

BOOMER S

Single-boom face drilling rigs
for small drifts and tunnels with
cross sections up to 31 m²



Atlas Copco

GROUND-BREAKING PRODUCTIVE DRILLING

THE BOOMER S1 IS A FACE DRILLING RIG FOR MINING AND TUNNELLING. THE RIG'S HEAVY-DUTY BOOM COPEs WELL WITH HIGH LOADS TO HELP YOU TO ACHIEVE DESIRED ADVANCE RATES IN YOUR LOCAL GROUND CONDITIONS. THE BOOM FEATURES A DOUBLE TRIPOD SETUP THAT ENABLES FAST, PRECISE POSITIONING AND ACCURATE HYDRAULIC PARALLEL HOLDING IN ALL DIRECTIONS.

+ MAIN BENEFITS

SAFETY AND CONTROL A FOPS-approved telescopic protective roof or an ergonomically designed FOPS/ROPS-approved cabin ensures safety plus excellent visibility and surveillance for the operator in control.

OUTSTANDING DRILL STEEL ECONOMY The rock drills available for the rig feature dual damping for productive, high-speed drilling and greater drill steel longevity.

LARGE WORK RADIUS The Boomer S1 D features a reel with a total of 70 meters of water hose and a longer electrical cable for an extensive work radius.

FOPS and ROPS approved cabin



Boom with a double tripod setup that enables fast, precise positioning



A CUTTING-EDGE RIG FOR DRIFTING AND TUNNELING

THE ROBUST BOOMER S IS IDEAL FOR TUNNELS WITH CROSS SECTIONS UP TO 31 M². FOR MAXIMUM DURABILITY, THE RIG IS EQUIPPED WITH A HEAVY-DUTY FEED. THE DRILLING SYSTEM INCORPORATES ROTATION PRESSURE CONTROLLED FEED AND AN ANTI-JAMMING FUNCTION FOR BETTER DRILL STEEL ECONOMY AND GREATER PRODUCTIVITY.



+ CERTIFIED POWER AND PERFORMANCE

The rig is powered by a 4-cylinder diesel engine that concurrently offers powerful performance and low emissions to reduce environmental impact. Engines are available with stage II, IIIA and IIIB certification to comply with emission standards in different markets. The diesel-driven hydraulic power source on the Boomer S1 D-DH model provides outstanding flexibility; the diesel motor is used for both tramming and drilling.



+ EASY TO OPERATE AND MAINTAIN

The operator enjoys an ergonomically designed cabin with a user-friendly interface to easily monitor and control all functions of the rig. With easy access to organized information, workflow is optimal. The rig is cleverly designed to provide straightforward access to all service points for easy maintenance.



+ THE COP 1800HD+ SERIES

Rock drills in the COP 1800HD+ series provide a sturdy four head bolt design as well as a separate lubrication of driver and gear as well as pressurized side bolts and mating surfaces for reliable operation, low maintenance costs and long intervals between overhauls. The variable and reversible stepless rotation motor ensures high torque with exceptional speed control.

ATLAS COPCO SERVICE – IT'S NOT JUST ABOUT OUR PROMISES, IT'S ABOUT DELIVERY

We offers several levels of service agreements to meet the requirements of your operation and to secure your productivity. Our service agreements help you build a quality operation focused on proactive, planned maintenance to minimize unplanned downtime. We support maintenance with detailed parts information on every piece within our full inventory of components, accessories, and tools.



DRILLING SYSTEM	A	B
COP 1638HD+	○	○
COP 1838HD+	○	○
COP 2238HD+	○	
Water mist flushing, external water and air supply (water or air oil cooler)	○	
Water mist flushing, internal air and external water	○	
Internal water mist flushing system with 250 l water tank	○	
Internal water mist flushing system with 560 l water tank		●
Hole blowing kit	●	●
Rock drill lubrication warning kit	●	●
Big hole drilling system	●	●
Dry drilling system with dust collector	○	
Drill stop*	○	○

*Mandatory for CE

BOOM	A	B
BUT 29	●	●
Automatic boom lubrication kit (Rear part of the boom)	●	○
Boom suspension system	○	○

FEED	A	B
BMH 2825, drill steel length 2 500 mm		
BMH 2831, drill steel length 3 090 mm	○	○
BMH 2837, drill steel length 3 700 mm	○	○
BMH 2840, drill steel length 4 000 mm	○	○
BMH 2843, drill steel length 4 310 mm	○	○
BMH 2849, drill steel length 4 920 mm	○	○
Telescopic feed BMHT 2000-series (max 4.3 m)	○	○
Extension drilling set BSH 110 (BMH feeds only)	○	○
Bulk head style hose tree on feeds		○
Mining (heavy-duty) centralisers	○	○

AIR/WATER SYSTEM	A	B
Hydraulic water booster pump capacity at 12 bar, 66 l/m	●	
Compressor: Atlas Copco GAR30*	○	●
Compressor: Atlas Copco LE7	●	
Water hose reel, including water hose	○	

*When equipped with COP 1838 a 95 kW powerpack is required (Not for diesel hydraulic).

HYDRAULIC SYSTEM	A	B
Low oil level indicator	●	●
Oil temperature meter	●	●
Filtration 16 µm	●	●
Oil filter indicator	●	●
Mineral hydraulic oil	●	●
Electric oil filling pump	●	●
Water/oil cooler	●	
Air/oil cooler	○	●
Heater for hydraulic oil tank	○	○
Hydraulic oil thermostat	●	●
Ni-Cr plated piston rods (limitations exist)	○	○

CONTROL SYSTEM	A	B
Hydraulic pilot control system	●	●
Feed Angle Measurement, FAM 1	○	○
Feed Angle Measurement with hole depth, FAM 3	○	

ELECTRICAL SYSTEM	A	B
Total installed power 59 kW* (Main motors 1x55 kW)	●	
Total installed power 79 kW* (Main motors 1x75 kW)	○	
Total installed power 99 kW* (Main motors 1x95 kW)	○	
Voltage 380-1 000 V	●	
Frequency 50 Hz or 60 Hz	○	
Starting method star/delta 380–690 V, direct start 1000 V	●	
Starting method – soft start (not for 1000 V)	○	
Transformer 5 kVA (4 kVA North America)	●	
Electronic overload protection for electric motors	●	
Percussion hour meter	●	
Digital volt/ampere meter in electrical cabinet	●	
Phase sequence and earth fault indicator	●	
Battery charger	●	
Dual controls for reels	●	
Electrical cable (Bulflex)	○	
Connector	○	
Plug PC4/PC5	○	
Socket PC4/PC5	○	
Switch gear	○	

*Larger powerpacks may be used at high altitude or with certain options.

CARRIER	A	B
Deutz TD 3.6 L04 3B/Tier 4i Water cooled	○	
Deutz 4-cylinder, D914 L04, EPA III/COM III (Tier 3/Stage IIIA) approved 4-stroke prechamber diesel engine (55 kW, 77,8 hp at 2 300 rpm, 270 Nm at 1 500 rpm)	●	
Deutz 4-cylinder BF4L 914, 4-stroke turbo diesel engine, Tier II (72 kW, 96 hp at 2500 rpm, 355 Nm at 1600 rpm, 14 km/h on flat ground, 9 km/h on incline 1:8)	○	
Deutz 6-cylinder, TCD 2012 L06, EPA III/COM III (Tier 3/Stage IIIA) approved 4-stroke prechamber diesel engine (128 kW at 2 200 rpm, 688 Nm at 1 600 rpm)		●
Articulated ±40° steering angle	●	●
Four wheel drive	●	●
Electrical system 24 V	●	●
Batteries 2 x 12 V, 70 Ah	●	●
Working lights, 4 x 80 W LED 24 V DC	●	
Tramming lights, 4 x 40 W+2 x 80 W LED 24 V DC	●	
Illuminated stairs	○	○
Automatic differential lock on front axle	●	●
Tires, 9.00 x R20	●	●
Clearance outside axles rear 15°	●	●
Front and rear hydraulic jacks	●	●
Fuel tank volume, 4 Cylinder engine: 60 l	●	
Fuel tank volume, 6 cylinder engine: 160 l		●
Manual lubrication kit	○	○
Fire suppression system ANSUL (manual)	○	○
Rig washing kit	○	○
Boot washing kit	●	
Handheld fire extinguisher 2x6 Kg	○	○
Cold weather package	○	○

CABIN (OPTIONAL)	A	B
FOPS/ROPS approved airconditioned cabin, noise level <80 dB(A)	●	●
Media player	●	●
Joystick controlled spot light, 70 W (left side)	●	○
Swingable seat	●	○
Air condition, cooling only	●	●
12 V Outlet	●	●

PROTECTIVE ROOF	A	B
Swingable seat for drilling and tramping	●	○
Spotlight 70 W	○	○
12 V Outlet	●	●

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

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

RECOMMENDED CABLE SIZES AND LENGTHS (59KW)			
Voltage	Dimension, mm ²	Diameter, mm	Length, m
380-400 V	3x50+3G10+2x1.5	33	150
440 V	3x50+3G10+2x1.5	33	150
500-525 V	3x35+G6+2x1.5	29	200
550-575 V	3x35+G6+2x1.5	29	200
660-690 V	3x35+G6+2x1.5	29	200
1 000 V	3x35+G6+2x1.5	29	200

Recommendations are given for surrounding temperature of 40°C.
Not for diesel hydraulic version.

RECOMMENDED CABLE SIZES AND LENGTHS (79 KW)			
Voltage	Dimension, mm ²	Diameter, mm	Length, m
380-400 V	3x70+3G16+2x1.5	39	110
440 V	3x70+3G16+2x1.5	39	110
500-525 V	3x70+3G16+2x1.5	39	110
550-575 V	3x50+3G10+2x1.5	33	150
660-690 V	3x35+G6+2x1.5	29	200
1 000 V	3x35+G6+2x1.5	29	200

RECOMMENDED CABLE SIZES AND LENGTHS (99 KW)			
Voltage	Dimension, mm ²	Diameter, mm	Length, m
380-400 V	3x70+3G16+2x1.5	39	110
440 V	3x70+3G16+2x1.5	39	110
500-525 V	3x70+3G16+2x1.5	39	110
550-575 V	3x50+3G10+2x1.5	33	150
660-690 V	3x35+G6+2x1.5	29	200
1 000 V	3x35+G6+2x1.5	29	200

DIMENSIONS	A	B
Width	1 750 mm	1 750 mm
Height, roof down	2 128 mm	2 168 mm
Height, roof up	2 828 mm	2 868 mm
Cabin height (Option)	2 800 mm	2 850 mm
Length, tramping	11 040 mm BMH 2843	11 040 mm BMH 2843
Ground clearance	365 mm	365 mm
Turning radius outer/inner (BMH2843)	4 950/2985	4 950/2985

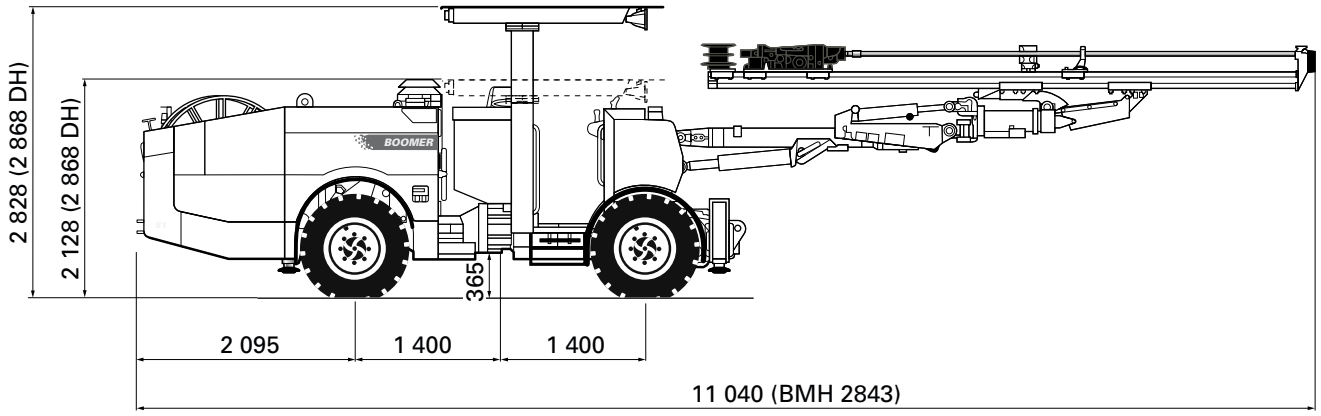
WEIGHT	A	B
Total	12 800 kg	12 850 kg*
Boom side	8 350 kg	8 150 kg
Engine side	4 500 kg	4 700 kg

*Empty water tank

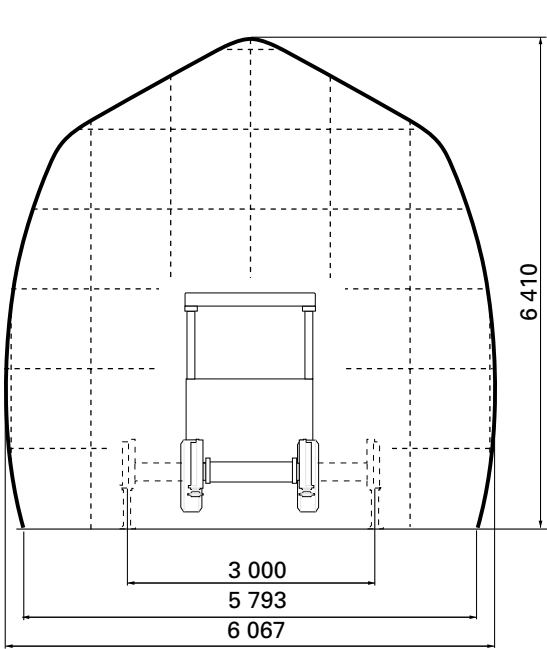
BOOMER S1 - NOISE AND VIBRATION	
Operator sound pressure level in cabin, drilling, free field (ISO 11201)	75±3 dB(A) re 20µPa
Operator sound pressure level working close to machine, drilling, free field	103±6 dB(A) re 20µPa
Sound power level (ISO 3747), drilling, free field	123 dB(A) re 1pW
Peak C-weighted 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 seated, drilling (ISO 2631-1) canopy	0.15±0.15 m/s ²
Vibration levels standing, drilling (ISO 2631-1) cabin	0.07±0.07 m/s ²
Vibration levels standing, drilling (ISO 2631-1) canopy	0.15±0.15 m/s ²

BOOMER S1 DH - NOISE AND VIBRATION	
Operator sound pressure level in cabin, drilling, free field (ISO 11201)	80±5 dB(A) re 20µPa
Operator sound pressure level close to machine, drilling, free field	103±6 dB(A) re 20µPa
Sound power level (ISO 3747), drilling, free field	123 dB(A) re 1pW
Peak C-weighted instantaneous sound pressure level (EN16228)	Less than 130 dB
Vibration levels seated, drilling (ISO 2631-1)	0.07±0.07 m/s ²
Vibration levels standing, drilling (ISO 2631-1)	0.07±0.07 m/s ²

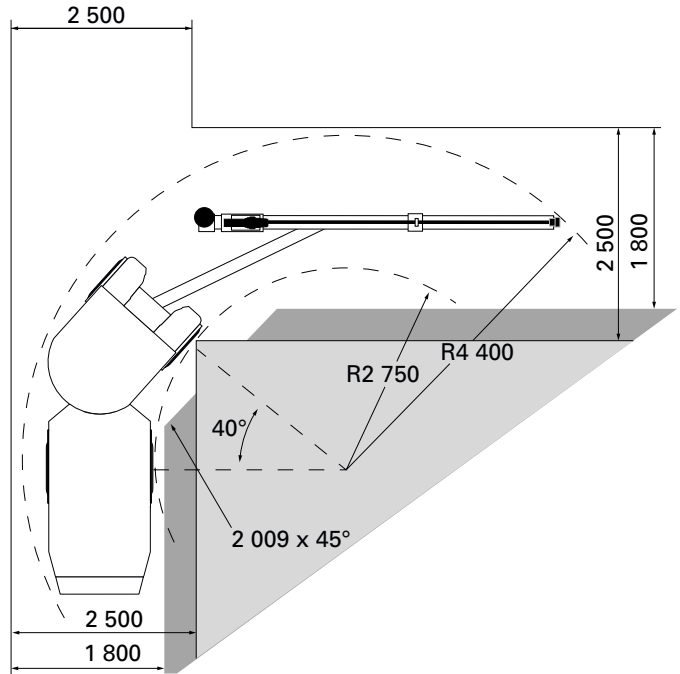
TECHNICAL SPECIFICATIONS



Dimension illustration (Optional equipment mounted).



Coverage area 31 m



Turning radius

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towards the environment and the people around us.
We make performance stand the test of time.
This is what we call – Sustainable Productivity.

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