

Boomer E1-DH

Diesel-hydraulic face drilling rig for medium to large mines
and tunnels with cross sections up to 106 m²



For power and productivity

The Boomer E1-DH rig has extensive coverage areas of up to 106 m², making it ideal for large mining applications and construction projects. The heavy-duty BUT 45 boom helps you to easily break ground and achieve desired advance rates in the toughest rock conditions. Inject your rig with computer intelligence and choose from the widest range of hydraulic rock drills available to effectively tackle your rock type. Long-wearing drill steel, high drilling accuracy and reduced overbreak makes it easy to calculate a good payback on the rig investment.

⊕ Main benefits

Versatile and powerful as it fits into a large range of applications with the ability also to go into relatively small tunnels thanks to its optimal and compact design

Economically beneficial thanks to the class leading BUT 45 booms and the largest rock drill range on the market

User-friendly with the Epiroc Rig Control System which allows the operator to easily monitor and control all rig functions and maintain a better focus on drilling



There is no need to mark the face as Boomer E1-DH has digital drill plans integrated as standard.



The control system is easy to learn and maximizes the performance with faster boom positioning and one hole automation.



The feeds feature interchangeable drill steel bushings which means that you can use either rubber or steel bushings without changing holder.

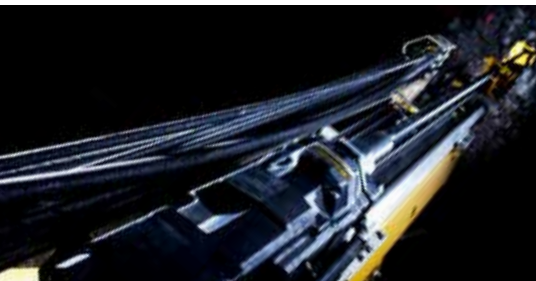
Productive drilling made easy

Enhanced operator guidance, on-board manuals and self-diagnostic capabilities results in an optimal work-flow with organized information and increased usability.



+ 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 (Rock Drilling Tools) 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.



+ Greater intelligence and efficiency

Boomer E1 and E2 rigs can be equipped with a wide range of operator assistance functions to augment their intelligence and efficiency. Options include automatic boom positioning (ABC Total), Total Station Navigation and an automatic rod handling system (Auto RHS E).



+ Increased productivity and safety

The fully automatic rod handling system, Auto RHS E, can be used to efficiently drill grout holes up to 30 meters deep. This system boosts productivity and safety by eliminating the need for operators to stand on a platform and manually couple and decouple threaded joints to extend drill rods. Ergonomically designed joysticks with all primary functions grouped along the top help the operator to focus on drilling instead of scanning the display and keyboard for functions.



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

Drilling system

COP 1600-series	○
COP 1800-series	●
COP MD20-series	○
COP 2200-series	○
Hole blowing kit	●
Water mist flushing, internal water, internal air supply	●
Additional water pump for fixed water line flushing	●
Rock drill lubrication warning kit	●

Boom

BUT 45 M	●
BUT 45 L	○
High reach version (boom plate raised 550 mm/ 21.6 inch)	○
Service platform	○
Swingable basket for service platform	○
Automatic boom lubrication	○

Feed

BMH 6800-series 14 ft, 16 ft, 18 ft, 20 ft, 21 ft	●
Telescopic feed BMHT 6000-series (max 18 ft)	○
Extension drilling set BSH 110 (BMH feeds only)	○
Rod Handling System E, RHS E (BMH feeds only)	○

AIR/watersystem

Hydraulically driven screw compressor Epiroc GAR 30*	●
Hydraulic water booster pump, max capacity at 15 bar boost 300 L/min. Minimum water inlet, 2 bar at 200 L/min**	●
Water tank 900 L/237 US Gal totally	●

Hydraulic system

Low oil level indicator	●
Oil temperature gauge on oil tank, electronically supervised	●
Filtration 16 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

Epiroc Rig Control System (RCS 5)	●
Advanced Boom Control (ABC) Regular	●
Advanced Boom Control (ABC) Total	○
Automatic Rod Handling (RHS E)	○
Measure While Drilling (MWD)	○
Underground Manager PRO (PC software)	●
Underground Manager MWD (PC software) for analysis of drill data	○
Bolt view	●
Water loss measurement instruments installed in service platform	○
Rig access control	●
Rig Remote Access (RRA), LAN or WLAN connection	○
Tunnel profiler	○
Total Station Navigation	○
CertiQ Professional	○
Dynamic Tunneling Package	○

Carrier

Deutz TCD 61 L06 Stage IV/ Tier 4F (160 kW)	○
Deutz TCD 2013 L06 2V Stage III A Tier 3 (173 kW)	○
Articulated steering ±38° steering angle*	●
Four-wheel drive	●
Dana 114 axles	
Clearance outside axles 16° rear, 23° front	●
Automatic differential lock on axles, limited slip	●
Tires 14.00xR24	●
Tires 16.00xR25	○
Electric system 24 V	●
Batteries 2x125 Ah	●
Hose/cable guiding at water/cable reel	
Tramming lights 8x22 W LED	●
Working lights 4x150 W, 24 V DC	●
Illuminated stairs LED	●
Fuel tank, volume 400 L/105 US Gal	●
Central lubrication system	○
Fire suppression system ANSUL (manual or automatic)	○
Fire suppression system FORREX (automatic)	○
Rig washing kit (only works when water hose is connected)	○
High pressure washer with water from water tank	○
Manual lubrication kit	○
Boot washing kit (only works when water hose is connected)	○
Hydraulic outlet for charging with Mini SSE	○
Hydraulic electric generator (multiple voltage available)	○

*If RHS E or SP2 service platform is equipped the steering angle will be reduced to 30°

Cabin	
ROPS* and FOPS certified cabin, noise level <80 dB(A)	●
Mounting height -140mm/-5.5 inch	○
Mounting height +250 mm/+9.8 inch	○
Mounting height +450mm/+ 17.7 inch (standard in high reach version)	○
Hydraulic cabin lift system, 0–600 mm/0-23.6 inch	○
Media player	○
12 V outlet for communication radio	○
Electrical heater, 1.2 kW, 230 V (CE)	○
Reversing camera with monitor	○
Air conditioning unit	●
Heating function for air conditioning (water transferred)	○
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)	●
Two operator panels (for standing operation only)	○
*Only FOPS approved if cabin is raised or cabin lift is installed	

Protective roof	
Manual spotlight, left and/or right	○
Swingable seat for drilling and tramming (one operator panel only)	○

Drifter rods

Rock drill	Rod	Min. hole diameter	
COP 1838	SR35-H35-T38 Speedrod	38 mm	1½ inch
COP 2238	SR35-H35-T38	38 mm	1½ inch
COP MD20	SR35-R39-T38	38 mm	1½ inch

Extension rods for injection drilling/RAS			
Rock drill	Rod	Min. hole diameter	
COP 1838 COP 2238 COP MD20	Rnd 39 Speedrod (SR38)	38 mm	1½ inch
	Rnd 39 Speedrod (T38)	38 mm	1½ inch

Dimensions side view

Reference	Metric	Imperial
H7 std	3 126 mm	10' 3.1"
H7 mounting height +450	3 576 mm	11' 8.8"
Ltot (16 ft feed) with BUT45 long	15 733 mm	51' 7.4"
Ltot (18 ft feed) with BUT45 long	16 343 mm	53' 7.4"
Width	2 550 mm	8' 4.4"
Height roof up/down	3 144/2 518 mm	10' 3.8/8' 3.1"
Ground clearance	341 mm	1' 1.4"
Turning radius outer/inner	8 600/4 800 mm	28' 2.6/15' 9.0"

*If RHS E or SP2 service platform is equipped the steering angle will be reduced to 30°

Shank adapters			
Rock drill	Rod	Min. hole diameter	
COP 1838	R38	38 mm	1½ inch
COP 2238	T38	38 mm	1½ inch
COP MD20	R32*	38 mm	1½ inch
* Intended for RAS and extension drilling with BSH 110			

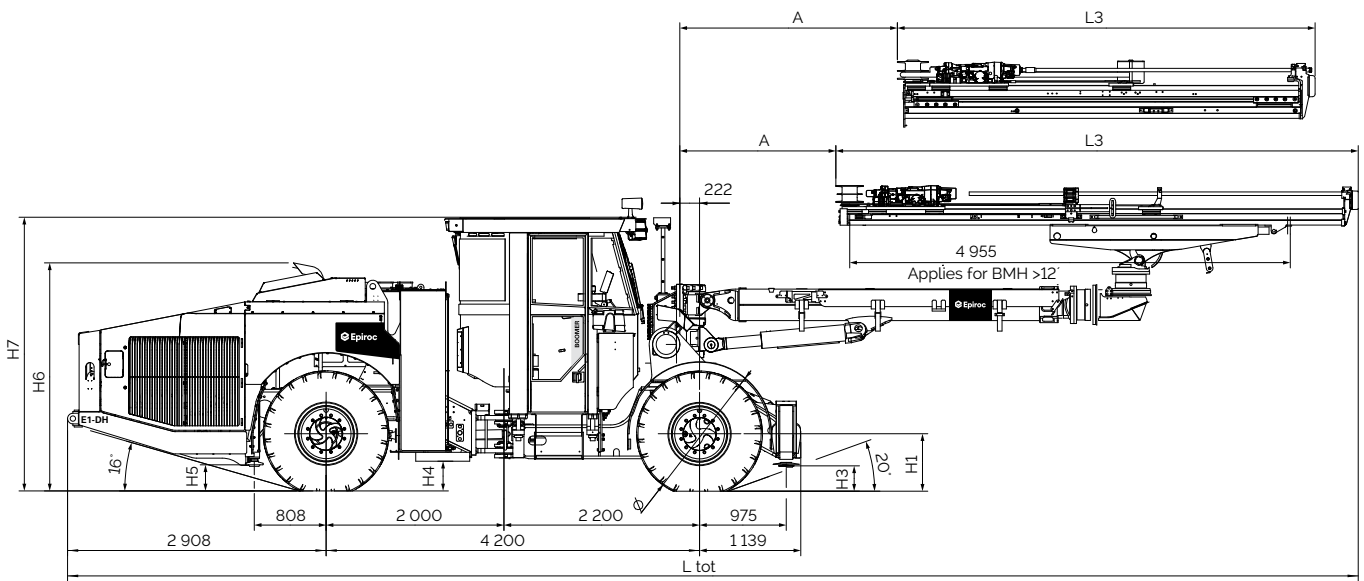
Couplings					
Rock drill	Rod	Diameter		Length	
COP 1838	R38	55 mm	2 ⁵ / ₃₂ inch	170 mm	6 ³ / ₄ inch
COP 2238	T38	55 mm	2 ⁵ / ₃₂ inch	170 mm	6 ³ / ₄ inch

Noise and vibration	
Operator sound pressure level in cabin, drilling, free field (EN16228 and ISO 11201)	75±3 dB(A) re 20uPa
Operator sound pressure level working close to machine, drilling, free field (EN16228 and ISO11203) (COP 1838)	103±6 dB(A) re 20uPa
Sound power level (ISO 3747), drilling, free field (COP 1838)	123±3 dB(A) re 1pW
Peak C-weighted instantaneous sound pressure level (EN16228)	Less than 130 dB(C) re. 20 uPa
Vibration levels seated, drilling (EN16228 and ISO 2631-1)	0.07±0.07 m/s^2
Vibration levels standing, drilling (EN16228 and ISO 2631-1)	0.07±0.07 m/s^2

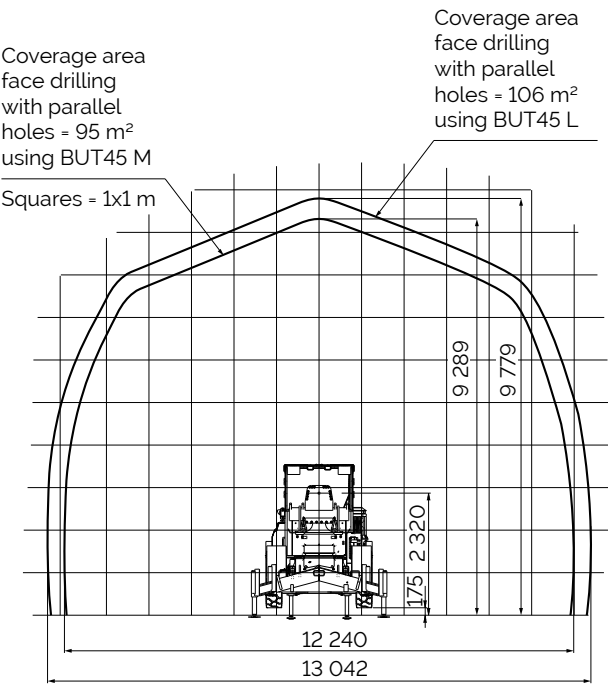
Tramming speed		
On flat ground (rolling resistance 0.05)	>15 km/h	>9.3 mph
On incline 1:8	>5 km/h	>3.1 mph

Gross weight (depending on configuration)			
Rig type	Total	Boom side	Engine side
One boom rig	22 000-34 000 kg (24-37.5 US tons)	20 000-24 000 kg (22-26.5 US tons)	7 000-10 000 kg (7.7-11 US tons)

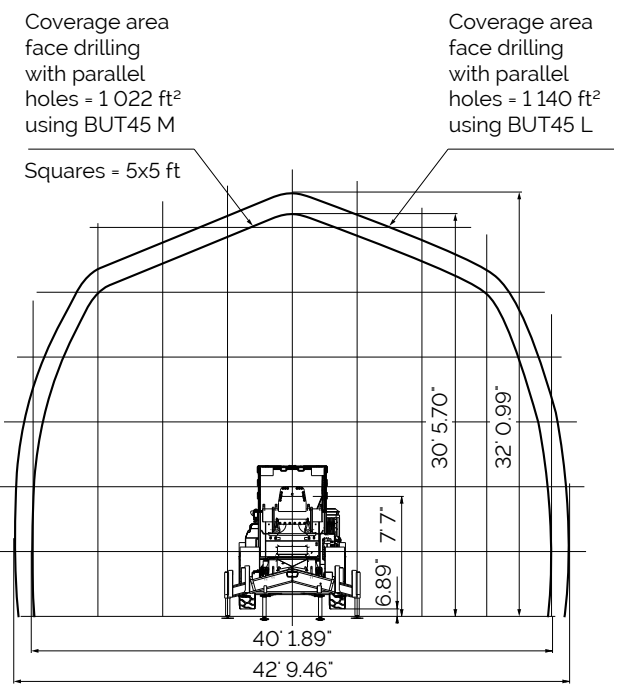
Dimensions in millimeters



Sideview.



Coverage area, metric.



Coverage area, imperial.

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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