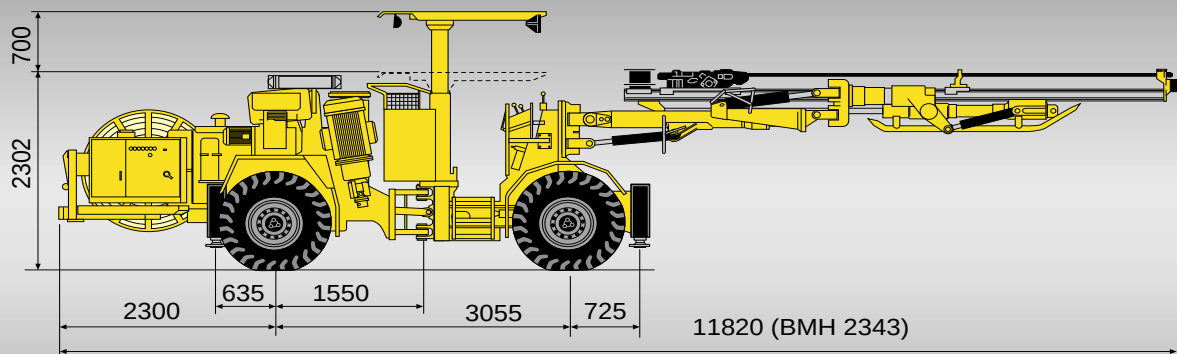


Boomer 282

Direct controlled hydraulic tunnelling and mining rig with two BUT 28 booms and COP 1238 rock drills.

For cross sections up to 45 m²



Rig with optional equipment mounted. All dimensions in mm.

Features

- Direct controlled drilling system which incorporates excellent anti-jamming function RPCF (Rotation Pressure Controlled Feed force). Separate pumps for percussion/positioning and rotation for independent control and maximum output.
- COP 1238 rock drill with modern reflex dampening giving genuine high speed drilling and good drill steel economy. Lubrication system with separate lubrication of driver and gear gives reliable operation, low maintenance cost and long intervals between overhauls.
- BMH 2300 heavy-duty aluminium hydraulic feeds with double bottom for high torsional resistance. Snap-on stainless steel sleeves and polymer contact pads for long life and low maintenance cost.
- BUT 28 heavy-duty booms for direct, fast and accurate positioning between holes. Improved linkage bearings in main boom joints and new axial bearings in all boom joints
- Sturdy, articulated carrier with four wheel drive for easy manoeuvring in narrow tunnels and drifts. Power steering, fail-safe brakes and central lubricated chassies. Four jacks for stable set up.
- Basic rig includes telescopic FOPS-approved protective roof, cable reel, work lights (3 x 500 W halogen), water booster pump and pump unloading function for easier start with low voltage.

Main components

Rock drill	2x COP 1238ME
Feed	2 x BMH 2300-series
Boom	2 x BUT 28
Drilling system	DCS12-45-2
Carrier	DC 15

Rock drill COP 1238-05

Shank adapter	R32, R38 or T38
Height over drill centre	86 mm
Impact power	15 kW
Impact rate	40-60 Hz
Hydraulic pressure, max.	230 bar
Rotation system	separate rotation
Rotation speed	0-270 rpm
Rotation torque, max.	500 Nm
Lub. air consump. (at 3 bar)	5 l/s
Water consumption	0.8 l/s
Weight	151 kg
Sound level	<106 dB(A)

Feeds BMH 2300

	BMH 2331	BMH 2337	BMH 2340	BMH 2343	BMH 2349
Total length (mm)	4677	5287	5587	5897	6507
Drill steel length (mm)	3090	3700	4000	4310	4920
Hole depth (mm)	2795	3405	3705	4015	4625
Weight, incl. rock drill (kg)	451	471	491	501	537
Feed force, max. (kN)	12.5	12.5	12.5	12.5	12.5

Boom BUT 28

Feed extension	1250 mm
Boom extension	1250 mm
Parallel holding	Complete
Feed roll-over	360 degrees
Max. lifting angle	+65 degrees
	-30 degrees
Max. swinging angle	±35 degrees
Weight, boom only	1750 kg

Hydraulic system

- Hydraulic pumps: 2 units consisting of one variable pump for percussion and positioning and one constant flow pump for rotation.
- Pumps unloaded at start
- System pressure 150-230 bar
- Hydraulic oil tank, volume max 160 l
- Low oil level indicator (incl. shut down when power supply is connected)
- Oil temperature meter on oil tank
- Filtration, 20 µm absolute
- Oil filter indicator
- Water cooled oil cooler, stainless steel
- Mineral hydraulic oil
- One operator's control panel

Air system

- LE55 compressor
- x 12.5 l/s at 7 bar
- Air pressure gauge

Water system

- Water booster pump CR 4-160 (50 Hz) or CR 4-100 (60 Hz)
- Capacity, max 100 l/min at 10 bar boost
- Min water inlet pressure 2 bar

Carrier DC 15

- Deutz 5-cylinder F5L 912W, 4-stroke prechamber diesel engine 55 kW (75 hp) at 2500 rpm, 230 Nm at 1550 rpm
- Fixed seat for tramming
- Articulated steering with +/- 41 degree steering angle
- Four wheel drive
- Hydrostatic power steering system
- Hydrodynamic transmission
- Hurth 176/137 boom-end axle
- Hurth 176/102 engine-end axle with +/- 8 degree oscillation
- Automatic differential lock on boom-end axle
- Tyres 12 R 20 Michelin XMINE D2
- Clearance outside axles 15 degree
- Hydraulic jacks 2 (extendable) at front and 2 at rear
- Service brakes: Two separate circuits, hydraulically applied, fully enclosed wet disc brakes
- Emergency and parking brakes: SAHR (Spring Applied Hydraulic Released)
- Fuel tank, volume 60 l
- Electric system 24V
- Batteries 2 x 12V, 70Ah
- Working lights, halogen 3 x 500W 230V AC or 2 x 500W (CSA)
- Tramming lights 8 x 70W 24V
- Spirit level
- Central lubrication system
- Fire extinguisher acc. to EN 791
- Gradeability 1:4 at max. load on drive wheels
- Tramming speed on flat ground >13km/hr (at rolling resistance 0,05); on incline 1:8 >4.5 km/hr

Electrical system

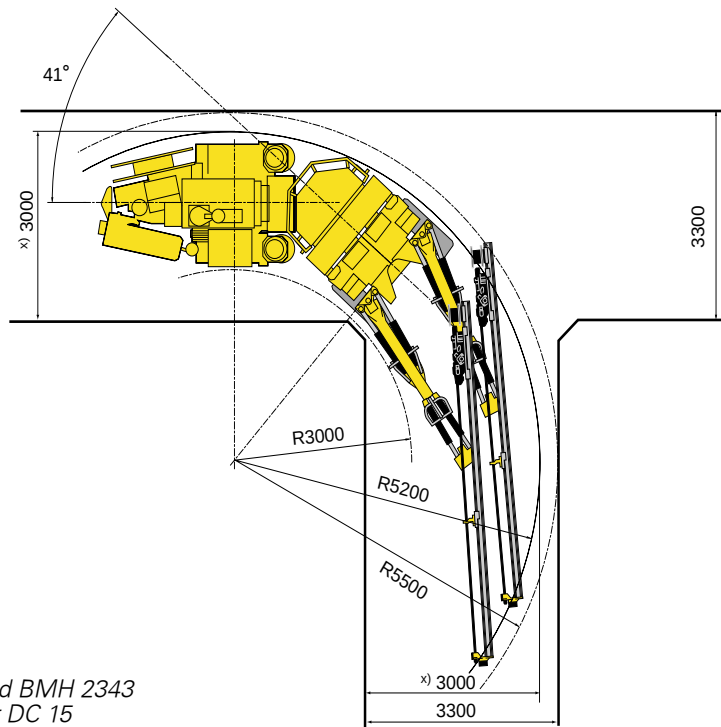
- Total installed power 100 kW
- Main motors 2 x 45 kW
- Voltage (as per customer specification) 380-1000 V
- Frequency (as per customer specification) 50-60 Hz
- Starting method - star/delta (380 - 690 V) direct (1000V)
- Thermal overload protection for electric motors
- Percussion hour meters on A-panel
- Digital volt/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 1.5 kVA
- Cable reel, inner/outer diameter Ø 660/1395 mm

Recommended cable size and length

Voltage	Type	Dimension	Diameter	Length
380-440 V	RDOT	4x70 mm ²	49 mm	60 m
500-550 V	RDOT	4x50 mm ²	44 mm	65 m
660-690 V	RDOT	4x35 mm ²	38 mm	95 m
1000 V	Buflex	3x35+3x6 mm ²	24 mm	185 m

Recommendations are given for surrounding temperature of 40°C.

Turning radius



Turning radius with feed BMH 2343
x) Turning radius carrier DC 15

Dimensions and weights

Width	1976 mm
Height roof down	2300 mm
Height roof up	3000 mm
Length (with BMH 2343 feeds)	11820 mm

Ground clearance	305 mm
Gross weight (basic rig)	16600 kg
Axle load boom side	13080 kg
Axle load engine side	3520 kg

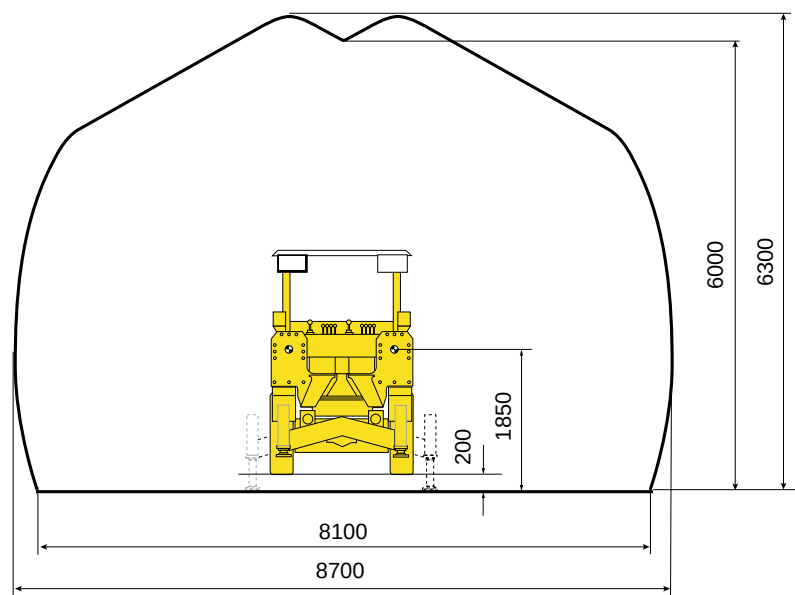
Optional equipment

- Telescopic feed BMHT 2300-series for left/right handed booms
- Extension drilling set BSH 110 (only for BMH 2000)
- FAM 1, Electronic lookout indicator
- FAM 2, Electronic lookout indicator, with hole depth measuring (only for BMH and BMHS feeds)
- Cabin (only with DC 16N)
- Aircondition unit for cabin, electrical driven
- Heater for cabin, 1.2 kW
- Illuminated stairs for platform/cabin
- Shelves for drill bits and tools
- High altitude setting
- Exhaust water scrubber
- Exhaust catalyser
- Fire suppression system ANSUL
- Dual controls for cable reel
- Limit switch for cable reel
- Cable reel with extra width (300 mm)
- Electric cable type RDOT or Buflex, see recommendations
- Plug for cable
- Power supply (incl. male plug)
- Electric outlet for accessories, 32 Amp (Voltage = main supply voltage.)
- Electrical system 1000 V, direct start only
- Electrical system CSA approved (Canadian regulations)
- Electrical system Australian approved acc. to AUS 3000
- Water hose reel Ø1100 mm, for hose diam 1½", length 60 m at 70% filling rate
- Dual controls for hose reel
- Water hose 60m, dim. 1½"
- Water flow guard
- Big hole drilling kit
- Hole blowing kit with external air
- Hole blowing kit, with 2 x 50 l air receiver
- Water mist flushing with external water and air supply (incl. extra fan for oil cooling)
- Dry drilling with dust collector, external air
- Heater for hydraulic oil tank, 0.8 kW
- Electric oil filling pump
- Automatic boom lubrication system, rear part of boom
- Rock drill lubrication failsafe kit, for two booms
- Rig washing kit, with water hose and reel
- Manual lubrication system, grease-gun with hose and reel (incl. 18 kg grease barrel)
- Hydraulic Swellex pump
- Carrier DC 16N, width 2120 mm (Deutz F5L 912W, 55kW)
- Spare wheel 1x for DC 15, DC 16N
- Horn
- Beacon warning lamp
- Back-up alarm

Boomer 282

Coverage area

(with 2° look-out angle)



Scale 1:100

Rock Tools

Drifter rods

Dimension	Min. hole dia, mm
R38-Hex 35-R32	45
R38-Hex 32-R32	41
R38-Hex 32-R28	41
T38-Hex 35-R32	48
T38-Hex 35-R32 SPEEDROD®	48

Extension rods for injection drilling

Dimension	Min. hole dia, mm
R32 SPEEDROD®	51
T38 SPEEDROD®	64

Shank adapters

Thread	Dia, mm	Length, mm	Part No.
R38	38	485	7804 3590 03
T38	38	485	7304 3590 03
R32	38	575	7803 3593 01 *
T38	38	575	7304 3593 01 *

Couplings

Thread	Dia, mm	Length, mm	Part No.
R38	55	170	7994 3655 00
T38	55	190	7314 3355 00
T38	52	190	7314 3352 00

*Intended for roof bolting and extension drilling with BSH 110.

For other dimensions and more information please see Selection Guide for Tunnelling and Drifting, printed matt

Rock Tools catalogue, printed matter No. 9851 1622 01 or 637 01.