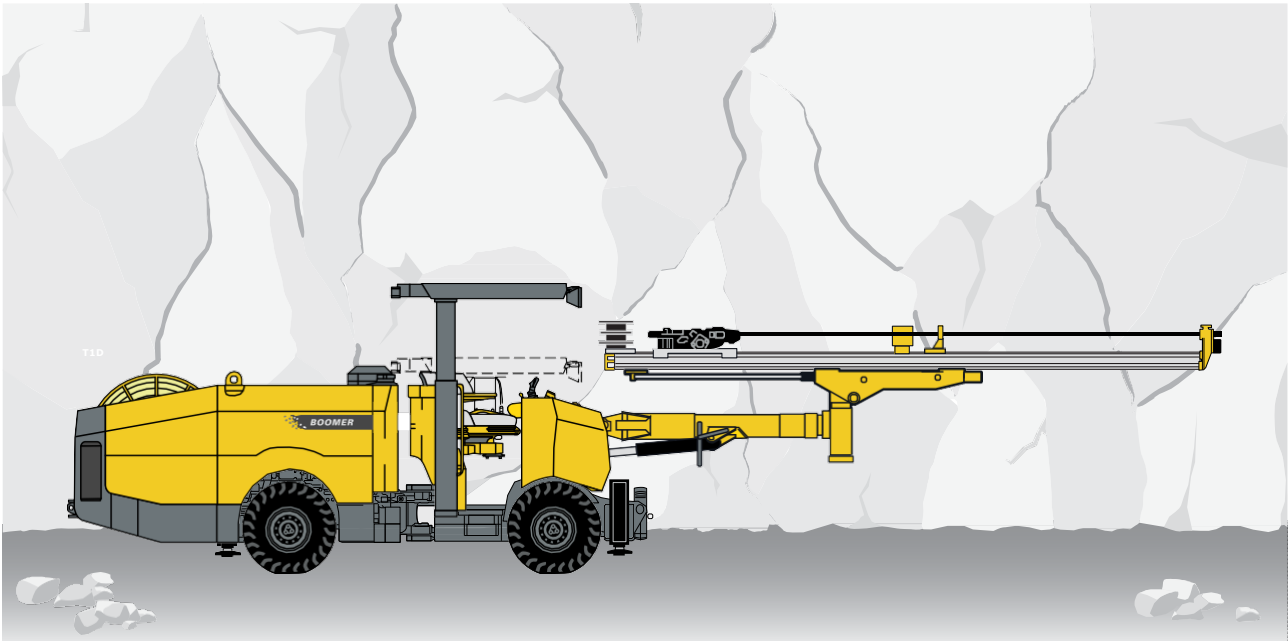


## BOOMER T1D UNDERGROUND DRILL RIGS

TECHNICAL SPECIFICATION



Hydraulically controlled mining and tunnelling face drilling rig with one BUT 4B boom. Available with a variety of rock drills to suit customer requirements.

### Standard features

#### »Rock drill

- COP 1638HD+, COP 1838HD+ or COP 2238HD+ rock drill with dual-damping system for optimal consumable life
- Pressurized housing and mating surfaces to reduce internal contamination of the rock drill

#### »Hydraulic boom

- BUT 4 heavy-duty boom for fast and flexible positioning between holes

#### »Hydraulic feed

- BMH 2000-series heavy-duty aluminium feed with high bending and torsional resistance for maximum durability
- Snap-on stainless steel sleeves and polymer contacts

#### »Control system

- Hydraulically controlled drilling system which incorporates the anti-jamming function Rotation Pressure Controlled Feed (RPCF)

#### »Carrier

- Sturdy, articulated carrier with four-wheel drive
- Powered by a 4-cylinder, EPA III/COM III (Tier 3/Stage IIIA) approved diesel engine
- Four jacks for stable set-up

#### »General

- FOPS-approved telescopic protective roof
- Cable reel
- Hydraulically driven compressor
- Hydraulically driven water booster pump
- Working lights

# Specifications

## ROCK DRILL

	COP 1638 HD+	COP 1838 HD+	COP 2238 HD+
Shank adapter	R32/R38/T38	R32/R38/T38	R32/R38/T38
Height over drill centre	88 mm	88 mm	88 mm
Length without shank	1 008 mm	1 008 mm	1 008 mm
Impact power	16 kW	18 kW	22 kW
Impact rate	60 Hz	60 Hz	73 Hz
Hydraulic pressure	200 bar	230 bar	250 bar
Rotation system	Separate rotation	Separate rotation	Separate rotation
Rotation speed	0-340 rpm	0-340 rpm	0-340 rpm
Rotation torque, max	640 Nm	640 Nm	640 Nm
Lub. air consump. at 2 bar	6 l/s	6 l/s	6 l/s
Water consumption	1.1 l/s	1.1 l/s	1.1 l/s
Weight	170 kg	170 kg	170 kg

## FEED

	BMH 2000	BMH 2825	BMH 2831	BMH 2837
Total length	4 087 mm	4 677 mm	5 287 mm	5 287 mm
Drill steel length	2 500 mm	3 090 mm	3 700 mm	3 700 mm
Hole depth	2 225 mm	2 795 mm	3 405 mm	3 405 mm
Feed extension	1 200 mm	1 500 mm	1 500 mm	1 500 mm
Weight, incl. drill	455 kg	485 kg	505 kg	505 kg
Feed force	15 kN	15.0 kN	15.0 kN	15.0 kN
Feed ext.	1200	1500	1500	1500

### »Boom

- BUT 4
- Feed extension..... 1 500\*mm
- Boom extension..... 900 mm
- Feed rotation..... $\pm 114^\circ$
- Feed roll-over..... $360^\circ$
- Feed dump cylinder..... $+18^\circ/-79^\circ$
- Max. swinging angle..... $\pm 30^\circ$
- Weight, boom only ..... 1 042 kg

\*Varies according to feed type selected.

### »Air system

- Compressor ..... LE7
- Capacity at 1,500 rpm ..... 11.7 l/s at 7 bar
- Air pressure gauge

### »Water system

- Water booster pump ..... Flygt PXR411H
- Water booster pump max capacity at 12 bar, l/s..... 1.1
- Min water inlet pressure..... 2 bar
- Water flow guard

## ELECTRICAL SYSTEM

	COP 1638	COP 1838+	COP 2238
Total installed power	59 kW	79 kW/ 59	79 kW
Main motor	55 kW	75 kW/ 55	75 kW
Voltage	380-1 000 V	380-1 000 V	380-1 000 V
Frequency	50-60 Hz	50-60 Hz	50-60 Hz
Transformer	4 kVA	4 kVA	4 kVA
Cable reel, diameter	1 300 mm	1 300 mm	1 300 mm
Starting method star/delta 380-690 V, direct start 1000 V			
Thermal overload protection for electric motors			
Percussion hour meters			
Digital volt/amperage meter in electrical cabinet			
Phase sequence indicator			
Earth fault indicator			
Battery charger			
Cable reel			
Dual controls for cable reel			

### »Hydraulic system

- Hydraulic pumps ..... 1 unit
- Pumps unloaded at start
- Hydraulic oil tank, volume, max..... 145 l
- Low oil level indicator
- Oil temperature meter on oil tank
- Oil filter indicator
- Oil/water cooler in stainless steel
- Filtration.....  $16 \mu\text{m}$
- Mineral hydraulic oil
- Electric oil filling pump
- One operator control panel
- Rock drill lubrication warning kit

### »Carrier

- Deutz 4-cylinder, D914 L04, EPA III/COM III (Tier 3/Stage IIIA) approved 4-stroke prechamber diesel engine
- Power rating at 2,300 rpm ..... 55 kW (77.8 hp)
- Torque at 1,500 rpm ..... 270 Nm
- Articulated steering.....  $\pm 40^\circ$  steering angle
- Fixed seat for tramping
- Four-wheel drive
- Hydrostatic power steering system
- Hydrostatic transmission
- Front axle ..... Dana 111D
- Rear axle ..... Dana 111D,  $\pm 7^\circ$  oscillation
- Automatic differential lock on front axle
- Tyres ..... 8.25 x R15
- Clearance outside axles .....  $15^\circ$
- 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
- Electric system ..... 24 V
- Batteries..... 2x12 V, 70 Ah
- Tramping lights ..... 6 x 40 W LED, 24 V
- Working/tramping lights ..... 3 x 80 W LED, 24 V DC
- Brake lights
- Fire extinguisher
- Gradeability at max. load on drive wheels..... 1:4
- Horn, beacon and reverse alarm
- 12 V outlet

# Specifications

## DRIFTER RODS

Dimension	Min. hole diameter
<b>mm</b> R38-HEX 35-R32	45
T38-HEX 35-R32	45
T38-HEX 35-R32 Speedrod	45
R38-HEX 35-SR35 Speedrod	45
T38-HEX 35-SR35	45
T38-Rnd 39-SR35	45
T38-HEX 35-R35	48
T38-HEX 35-R35 Speedrod	48
T38-Rnd 39-R35	48
T38-Rnd 39-R35 Speedrod	48

## EXTENSION RODS FOR INJECTION DRILLING/RAS

Dimension	Min. hole diameter
<b>mm</b> R32 Speedrod	51
T38 Speedrod	64

## SHANK ADAPTERS

Thread	Diameter	Length
<b>mm</b> R38	38	435
T38	38	435
R32*	38	525
T38*	38	525

*\*Intended for extension drilling with BSH110*

## COUPLINGS

Thread	Diameter	Length
<b>mm</b> R38	55	170
T38	55	190

# Optional equipment

### »Rock drill

- Big hole drilling system
- Water mist flushing, external water and air supply
  - Hydraulic oil cooled by water
  - Hydraulic oil cooled by air fan
- Hole blowing kit with 50 l air receiver (CE Approved)

### »Feed

- Telescopic feed BMHT 2000-series (max 12 ft)
- Extension drilling set BSH 110 (BMH feeds only)
- Long Hole Drilling system (manual rod handling)
  - BMH or BMHS 2000 series production feed (1.2, 1.5 or 1.8m extension steels)
  - BSH 45 drill steel support
  - Rear stinger
  - FAM T1 angle reading instrument
- Bulk head style hose tree on feeds

### »Boom

- Feed Angle Measurement, FAM T1 (including electronic parallel hold)
- Automatic boom lubrication kit, rear part of boom
- Boom suspension system

### »Hydraulic system

- Biodegradable hydraulic oil
- Hydraulic oil thermostat
- Heater kit for hydraulic oil tank

### »Carrier

- Fire suppression system ANSUL (manual or Checkfire)

- Illuminated stairs for platform/cabin

### »Protective roof

- Manual spotlight

### »Cabin

- FOPS/ROPS approved cabin, noise level <80 dB(A), height 2 716 mm including:
  - Air conditioning unit
  - Fixed seat
- Electrical heater, 1.2 kW, 230 V (CE)
- Joystick controlled spotlight
- CD player

### »Electrical system

- Stainless steel electrical enclosure
- Electric cable type Buflex M
- Plug for cable
- Switch gear
- Connector for cable

### »Miscellaneous

- Manual lubrication system
- Rig washing kit
- Ni-Cr plated piston rods (limitations exist)
- Drill bit holder
- Drill steel holder