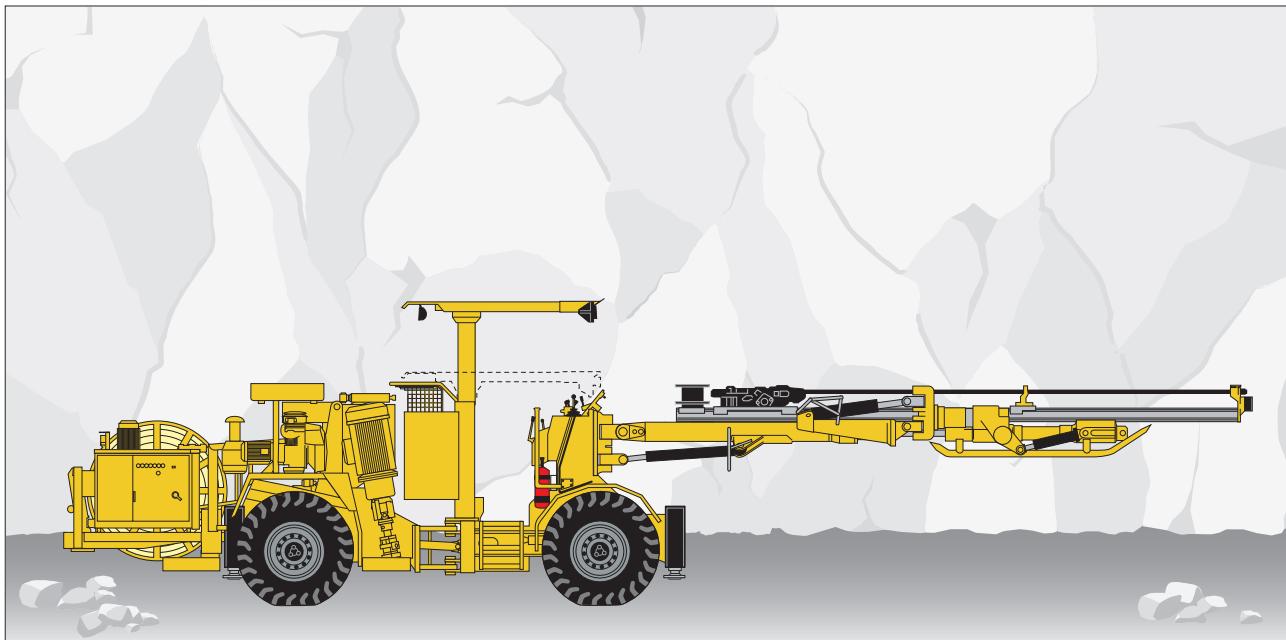


Atlas Copco Face Drilling Rigs

Rocket Boomer® 282^{D18}

Technical specification



Direct controlled hydraulic tunnelling and mining rig with two BUT 28 booms and COP 1838 rock drills for high speed drilling.

Features

»Rock drill

- COP 1838 rock drills with double reflex dampening
- New lubrication system with separate lubrication of driver and gear, pressurized sidebolts and mating surfaces

»Drilling system

- Direct controlled drilling system which incorporates anti-jamming function RPCF (Rotation Pressure Controlled Feed force)
- Separate pumps for percussion, dampening/positioning and rotation

»Hydraulic boom

- BUT 28 heavy-duty booms with adjustable expanding shafts in all boom joints

»Hydraulic feed

- BMH 2800 heavy-duty aluminium feeds with double bottom for high torsional resistance
- Snap-on stainless steel sleeves and polymer contact pads

»Carrier

- Sturdy, articulated carrier with four wheel drive
- Powered by a 5-cylinder, low emission diesel engine
- Four jacks for stable set up

»General

- FOPS approved protective roof
- Cable reel
- Driver's seat
- Electric driven piston compressor
- Water booster pump
- Cable reel
- Working lights

Specifications

» Rock drill

- COP 1838ME-05
- Shank adapter R32, R38 or T38
- Height over drill centre 88 mm
- Impact power 20 kW
- Impact rate 60 Hz
- Hydraulic pressure, max 230 bar
- Rotation system separate rotation
- Rotation speed 0–340 rpm
- Rotation torque, max. 545 Nm
- Lub. air consump. (at 2 bar) 5 l/s
- Water consumption 1.1 l/s
- Weight 170 kg
- Sound level <106 dB(A)

» Feed

- BMH 2800 BMH 2831 BMH 2837 BMH 2843 BMH 2849
- Total length, mm 3090 3700 4310 4920
- Drill steel length, mm 2795 3405 4015 4625
- Hole depth, (mm) 4677 5287 5897 6507
- Weight, incl. rock drill, kg 475 495 525 540
- Feed force, kN 15.0 15.0 15.0 15.0

» Boom

- BUT 28
- Feed extension 1250 mm
- Boom extension 1250 mm
- Parallel holding complete
- Feed roll-over 360°
- Max. lifting angle +65°/-30°
- Max. swinging angle out 45°/in 25°
- Weight, boom only, kg 1750

» Hydraulic system

- Hydraulic pumps 2 separate units
- Pumps unloaded at start
- System pressure bar, max 150–230
- Hydraulic oil tank, volume liter max/min 195
- Low oil level indicator
- Oil temperature meter on oil tank
- Oil filter indicator
- Water cooled oil
- Filtration 16 µm
- Mineral hydraulic oil
- Two operator's control panel

» Air System

- Compressor Atlas Copco LE7
- Capacity, max at 7 bar 12.5 l/s
- Air pressure gauge

» Water System

- Water booster pump CR10–16 or CR10–10
- Water booster pump max capacity at 13.5 bar, l/min 100
- Min water inlet pressure, bar 2

» Engine

- Deutz 5-cylinder, F5L 912W, 4 stroke prechamber
- Power rating at 2500 rpm 55 kW (75 hp)
- Torque at 1550 rpm 230 Nm

» Carrier

- Articulated steering +/-41° steering angle
- Fixed seat for tramping
- Four wheel drive
- Hydrostatic power steering system
- Hydrostatic transmission
- Front axle Dana 176
- Rear axle Dana 176, +/- 8 ° oscillation
- Automatic differential lock on rear axle
- Tires Michelin 12.00 R20 XMINE D2
- Clearance outside axles 15°
- Hydraulic jacks, front 2 extendable
- Hydraulic jacks, rear
- Service brakes 2 separate circuits
- Emergency and parking brakes SAHR
- Fuel tank, volume 60 l
- Electric system 24 V
- Batteries 2 x 70 Ah
- Tramming lights 8 x 70 W
- Working lights 3 x 500 W
- Central lubrication system
- Spirit level
- Fire extinguisher
- Gradeability at max. load on drive wheels 1:4
- Horn
- Beacon warning lamp
- Back-up alarm

» Electrical system

- Total installed power 121 kW
- Main motors 2 x 55 kW
- Voltage 380–1000 V
- Frequency 50–60 Hz
- Starting method star/delta (380–690 V) direct (1000 V)
- Thermal overload protection for electric motors
- Percussion hour meters
- Digital volt/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 5.5 kVA
- Cable reel, inner/outer diameter, mm 660/1395

Specifications

DRIFTER RODS

Dimension	Min. hole diameter
mm	R38-HEX 35-R32
	T38-HEX 35-R32
	T38-HEX 35-R32 Speedrod
	R38-HEX 35-SR35 Speedrod
	T38-HEX 35-SR35
	T38-Rnd 39-SR35
	T38-HEX 35-R35
	T38-HEX 35-R35 Speedrod
	T38-Rnd 39-R35
	T38-Rnd 39-R35 Speedrod

SHANK ADAPTERS

Thread	Diameter	Length	Part No.
mm	R38	38	435
	T38	38	435
	R32	38	525
	T38	38	525

*Intended for RAS and extension drilling with BSH 110

COUPLINGS

Thread	Diameter	Length	Part No.
mm	R38	55	170
	T38	55	190

EXTENSION RODS FOR INJECTION DRILLING/RAS

Dimension	Min. hole diameter
mm R32 Speedrod	51
T38 Speedrod	64

Optional Equipment

» Rock drill/Drill system

- Hole blowing kit with external air supply
- Hole blowing kit with 2 x 50 l air receiver
- Rock drill lubrication warning kit for two booms
- Big hole drilling kit
- Dry drilling system
- Water mist flushing with external water and air supply

» Feed

- Telescopic feed BMHT 2800-series
- Extension drilling set BSH 110

» Boom

- FAM 1 Electronic look-out indicator
- FAM 2 Electronic look-out indicator with hole depth measuring
- Automatic boom lubrications system, rear part of boom

» Water system

- Water flow guard
- Water hose reel dia. 1100 mm for hose dia. 1½"
- Water hose 60 m, dia. 1½"
- Water mist flushing with external water and air supply

» Hydraulic system

- Heater kit for oil tank , 2 x 500 W
- Electric oil filling pump
- Biodegradable hydraulic oil
- Thermostat

» Carrier

- Exhaust catalyser
- Exhaust water scrubber

- Fire suppression system ANSUL

- Check fire system for ANSUL
- High altitude setting of diesel engine
- Shelves for drill bits and tools
- Dual controls for hose reel
- Dual controls for cable reel

» Cabin

- Air condition unit for cabin
- Heater for cabin, 1.2 kW
- Illuminated stairs for platform/cabin

» Electrical system

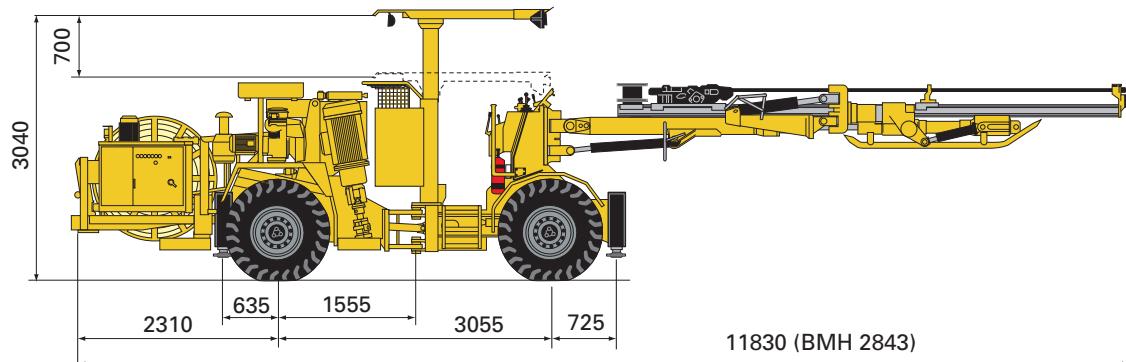
- Electric cable type RDOT or Buflex
- Plug for cable
- Power supply (incl. male plug)
- Limit switch for cable reel, lamp indicator
- Limit switch for cable reel, lamp indicator and brake connection
- Cable reel with extra width 300 mm
- Electric outlet for accessories, 32 A
- Electrical system 1000 V, direct start only
- CSA approved electrics (Canadian regulations), direct start only
- Australian electrics according to AUS 3000

» Miscellaneous

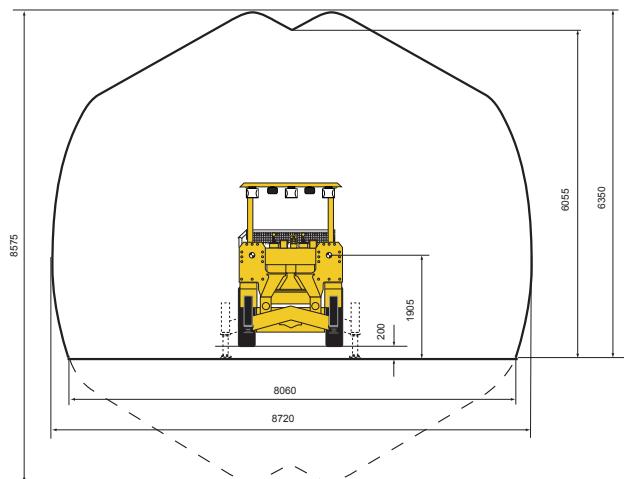
- Hydraulic Swellex pump
- Rig washing kit
- Manual lubrication system

Measurements

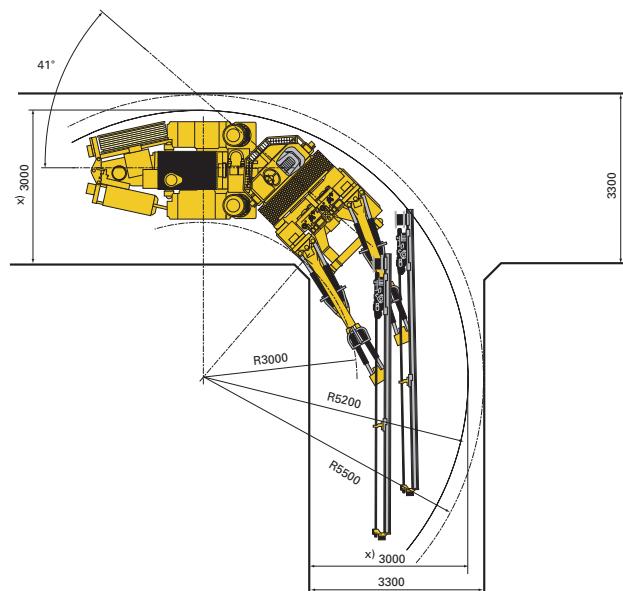
SIDE VIEW



COVERAGE AREA



TURNING RADIUS



DIMENSIONS

mm	Width	1990
	Height, roof down	2340
	Height, roof up	3040
	Lenght with BMH 2343 feeds	11830
	Ground clearance	305

TRAMMING SPEED

km/h	On flat ground (rolling resistance 0.05)	>13
	On incline 1:8	>4.5

WEIGHT

gross weight		
kg	Total	18000
	Axle load boom side	13200
	Axle load engine side	4800

RECOMMENDED CABLE SIZE AND LENGTH

Voltage	Type	Dimension, mm²	Diameter, mm	Lenght, m
380–440 V	RDOT	4x70	49	60
500–550 V	RDOT	4x50	44	65
660–690 V	RDOT	4x35	38	95
1000 V	Buflex	3x35 + 3x6	24	185

Max lenght 85 mm, fully would RDOT 35 with D=38. Recommendations are given for surrounding temperature of 40° C