3038, Max 14 ft feed				Voltage 690-1 000 V 50/60 Hz**	○	○	○
Air/watersystem	A	B	C	Starting method, star/delta (400-690 V)	●	●	●
Hydraulically driven screw compressor Atlas Copco GA 5	●	●	●	Starting method, direct start (1 000 V)	●	●	●
Hydraulically driven screw compressor Atlas Copco GA 30*	○	○	○	Starting method soft start (not for 1 000 V)	○	○	○
Hydraulic water booster pump, max capacity at 15 bar boost 200 L/min. Minimum water inlet, 2 bar at 200 L/min**	●	●	○	Transformer 8 kVA	●	●	●
Hydraulic water booster pump, max capacity at 30 bar boost 400 L/min. Minimum water inlet, 2 bar at 400 L/min**	○	○	○	Transformer for charging 100 kW	○	○	●
Electric driven water booster pump, max capacity at 15 bar boost 300 L/min. Minimum water inlet, 2 bar at 200 L/min**	○	○	●	Electronic overload protection for electric motors	●	●	●
Water hose reel	○	○	○	Digital voltmeter/ampere meter in electric cabinet	●	●	●
Water hose (Ø1.5 inch 70 m)	○	○	○	Percussion hour meter on operator display	●	●	●
* Might require a larger electrical motor				Phase sequence and earth fault indicator	●	●	●
** Depending on selected rock drill				Cable reel, diameter 1 600 mm	●	●	●
Hydraulic system	A	B	C	Electric outlet for accessories, 16 A (CE)/32 A (CE) (380-690 V)	○	○	○
Low oil level indicator	●	●	●	Extra transformer 3-phase, 15 kVA (230/400 V outlet) (690-1 000 V)	○	○	○
Oil temperature gauge on oil tank, electronically supervised	●	●	●	PC4 or PC5 plug	○	○	○
Filtration 16 µm	●	●	●	Battery charger	●	●	●
Oil filter indicator	●	●	●	Dual controls for cable reel	●	●	●
Extra filtration package for water and fine particle removal	○	○	○	Stainless steel electrical enclosure	○	○	○
Mineral hydraulic oil	●	●	●	Electric system 24 V	●	●	●
Biodegradable hydraulic oil	○	○	○	24 V Batteries 2x125 Ah	●	●	●
Electrical oil filling pump	●	●	●	700 V Battery 280 Ah	○	○	●
Heater kit for hydraulic oil tank, diesel engine and electric motors	○	○	○	Tramming lights 8x22 W LED	●	●	●
Ni-Cr plated piston rods (limitations exist)	○	○	○	Working lights 4x150 W, 24 V DC	●	●	●
				Illuminated stairs LED	●	●	●
				* Depending on selected rock drill			
				** When equipped with COP 3038			

Technical specifications

● - Standard ○ - Option
A - Boomer M1 **B** - Boomer M2 **C** - Boomer M2 Battery

Carrier	A	B	C
Deutz TCD 2013 L04 2 V stage IIIA/Tier 3 (120 kW)	●	●	
Deutz TCD 41 L04, stage IV/Tier 4 F (115 kW)	○	○	
Traction motor, 150 kW			●
Articulated steering ±41° steering angle*	●	●	●
TCD 41 stage 5 alternative	○	○	○
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	○	○	○
Hydraulic Swellex pump type H1 for manual installation	○	○	○
Hydraulic outlet for charging with Mini SSE	○	○	○

Protective roof	A	B	C
Mounting height -80 mm/+310 mm	○	○	○
Manual spotlight, left and/or right	○	○	○
Two operator panels (for standing operation only)	○	○	○
Swingable seat for drilling and tramping (one operator panel only)	○	○	○

Cabin (optional)	A	B	C
ROPS and FOPS certified cabin, noise level <80 dB(A)	●	●	●
Mounting height -140/+250 mm	○	○	○
Low profile cabin -150 mm	○	○	○
Air conditioning unit	●	●	●
Heating function for air conditioning (water transferred)	○	○	○
12 V outlet for communication radio	○	○	○
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 tramping	○	○	○
Cabin body made of stainless steel	○	○	○
Joystick-controlled spotlights left and/or right, 70 W	○	○	○
Front window 22 mm (P8B safety classed)	●	●	●
Media player	○	○	○

Drifter rods

Rock drill	Rod	Min. hole diameter (mm)
COP 1838	SR35-H35-T38 Speedrod	38
COP 2238	SR35-H35-T38	38
COP MD20	SR35-R39-T38	38
COP 3038	SR35-R39-T38	45

Extension rods for injection drilling/RAS

Rock drill	Rod	Min. hole diameter (mm)
COP 1838	Rnd 32 Speedrod	38
COP 2238	Rnd 39 Speedrod	38
COP MD20		
COP 3038	TC42-R39-TC42 Speedrod	64

Shank adapters

Rock drill	Rod	Min. hole diameter (mm)
COP 1838	R38	38
COP 2238	T38	38
COP MD20	R32*	38
COP 3038	TC42 (conical T-thread)	45

*Intended for RAS and extension drilling with BSH 110

Couplings

Rock drill	Rod	Diameter (mm)	Length (mm)
COP 1838	R38	55	170
COP 2238	T38	55	170
COP MD20			
COP 3038	TC42/T38	57	175

Recommended cable size and length

Voltage	Type	Dimension (mm²)	Diameter (mm)	Length (m)	Rock drill
380-400 V	Buflex	3x185+3G35	56	90	COP 1838/2238
440-500 V	Buflex	3x150+3G25	52	100	COP 1838/2238
550 V	Buflex	3x120+3G25	46	120	COP 1838/2238
660-690 V	Buflex	3x95+3G16	45	150	COP 1838/2238
660-690 V	Buflex	3x150+3G25	52	100	COP 3038
1 000 V	Buflex	3x50+3G10	33	200	COP 1838/2238
1 000 V	Buflex	3x95+3G16	45	150	COP 3038

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.

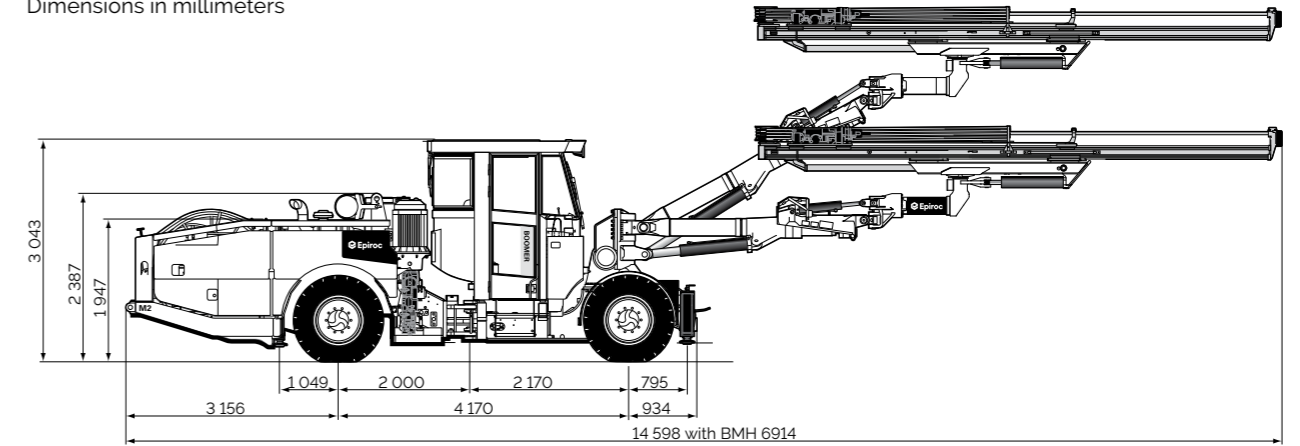
Noise and vibration

Operator sound pressure level in canopy, drilling, free field (ISO 11201)	104±6 dB(A) re 20 uPa
Operator sound pressure level in cabin, drilling, free field (ISO 11201)	75±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

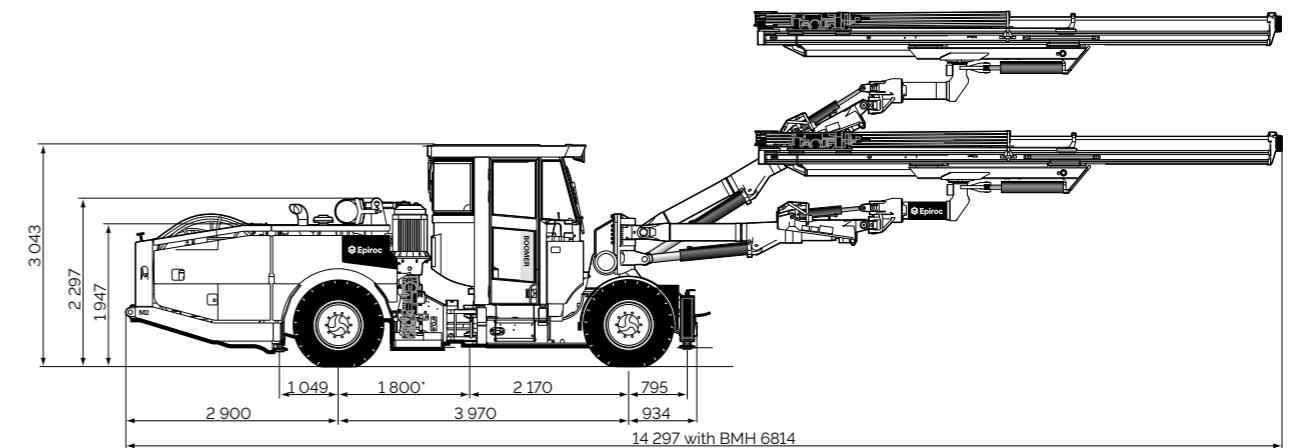
131 dB(A) re 1 pW when equipped with COP 3038

Technical specifications

Dimensions in millimeters

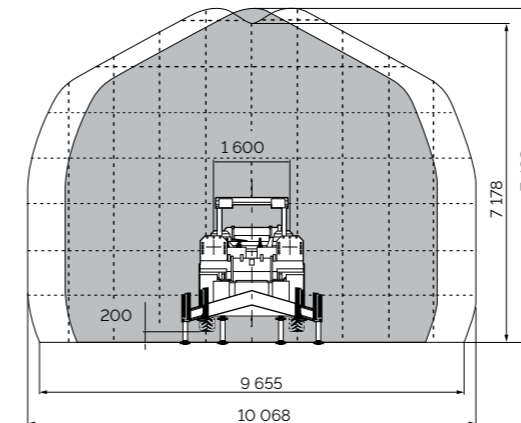


Boomer M2 Battery equipped with COP 1838.



Boomer M2 equipped with COP 3038.

* COP 3038 adds 200mm.



■ One boom rig
 □ Two boom rig

Boomer M-series, coverage area.

Dimensions

Width	2 550 mm
Height with cabin	3 179 mm
Height roof up/down	3 019/2 324 mm
Length with BMH 6814 feed(s)	14 297 mm
Ground clearance	260 mm
Turning radius outer/inner (Equipped with COP 1838)	7 500/4 400 mm
Turning radius outer/inner (Equipped with COP 3038)	7 200/4 400 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
One boom rig	18 000-20 000 kg	9 000-11 000 kg	9 000 kg
Two boom rig	23 000-29 000 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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