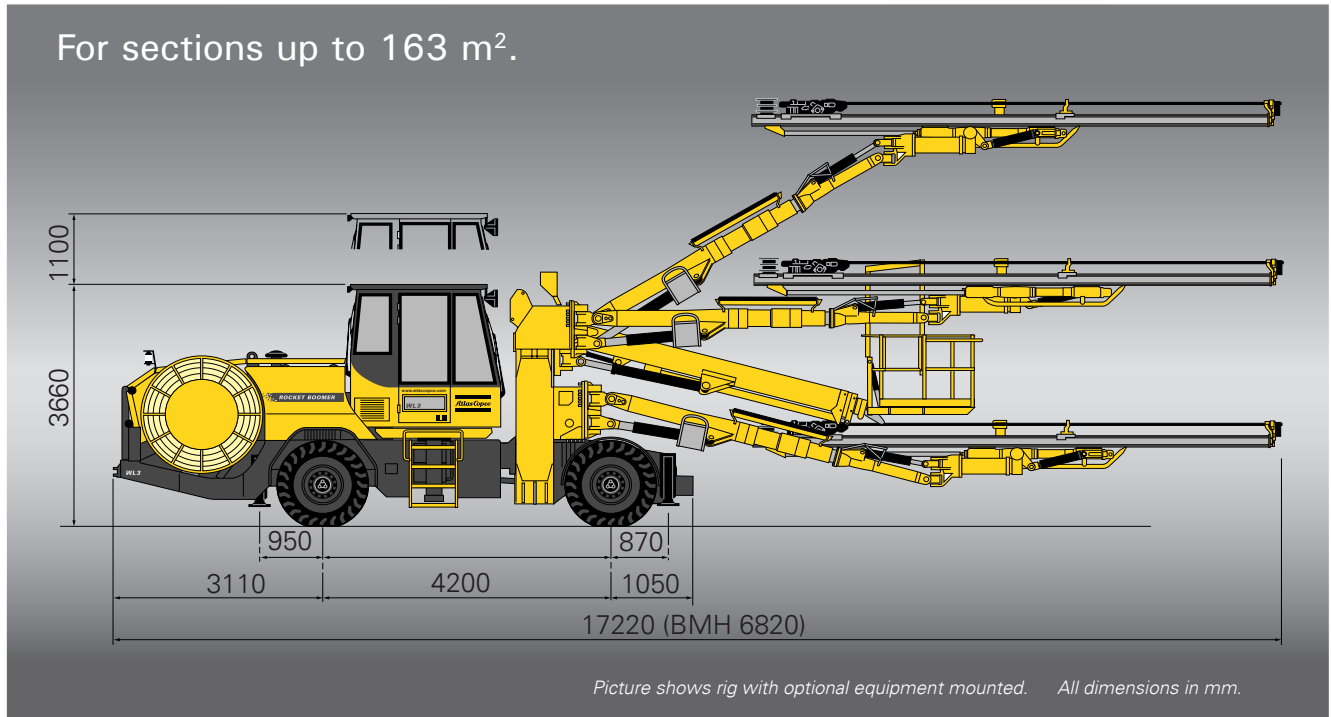


Rocket Boomer WL3 C

Hydraulic tunnelling rig with extra wide reaching boom console for highway tunnels and underground caverns.



Features

- Rig Control System (RCS) with interactive operator control panels and full-colour display. Automatic functions in the drilling process such as auto-collaring and anti-jamming protection as well as improved regulation of the rock drill provide high performance and outstanding drill steel economy. Integrated diagnostic and fault location system can immediately identify faulty electronic components.
- COP 1838 powerful, high performance rock drill with its long, slender piston and double reflex dampener gives genuine high speed drilling and excellent drill steel economy.
- PC-card for transfer of data and for service engineers to store preferred drill settings.
- BUT 35 heavy-duty booms for direct, fast and accurate positioning between holes. New powerful feed rotation unit and increased coverage. Improved linkage bearings in main boom joints and new axial bearings in all boom joints.
- Modular design of electronic and mechanical components for easy service and maintenance.
- Optional Advanced Boom Control (ABC) system supports and guides the operator in accurate drill hole positioning and alignment to reduce costly overbreak. ABC is available in three levels - Basic, Regular and Total.
- Large and ergonomic cabin with noise level reduced to 80dB(A). Possible to work standing or sitting with ergonomic panels.
- Sturdy carrier with all-wheel drive for easy manoeuvring. Powered by a turbo-charged, water-cooled 6-cylinder, low emission diesel engine for high mobility. Four jacks for stable set up.
- Basic rig includes FOPS approved cabin, hydraulic powered air condition/heating and filtered inlet air, adjustable electronic control panel with colour display for standing operator, hydraulic driven compressor and water booster pump, cable reel and working lights.

Main components

| | |
|-----------------|---------------------|
| Rock drill | 3 x COP 1838ME/HF |
| Feed | 3 x BMH 6800-series |
| Boom | 3 x BUT 35 G |
| Drilling system | RCS |
| Carrier | DC 150 |

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Rock drill COP 1838ME-07

| | |
|-----------------------------|-------------------|
| Drill steel | 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 | 0-240 rpm |
| Rotation torque, max. | 700Nm |
| Lub. air consump.(at 3 bar) | 5 l/s |
| Water consumption | 1.1 l/s |
| Weight | 171 kg |

Rock drill COP 1838HF-06

| | |
|-----------------------------|-------------------|
| Drill steel | R32, R38 or T38 |
| Height over drill centre | 88 mm |
| Impact power | 22 kW |
| Impact rate | 73 Hz |
| Hydraulic pressure, max. | 250 bar |
| Rotation system | separate rotation |
| Rotation speed,max | 0-300 rpm |
| Rotation torque, max. | 545 Nm |
| Lub. air consump.(at 3 bar) | 6 l/s |
| Water consumption | 1.2 l/s |
| Weight | 171 kg |

Feed

| | BMH 6814 | BMH 6816 | BMH 6818 | BMH 6820 |
|---------------------------------|-------------|-------------|-------------|-------------|
| Total length(mm) | 5882 | 6502 | 7102 | 7677 |
| Drill steel length(mm) | 4310 | 4920 | 5530 | 6100 |
| Hole depth(mm) | 4048 | 4668 | 5268 | 5843 |
| Weight, incl.rock drill (kg) | 631 | 665 | 696 | 721 |
| Feed force (kN) | 20.0 | 20.0 | 20.0 | 20.0 |

Boom BUT 35

| | |
|---------------------|----------------------------|
| Feed extension | 1800 mm |
| Boom extension | 1600 mm |
| Parallel holding | Complete |
| Feed roll-over | 360 degrees |
| Max. lifting angle | +70 degrees -45 degrees |
| Max. swinging angle | ±45 degrees |
| Weight, boom only | 2860 kg |

Hydraulic system

- Hydraulic pumps: 3 separate units, one for each boom. Each consists of two variable pumps for percussion and positioning, and two constant flow pumps for rotation and compressor
- Pumps unloaded at start
- System pressure max 250 bar
- Hydraulic oil tank, volume max 755 l, min 470 l
- Low oil level indicator
- Oil temperature gauge on oil tank, electronically supervised
- Mineral hydraulic oil
- Electric oil filling pump
- Filtration 16 µm

Air system

- Hydraulic driven Atlas Copco GA 5 screw compressor with 80 l air receiver
- Capacity, max 26 l/s at 9 bar
- Hydraulic drive, axial piston motor 10 cc
- Air pressure gauge

Water system

- Hydraulic driven water booster pump CR 16-80
- Capacity, max 300 l/min at 15 bar boost
- Min water inlet pressure 2 bar at 300 l/min
- Hydraulic drive, axial piston motor 10 cc
- Water pressure gauge
- Water flow guard

Carrier

- Deutz BF6M 1013C engine, water-cooled turbo-charged 170 kW (231 hp) at 2300 rpm, 847 Nm at 1400 rpm
- Rear axle steering with ±33 degree steering angle
- All-wheel drive
- Hydrostatic power steering system
- Hydrodynamic Clark 32000 transmission
- Hurth 184 boom axle
- Hurth 276 rear axle with ± 8 degree oscillation
- Manual actuated differential lock on boom axle
- Tyres front and rear 14.00 x R24 Michelin XKA
- Clearance outside axles 15 degree
- Hydraulic jacks 2 (extensible) 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 150 l
- Electric system 24 V
- Batteries 2 x 125 Ah
- 8 x 70 W tramping lights
- Illuminated stairs 2 x 70W
- Gradeability 1:4 at max. load on drive wheels
- Tramming speed on flat ground 17km/hr (at rolling resistance 0,05); on incline 1:8 > 5 km/hr
- Beacon and reverse alarm
- Horn

Cabin

- Large FOPS approved cabin, noise level 80 dB(A)
- Rubber-damped for comfort during tramming and drilling
- Safety glass. Two wipers with washer (front shield, rear shield)
- Fixed seat for tramming
- Cabin light 220 V, adjustable reading lamp 24 V
- Outlets socket 12 V for communication radio
- 220 V (10 A) electrical outlet for accessories
- Air conditioner/heating, hydraulic powered and water transferred, with heater control and stepless fan and filtered inlet air.
 - Refrigerant R134a
 - Cooling capacity at 35° C 50% Rh 5 kW. 95° F wet bulb 79.0 17.000 btu.
 - Heating capacity - 10 kW 34.000 btu diesel power, and 3 kW 10.500 btu with electric use
 - Airflow - 500 m³/h, 294 cfm

Electronic system

- Rig Control System, CAN-based network. Versatile and scalable to higher degree of automation
- One adjustable, electronic control panel with colour display for standing operator as standard. (Other configurations are available)
- PC-card for transfer of data and for service engineers to store preferred drill settings
- Integrated diagnostic system
- Pre-set drilling parameters for up to three bit types, e.g. big hole drilling

Electrical system

- Total installed power 237 kW
- Main motors 3 x 75 kW
- Voltage (as per customer specification) 400-700 V
- Frequency (as per customer specification) 50-60 Hz
- Starting method - star/delta
- Electronic overload protection for electric motors
- Percussion hour meter on operator's display
- Digital voltmeter/amperege meter in electric cabinet
- Battery charger
- Transformer 12 kVA
- 4 x 1000 W + 2 x 500 W working lights, halogen
- Cable reel, diameter 1800/1020 mm, capacity max. 1000 kg

Dimensions and weights

| | | |
|------------------|---------------------|----------|
| Width | wide console | 3010 mm |
| Height | cabin fixed | 3660 mm |
| | liftable cabin down | 3660 mm |
| | liftable cabin up | 4760 mm |
| Length | with 20 ft feeds | 17220 mm |
| Length | carrier only | 8360 mm |
| Ground clearance | | 435 mm |

| | | |
|-----------------------------------|-------------|----------|
| Turning radius | outer | 11800 mm |
| | inner | 6600 mm |
| Gross weight (rig without option) | | |
| Total | | 43000 kg |
| | Boom side | 33000 kg |
| | Engine side | 10000 kg |

Optional equipment

Rock drill/Drill system

- Rock drill rotation motor –05 (435 Nm, 0-370 rpm)
- Hole blowing kit
- Spare rock drill
- Water mist flushing with external water and air supply (incl. extra hydraulic driven fan for oil cooling)
- Rock drill lubrication warning kit

Feed

- Telescopic feed BMHT 6800-series, max 18 ft. rod (not in combination with ABC Total)
- Extension drilling set BSH 110
- Rod adding system RAS, max 20+10 ft rods (max 18+10 ft on booms with fixed boom segment)
- Rig prepared for RAS

Boom

- Extended boom reach (BUT 35LG) with 700 mm long fixed boom segment
- Automatic boom lubrication system, rear part of boom

Software

- Advanced Boom Control system - ABC Basic
- Advanced Boom Control system - ABC Regular for computer assisted drilling. Tunnel Manager Lite included.
- Advanced Boom Control system - ABC Total for computer controlled drilling. Tunnel Manager Lite included.
- Rig prepared for ABC Total
- Measure While Drilling - MWD, logging drill data for geological survey purposes

Cabin

- Operator's seat, six-way adjustable, with all drilling controls in the armrest
- Possible to work sitting or standing with ergonomic panels
- Second operator's panel as option (one panel for standing operator included in basic rig)
- Available configurations with additional operator's panel: 2 standing, 1 standing + 1 sitting or 2 sitting
- Spot lights, 3 x 70 W, or 2 x 55 W with joy-stick control
- CD player, radio and speakers mounted in cabin
- Lifting arrangement cabin 1.1 m

Hydraulic system

- Biodegradable hydraulic oil, Statoil Hydraway Bio PA 46 (PAO), Petro Canada Premium ECO HT-E 46/68
- Heater kit for hydraulic oil tank, 0.8 kW

Air system

- Extra compressor GA 5 additional 26 l/s at 9 bar (for charging)

Carrier

- Exhaust water scrubber
- Exhaust catalyzer with silencer
- Particle filter
- Dual controls for cable reel
- Limit switch for cable reel
- Water hose reel diam.1800/920 mm, for 2" diam hose, length 60 m att 70% filling rate (not in combination with watermist)
- Water 2" diam hose
- Dual controls for hose reel
- Ansul 101, fire suppression system (required in CE countries)
- Spare wheel
- Hydraulic jacks (2x) with large plates
- High altitude setting of diesel engine
- Thelma brakes for extremely steep tunnels. Acting on drive shaft. (on special request)

Electrical system

- Soft start for electrical motors, for 400 - 690 V
- 1000 V electric system, direct start only
- Electric cable, type H07 or Buflex see recommendations
- Plug and socket for cable, male and female
- Electric outlet for accessories, 3-phase max 16 A, 400-690 V (same Voltage as rig)
- Extra transformer, 15 kVA incl 3-phase outlets 32 A and 16 A, 1-phase outlets 10 A
- CSA approved electrics (Canadian regulations), on special request

Miscellaneous

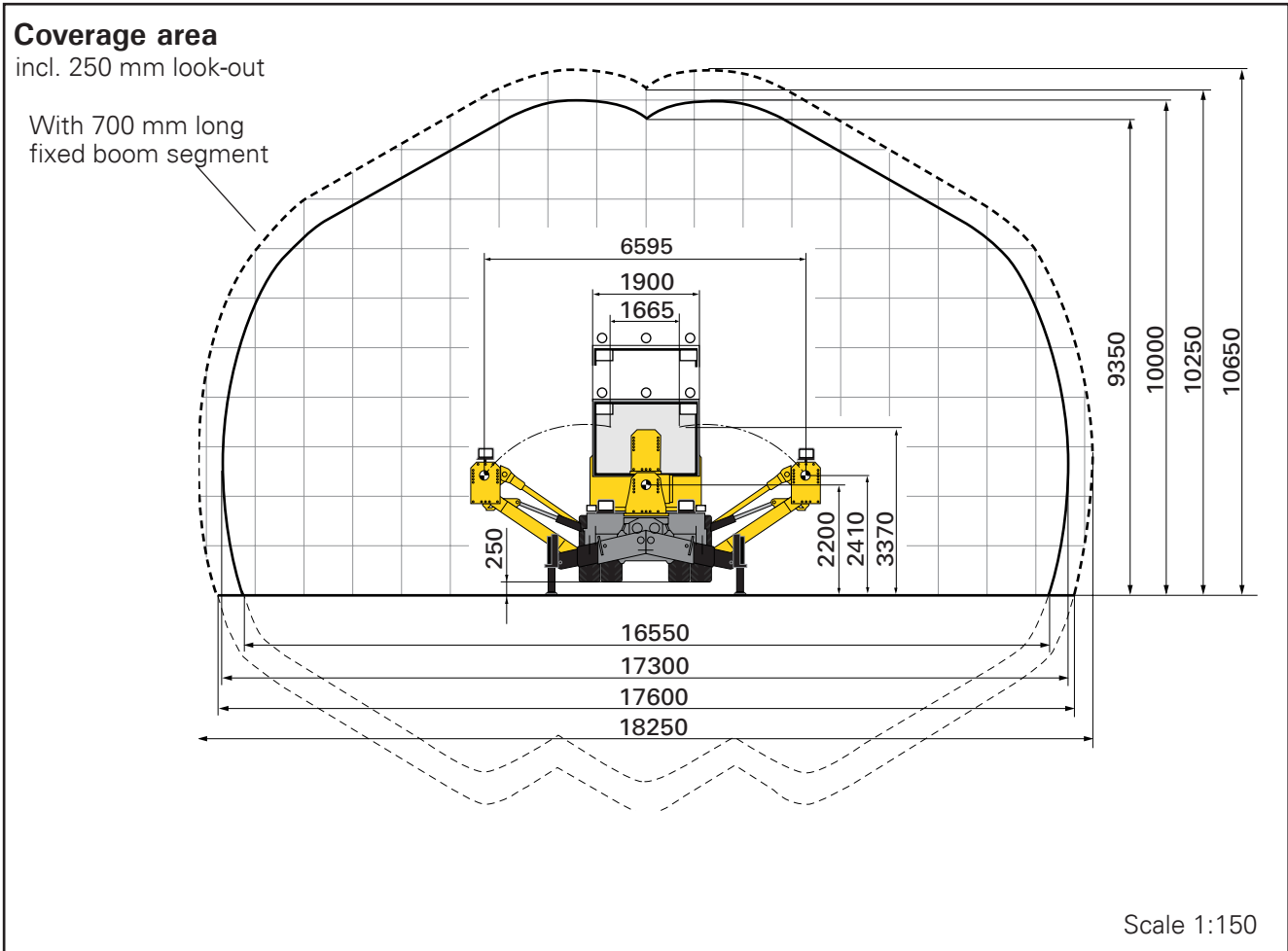
- Service platform HL 300 MB-C, max payload 450 kg
- Service platform with front gate
- Protective roof for service platform, FOPS approved
- Water and air outlet in service platform basket
- Hydraulic Swellex pump
- Holder for spare drill rods
- Rig washing kit, with water hose and reel (water supplied from booster pump)
- Manual lubrication system, grease-gun with hose and reel (incl. 18 kg grease barrel)
- Service tool box for electronic network system

Recommended cable size and length

| Voltage | Type | Dimension | Diameter | Length |
|-----------|---------|----------------------------|----------|--------|
| 400-440 V | Buflex | 3x240+3G50 mm ² | 64 mm | 100 m |
| 500-550 V | H07RN-F | 4G150 mm ² | 67 mm | 85 m |
| 500-550 V | Buflex | 3x185+3G35 mm ² | 56 mm | 125 m |
| 660-700 V | H07RN-F | 4G95 mm ² | 55 mm | 115 m |
| 660-700 V | Buflex | 3x120+3G25 mm ² | 46 mm | 175 m |
| 1000 V | Buflex | 3x95+3G16 mm ² | 42 mm | 200 m |

G = Protection yellow/green
Valid for ambient temperature below 30°C

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Rock Drilling Tools

Drifter rods

| Dimension | Min. hole dia, mm |
|--------------------------|-------------------|
| R38-Hex 35-R32 | 45 |
| T38-Hex 35-R32 | 45 |
| T38-Hex 35-R32 Speedrod | 45 |
| R38-Hex35- 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 dia, mm |
|--------------|-------------------|
| R32 Speedrod | 51 |
| R35 Speedrod | 48 |
| T38 Speedrod | 64 |

Shank adapters

| Thread | Dia, mm | Length, mm | Part No. |
|--------|---------|------------|---------------|
| R38 | 38 | 435 | 404-09101,00 |
| T38 | 38 | 435 | 435-09101,00 |
| R32 | 38 | 525 | 403-09103,00* |
| R35 | 38 | 525 | 409-09103,00* |
| T38 | 38 | 525 | 435-09103,00* |

*= Intended for rod adding system, RAS, and extension drilling with BSH 110.

Couplings

| Thread | Dia, mm | Length, mm | Part No. |
|--------|---------|------------|-------------|
| R38 | 55 | 170 | 304-0055,00 |
| T38 | 55 | 190 | 335-0055,00 |

For other dimensions and more information please see Secoroc General Catalogue, printed matter No. 9851 2156 01.