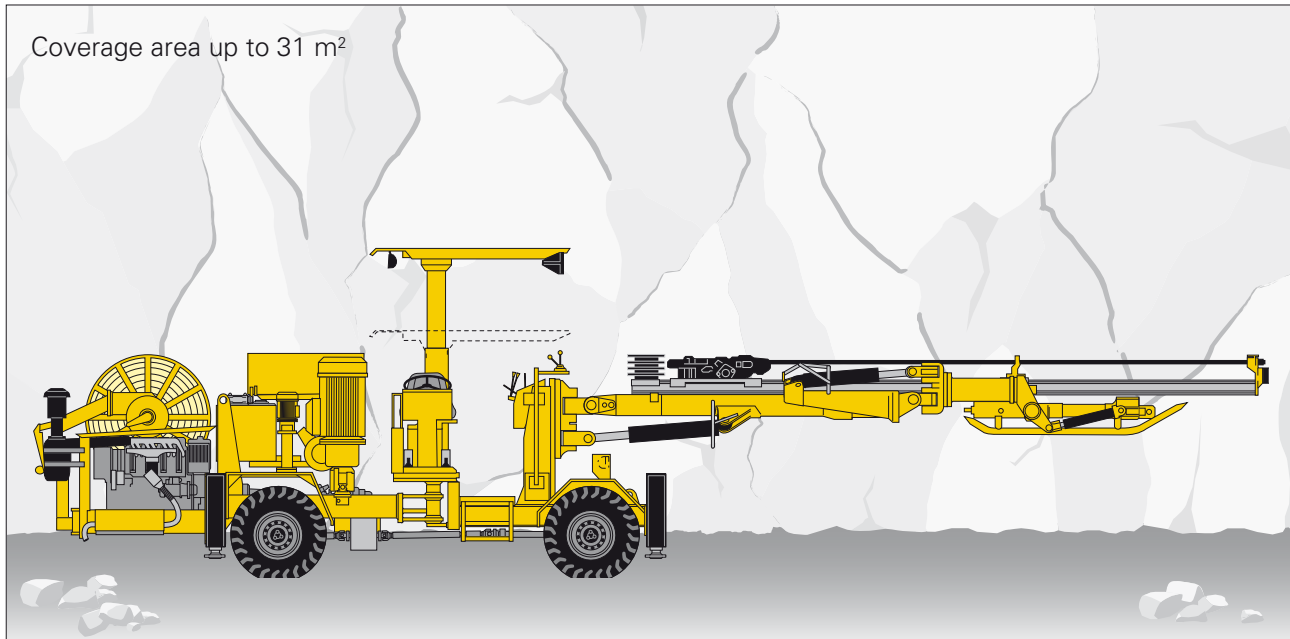


Boomer 281

Equipped with COP 1638 or COP 1838ME rock drill



Hydraulically controlled mining and tunnelling face drilling rig with one BUT 28 boom. Available with a variety of rock drills to suit customer requirements.

Standard features

» Rock drill

- COP 1638 or COP 1838ME 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 28 heavy-duty boom with double tripod suspension for accurate hydraulic parallel holding in all directions

» Hydraulic feed

- BMH 2800-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 diesel engine
- Four jacks for stable set up

» General

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

Specifications

ROCK DRILL

	COP 1638	COP 1838ME
Shank adapter	R32/R38/T38	R32/R38/T38
Height over drill centre	88 mm	88 mm
Length without shank	1 008 mm	1 008 mm
Impact power	16 kW	18 kW
Impact rate	60 Hz	60 Hz
Hydraulic pressure	200 bar	230 bar
Rotation system	Separate rotation	Separate rotation
Rotation speed	0–340 rpm	0–340 rpm
Rotation torque, max	440–1 000 Nm	640–1 000 Nm
Lub. air consump. at 2 bar	5–7 l/s	5 l/s
Water consumption	35–120 l/m	40–120 l/m
Weight	173 kg	170 kg
Sound level	<106 dB(A)	<106 dB(A)

FEED

	BMH 2800	BMH 2831	BMH 2837	BMH 2843
Total length	4 677 mm	5 287 mm	5 897 mm	5 897 mm
Drill steel length	3 090 mm	3 700 mm	4 310 mm	4 310 mm
Hole depth	2 795 mm	3 405 mm	4 015 mm	4 015 mm
Weight, incl. drill	475 kg	495 kg	525 kg	525 kg
Feed force	15.0 kN	15.0 kN	15.0 kN	15.0 kN

» Boom

- Boom BUT 28
- Feed extension 1 250 mm
- Boom extension 1 250 mm
- Parallel holding complete
- Feed roll-over 360°
- Max. lifting angle +65°/–30°
- Max. swinging angle ±35°
- Weight, boom only 1 750 kg

» Air system

- Electronically driven piston compressor Atlas Copco LE3
- Capacity, max at 7 bar 4.4 l/s
- 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, bar 2
- Water flow guard

» Control system

- Direct hydraulic Control System, DCS
- Basic functions such as anti-jamming included

» Electrical system

- Total installed power 63 kW
- Main motors 1 x 55 kW
- Voltage 380–1 000 V
- Frequency 50–60 Hz
- Starting method star/delta (1 000 V direct start)
- Thermal overload protection for electric motors
- Percussion hour meter
- Digital voltmeter/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 1.5 kVA
- Cable reel, diameter 1 100 mm

» Hydraulic system

- Hydraulic pumps 1 unit
- Pumps unloaded at start
- System pressure, max 150–230 bar
- Hydraulic oil tank, volume max 124 l
- Oil temperature meter
- Manual oil filling pump
- Oil filter indicator
- Low oil level indicator
- Water cooled oil
- Filtration 20 µm
- Mineral hydraulic oil

» Carrier

- Deutz 5-cylinder, F5L 912W diesel engine
- Power rating at 2 300 rpm 52 kW (75 hp)
- Torque at 1 550 rpm 230 Nm
- Articulated steering ±41° steering angle
- Fixed seat for tramping
- Four-wheel drive
- Articulated steering
- Hydrostatic transmission Clark 12000
- Front axle Dana 112
- Rear axle Dana 112, ±10° oscillation
- Automatic differential, limited slip 45% rear axle
- Tyres 8.25 x R15
- Clearance outside axles 15°
- 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 2 x 12 W, 70 Ah
- Tramping lights 8 x 70 W, 24 V
- Working lights 2 x 500 W, 230 VAC
- Brake lights
- Fire extinguisher
- Central lubrication system
- Spirit level
- Gradeability at max. load on drive wheels 1:4
- Horn, beacon and reverse alarm
- Rock drill lubrication warning kit

DRIFTER RODS

Dimension		Min. hole diameter
mm	R32-H35-R38	45
	R32-H35-T38	45
	R32-H35-T38 Speedrod	45
	SR35-H35-T38 Speedrod	45
	SR35-H35-T38	45
	SR35-R39-T38	45
	R32-R39-T38	45
	SR35-R39-T38 Speedrod	45

SHANK ADAPTERS

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

COUPLINGS

Thread		Diameter	Length
mm	R38	55	170
	T38	55	190

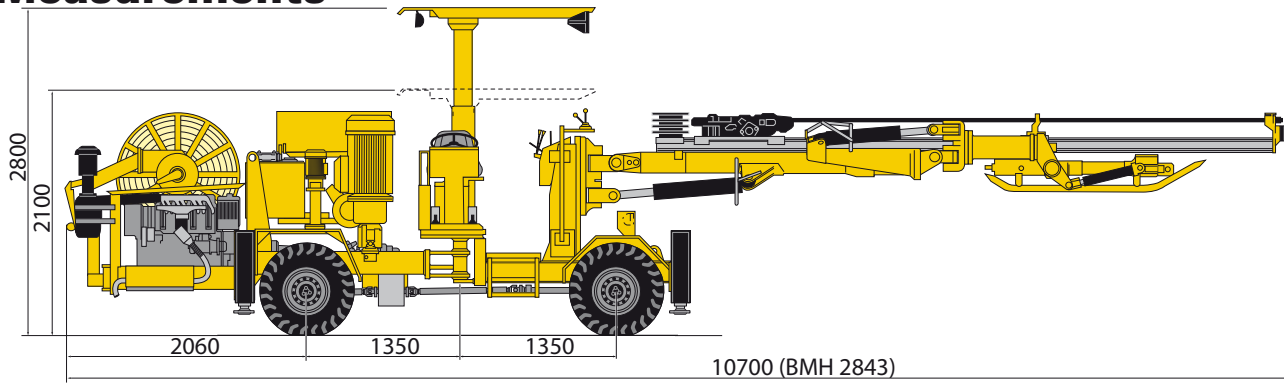
Optional equipment**» Rock drill**

- Big hole drilling kit

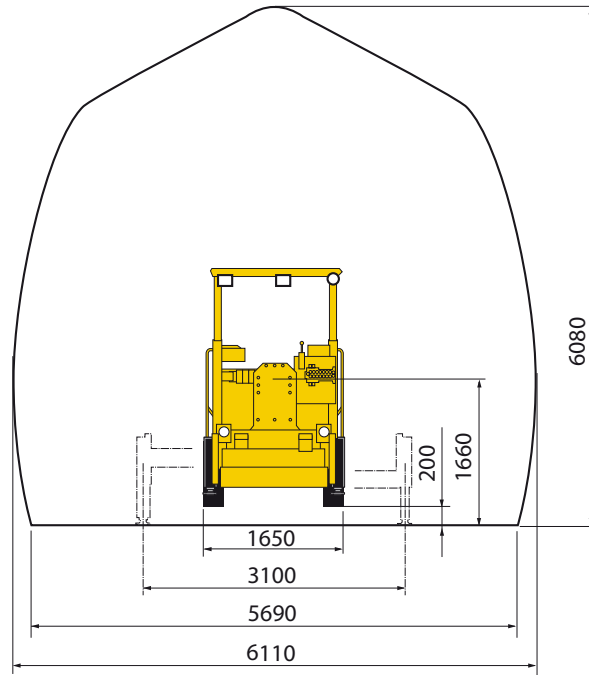
» Feed

- Telescopic feed BMHT 2800-series for left/right handed booms

Measurements



SIDE VIEW



COVERAGE AREA

DIMENSIONS		
mm		
Width		1 650
Height roof up/down		2 800/2 100
Length with BMH 2843 feed		10 700
Ground clearance		280

WEIGHT		
gross weight, depending on configuration		
kg		
Total		10 000
Boom side		6 700
Engine side		3 300

TRAMMING SPEED		
km/h		
On flat ground (rolling resistance 0.05)		>10
On incline 1:8		> 4.5

RECOMMENDED CABLE SIZE AND LENGTH				
Voltage	Type	Dimension, mm ²	Diameter, mm	Length, m
380–400 V	H07RN-F	4X50	44	40
	Buflex	3x70+3G16	37	60
440–500 V	H07RN-F	4X35	38	60
	Buflex	3x50+3G10	32	80
550 V	H07RN-F	4X35	38	60
	Buflex	3x50+3G10	32	80
660–690V	H07RN-F	4X25	34	70
	Buflex	3x35+3G6	28	105
1 000 V	H07RN-F	N/A	N/A	N/A
	Buflex	3x35+3G6	28	105

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

