

Boomer S1 L

Low profile face drilling rig for drifts and tunnels with cross sections up to 29 m²

 **Epiroc**

A leader in low-vein mining

The powerful Boomer S1 L is a hydraulic face drilling rig for low-vein mining, ideally suited for drifts or tunnels down to 1.3 meters in height, with cross sections of up to 29 m². The Boomer S1 L features a heavy-duty BUT 28 boom and a hard-wearing COP rock drill to optimize your productivity on site. In addition, it comes equipped with a reliable direct control system (DCS) to grant you maximal uptime with minimal hassle.

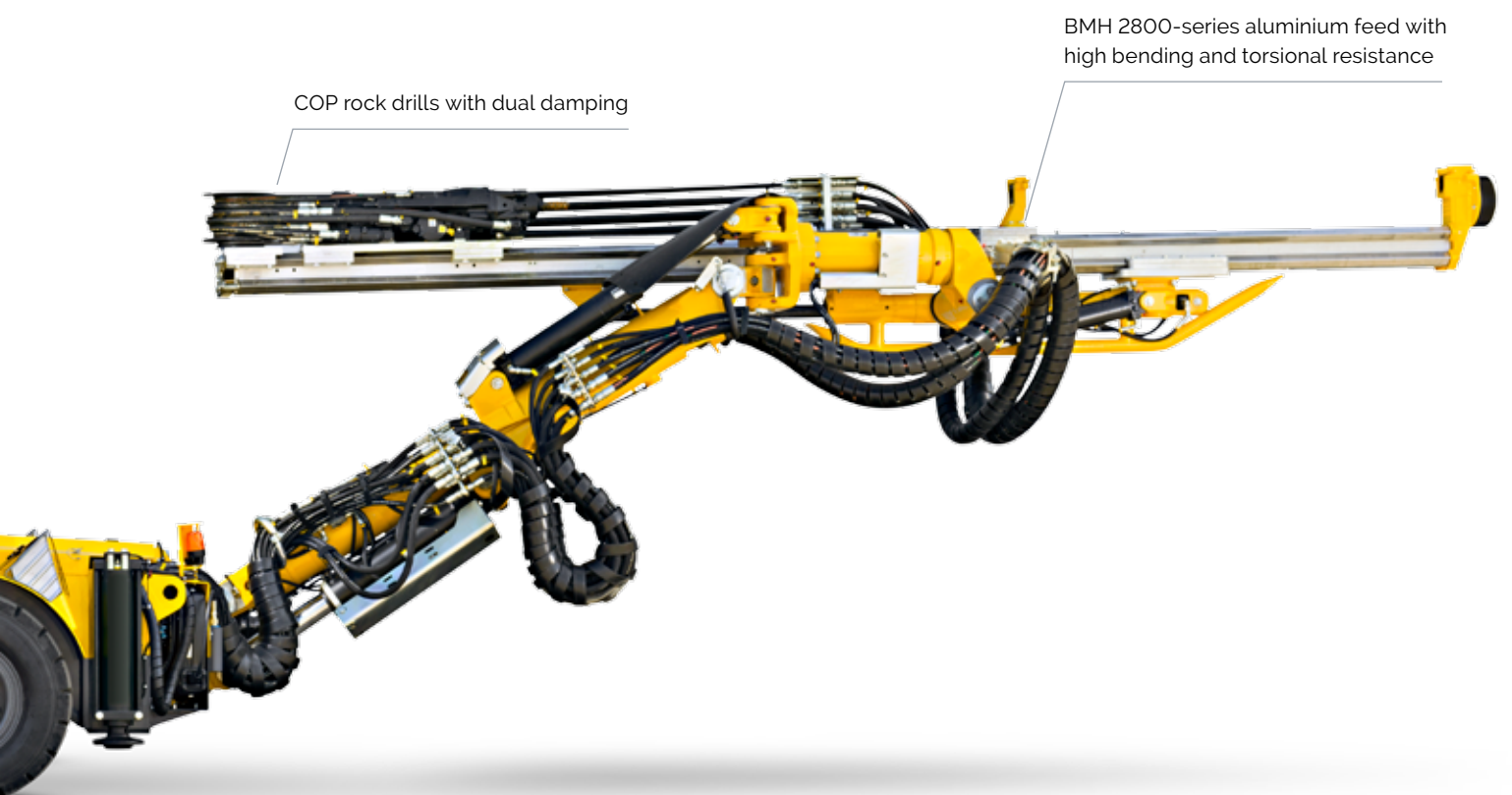
+ Main benefits

Powerful performance with low emission diesel engine which leaves a relatively low environmental footprint while making a tremendous impact on the rock type you face

Outstanding drill steel economy with the available rock drills (COP 1638HD+ and COP 1838HD+) which feature dual damping for efficient, high-speed drilling

Fast tramming and easy manoeuvring thanks to the articulated carrier with rotation pressure controlled feed (RPCF) which prevents jamming and extends drill steel longevity





COP rock drills with dual damping

BMH 2800-series aluminium feed with high bending and torsional resistance

For tenacity in smaller tunnels

The Boomer S1 L features a sturdy carrier, four-wheel drive for terrific tramming ability and a heavy-duty BMH 2800-series aluminium feed with high bending and torsional resistance for maximum durability. The powerful BUT 28 hydraulic boom has a double tripod design for a steady hold and more accurate drilling.



+ Engineered for responsible power

The Boomer S1 L is powered by a 4-cylinder diesel engine that concurrently offers powerful performance and low emissions so you can meet Stage III requirements in different jurisdictions. The variable and reversible stepless rotation motor ensures high torque with exceptional speed control.



+ Straightforward operation and maintenance

The operator of the Boomer S1 L enjoys a safe, ergonomically designed workspace under a protective, FOPS certified telescopic roof. The userfriendly interface makes it easy to monitor and control all rig functions. The rig's userfriendly design also provides straightforward access to all service points for easy maintenance.



+ COP hydraulic rock drills

COP rock drills available for the Boomer S1 L feature a sturdy four-head bolt design with separate lubrication of driver and gear. Pressurized side bolts and mating surfaces also contribute to reliable operation, low maintenance costs and long intervals between overhauls.



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.

Drilling system

COP 1638HD+	●
COP 1838HD+	●
Big hole drilling kit	○
Hole blowing kit	○
Rock drill lubrication warning kit	●
Drill stop*	○
*Mandatory for CE	

Boom

Boom: BUT 28 SL	●
Automatic boom lubrication kit, rear part of boom	○
Boom suspension system	○
Over-ride for boom parallell holding system	○
Swing arm hose guide	○

Feed

BMH 2831, drill steel length 3 090 mm	○
BMH 2837, drill steel length 3 700 mm	○
BMH 2840, drill steel length 4 000 mm	○
Telescopic feed BMHT 2000-series	○
Extension drilling set BSH 110 (BMH feeds only)	○
Bulk head style hose tree on feeds	○
Mining (heavy-duty) centralisers	○
Dovel spacer BMH2000	○

Hydraulic system

Oil temperature meter	●
Electrical oil filling pump	●
Oil filter indicator	●
Low oil level indicator	●
Water cooled oil	●
Filtration: 16 µm	●
Mineral hydraulic oil	●
Hydraulic oil thermostat	○
Biodegradable hydraulic oil	○

Control system

DCS2	●
Feed Angle Measurement, FAM1	○

Air/water system

Compressor: Epiroc LE7	●
Hydraulically water booster pump capacity at 12 bar: 66 l/m	●
Water hose reel, incl water hose	○
Aggressive water resistant flush	○

Cabin

FOPS and WUG (60 kJ) approved airconditioned cabin, noise level <85 dB(A)	●
Media player	●
Fixed seat	●
Air fan for operator	○
Air condition, cooling only	●
12 V outlet	●

Protective roof

Outlet for communication radio, 12 V	●
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Electrical system

Total installed power: 59 kW	●
Main motors: 55 kW	●
Voltage: 380-1 000 V	●
Frequency: 50-60 Hz	●
Starting method: star/delta (1 000 V direct start)	●
Electronic overload protection for electric motors	●
Percussion hour meter	●
Digital voltmeter/amperage meter in electric cabinet	●
Phase sequence indicator	●
Earth fault indicator	●
Battery charger	●
Transformer: 4 kVA	●
Cable reel	●
Electric cable type or Buflex	○
Plug PC4/5	○
Socket PC4/5	○
Switch gear	○
Electrical outlet for accessories, 16 A (CE)/32 A (CE) (380-690 V)	○
IP56 rating on all electrical cabinets boxes (Except diesel starter motor and alternator)	○

Carrier

Deutz 4-cylinder, TD 2011 L04 diesel engine	●
Power rating at 2 600 rpm: 55 kW (73 hp)	●
Articulated steering: ±41° steering angle	●
Fixed seat for tramping	●
Four-wheel drive	●
Hydrostatic transmission	●
Front axle: Dana 112	●
Rear axle: Dana 112, ±6° oscillation	●
Tyres: 10xR15	●
Clearance outside axles: 12' rear	●
Hydraulic jacks, front: 2 extendable	●
Hydraulic jacks, rear: 2	●
Service brakes: 2 separate circuits	●
Emergency and parking brakes: SAHR	●
Fuel tank, volume: 60 l	●
Exhaust catalyser	●
Silencer	●
Electric system: 24 V	●
Batteries: 2x12 V, 70 Ah	●
Tramming lights: 4x70 W	●
Working lights: 6x200 W, 230 V	●
Brake lights	●
Fire extinguisher	●
Central lubrication system	●
Spirit level	●
Gradeability at max. load on drive wheels: 1:4	●
Horn, beacon and reverse alarm	●
Manual lubrication kit	●
Rig washing kit	●
Ni-Cr plated piston rods (limitations exist)	●
Warning stripes	●
Fire suppression system ANSUL (manual or Checkfire)	○

Drill rods

Dimension	Minimum hole diameter
R38-H35-R32	45 mm
R38-H35-SR35 Speedrod	45 mm
T38-H35_R32	45 mm
T38-H35-R32 Speedrod	45 mm
T38-H35-SR35	45 mm
T38-H35-R35	48 mm
T38-H35-R35 Speedrod	48 mm
T38-R39-R35	48 mm
T38-R39-SR35	45 mm
T38-R38-R35	48 mm

Extension rods for injection drilling/RAS

Dimension	Minimum hole diameter
R32 Speedrod	51 mm
T38 Speedrod	64 mm

Shank adapters

Thread	Diameter	Length
R38	38 mm	435 mm
T38	38 mm	435 mm
R32	38 mm	525 mm
T38*	38 mm	525 mm

*Intended for RAS and extension drilling with BSH 110

Couplings

Thread	Diameter	Length
R38	55 mm	170 mm
T38	55 mm	190 mm

Tramming speed

On flat ground (rolling resistance 0.05)	>15 km/h
On incline 1:8	> 5.5 km/h

Dimensions

Width	2 400 mm
Height cabin	1 700 mm
Height roof up	1 300/1 700 mm
Length with BMH 2837 feeds	13 065 mm
Ground clearance	260 mm
Turning radius outer/inner	5 600/2 900 mm

Weight

Total	12 500 kg
Boom side	8 200 kg
Engine side	4 300 kg

Recommended cable size and length

Voltage	Type	Dimension, mm ²	Diameter	Length
380–400 V	Buflex	3x70+3G16	39 mm	55 m
440 V	Buflex	3x70+3G16	39 mm	55 m
500–525 V	Buflex	3x50+3G10	33 mm	85 m
550–575 V	Buflex	3x50+3G10	33 mm	85 m
660–690 V	Buflex	3x35+3G10	33 mm	90 m
1 000 V	Buflex	3x35+3G6	29 mm	90 m

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

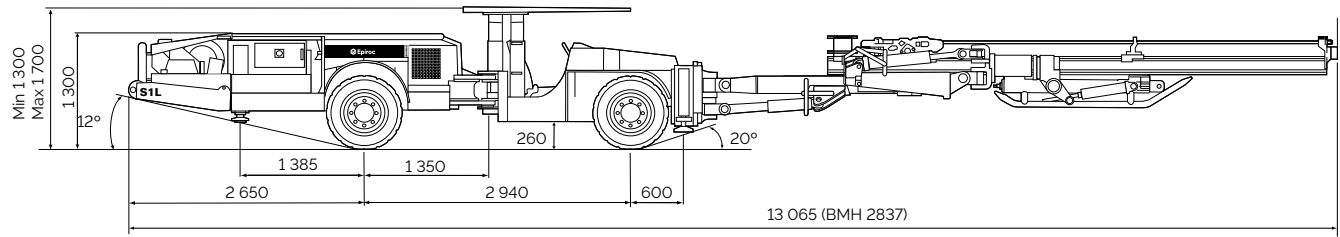
Noise and vibration

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	103±6 dB(A) re 20 uPa
Sound power level (ISO 3747), drilling, free field	123 dB(A) re 1 pW
Peak C-weighted instantaneous sound pressure level (EN16228)	Less than 130 dB
Vibration levels seated, drilling (ISO 2631-1) cabin	0.07±0.07 m/s ²
Vibration levels standing, drilling (ISO 2631-1) cabin	0.07±0.07 m/s ²

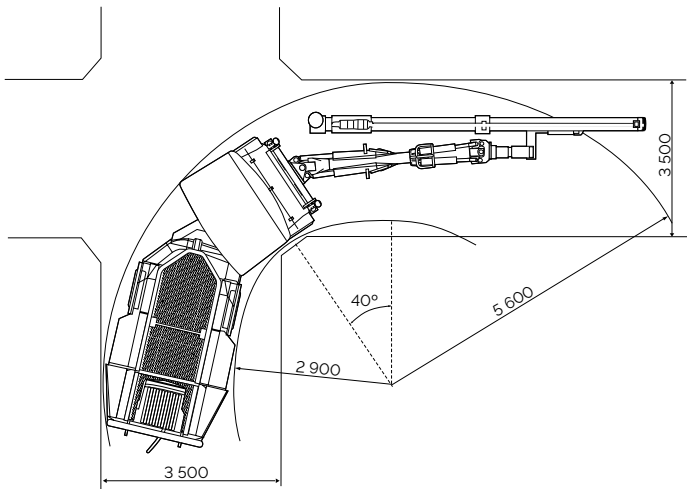


Technical specifications

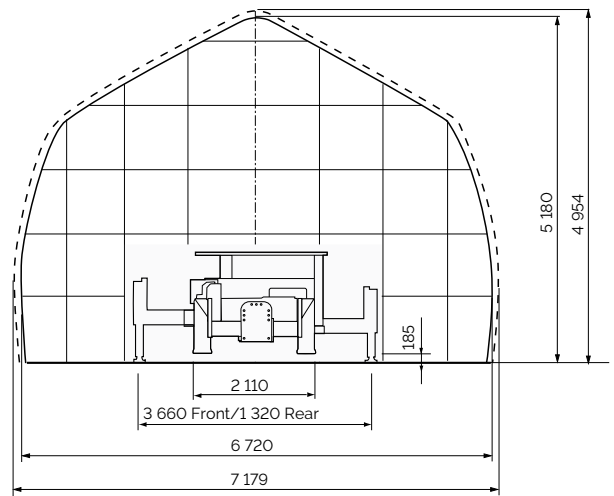
Dimensions in millimeters



Side view.



Turning radius.



Coverage area.





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