

Cabletec M

Fully mechanized cable bolting drill rig
for mid size mining tunnel profiles



Quality assured cable bolting

A fully mechanized cable bolting drill rig for drilling and installation of cable bolts up to 20 m in length.

Main benefits

Operator safety and ergonomics thanks to the FOPS certified protection roof or optional cabin, with full mechanization of the drilling, grouting and cable pushing processes

Quality control with automatic mixing for the cement grout and data recording functionality

High productivity thanks to the two-boom concept featuring dual task functionality with separate drilling boom and grout cable boom

Optional ROPS and
FOPS certified cabin





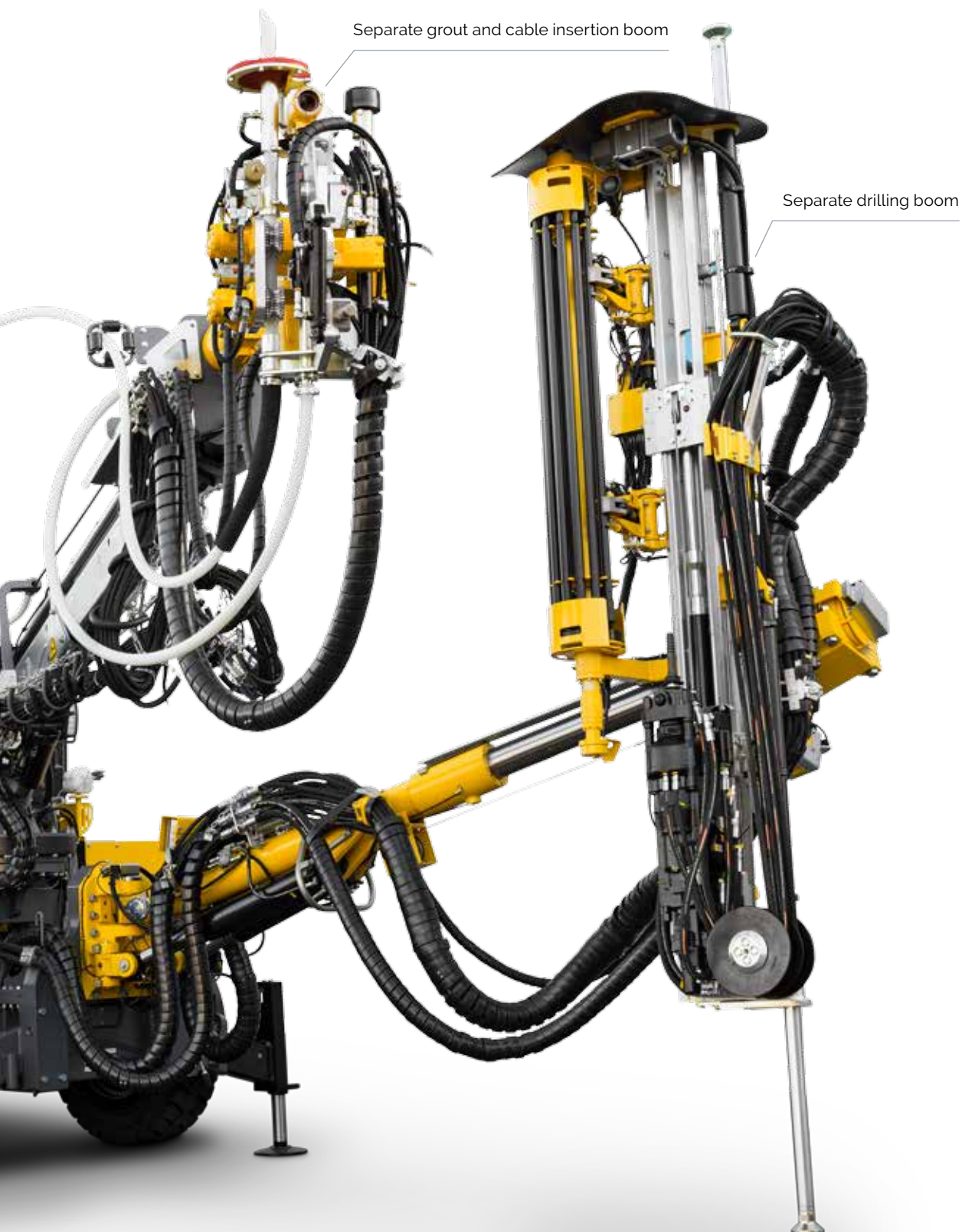
The fully mechanized drilling system of Cabletec M is taken from the well proven production drill rig Simba S7.



The machine has 500 kg of dry cement and approximately 775 m of 15.2 mm diameter bolting cable storage capacity.



With a hole diameter range of 51-76 mm and 20 m mechanized drilling hole depth, Cabletec M can also be used as a secondary production drill rig.



Where quality and safety meet

Safety and quality of cable bolt installation is our focus. The Cabletec M is designed with a range of standard and optional features that ensure these goals are met.



+ Safety

Due to the fully mechanized design of the Cabletec M, all operations are performed from within the operator station. Exposure of the operator to heavy lifting, unsafe ground, and other hazards are significantly reduced.



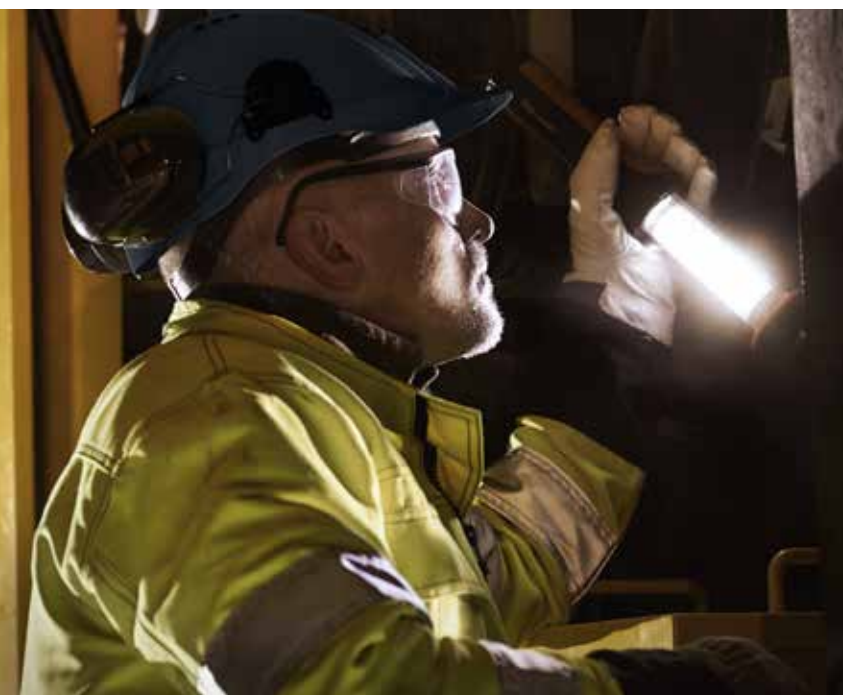
+ Quality

Both drilling and grout mixing quality are assured with the Cabletec M. Single hole automatic drilling with precise positioning sensors will ensure that the hole is drilled where it was planned and to the depth required. Load cells and programmable mixing ratios will guarantee the correct grout consistency that is required to achieve the necessary load transfer from the rock mass to the bolting cable. Quality assured.



+ Control system

The Cabletec M control system features touch screen functionality enabling fast and intuitive operation of the machine. Logging functions make all relevant drilling and cable bolting data available for later analysis and quality control reviews.



A comprehensive service offering

Even the best equipment needs to be regularly serviced to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, minimizing down-time and maximizing availability through-out the lifetime of your equipment. We focus on productivity, reliability and safety. With over 3 300 certified technicians located in over 80 countries we are committed to support you anytime, anywhere.

Rock drill/Drilling system

COP 1838+	●
COP 1838 MUX+	○
Air-water mist flushing - external water and air supply - hydraulic oil cooled by water	○
Air-water mist flushing - external water and air supply - hydraulic oil cooled by air-fan	○
Rock drill lubrication warning kit	●
Thread lubrication kit	○
Hole blowing kit	●
Rock drill lubrication air - filtration system	○

Boom

Feed dump, drilling +24° forward and -79° backward	
Feed extension 900 mm	
Boom extension 1 250 mm	
BUT 32 PD	●
Auto lube: drilling unit, boom, crane, cement mixer	○
Central lube: drilling and positioning unit	○

Bolting unit

Separate telescopic boom with grout/cable installation unit	●
Grout hose diameter, inner 20 mm/outer 29 mm	●
Grout hose reel, max 20 m hole length	●
Cable roll for cable bolting, 15.2 mm diam multi-strand cable, 775 m roll	○
Cable and hose feeder with cable cutter and bending unit	●

Hydraulic system

Low oil level indicator	●
Oil temperature meter	●
Filtration 16 µm	●
Oil filter indicator	●
Mineral hydraulic oil	●
Electric oil filling pump	●
Water/oil cooler in stainless steel	●
Heater kit: hyd- tank, diesel engine, el. motor	○
Kidney hydraulic oil filter	○
Ni-Cr plated piston rods for hydraulic cylinders	○

Control system

Rig Control System (RCS)	●
ABC Regular (Single Hole Auto)	●
Breakthrough Automatic Stop	○
Drill Plan Handling	○
Full Drill Data Handling	○
Rig Remote Access (RRA)	○
Boom Alignment Laser	○
Automatic Parallel Holding	○
Void Detection	○
Area guards	○
CertiQ professional	○
Drill Stop Protection system (required for CE)	○
Rig access control	○
Measure while drilling	○
Total station navigation	○

Air/water system

Compressor: Atlas Copco GAR5	●
Water booster pump capacity at 15 bar, 250 l/min	
Minimum water inlet pressure 2 bar	
Water booster pump on board	●
Water hose reel, including water hose	○
Joystick controlled water-jet canon for cleaning	●
Dual controls for hose reel	●
Manual lubrication kit (pneumatic)	○
High pressure rig washing kit with hose and reel	○
Low pressure rig washing kit with hose and reel	○
Boot washing arrangement	○
Hose/cable guiding at water/cable reel	○

Electrical system

Total installed power 103 kW	●
Main motor 95 kW	●
Voltage 380-1 000 V	●
Frequency 50 Hz	○
Frequency 60 Hz	○
Soft start (380-690 V)	○
Electronic overload protection for electric motors	●
Digital volt/ampere meter in electrical cabinet	●
Phase sequence and eart fault indicator	●
Battery charger	●
Cable reel with limiting switch	●
PC4 or PC5 Plug/Socket	○
Stainless steel electrical enclosure (A-cabinet)	○
Electrical outlet, main voltage	○
Transformer 3-phase 15 kVA	○

Carrier

Deutz TCD2013 L04 2 V diesel engine @ 120 kW stage IIIA/Tier 3	●
Deutz TCD 4.1 L04 diesel engine @ 115 kW stage IV/Tier 4 f	○
Articulated +/- 41 degrees steering angle	●
Four wheel drive	●
Electrical system 24 V	●
Batteries 2x125 Ah	●
Automatic differential lock on front axle, limited slip	●
Tyres, 12.00xR24	●
Clearance outside axles rear 13"	●
Front and rear hydraulic jacks	●
Fuel tank volume 4 cylinder engine 110 l	●
Central grease point	●
Tramming lights, 6x40 W LED + 2x70 W halogen	●
Working lights, 4x150 W LED, 24 V DC	●
Illuminated stairs for platform	●
Central grease point	●
Hand throttle	●
Fire extinguisher	○
Fire suppression system ANSUL - manual release	○
Fire suppression system ANSUL - automatic release (checkfire)	○
Fire suppression system ANSUL - automatic release (CO2)	○

Protective roof

FOPS approved protective roof operator station	●
Protection bars (Grizzly bars)	○
Spot light: 70 W left/right	○
Swingable seat for drilling and driving	○

Cabin

FOPS/ROPS approved cabin, noise level <80 dB(A)	○
Low profile cabin (ROPS/FOPS seated operation)	○
Mediaplayer	○
12 V outlet for communication radio	●
Electrical heater, 1.2 kW, 230 V (CE)	○
Reversing camera with monitor	●
Air conditioning unit	●
Heating function for air conditioning (water transferred)	○
Swingable seat for drilling and driving	○
Cabin body made of stainless steel	○
Joystick-controlled spotlights left and/or right, 70 W	○
Protection bars (Grizzly bars), front window	○
Cabin mounts: Lowered 140 mm from standard	○

Cement grouting system

Cement mixer, volume 114 l	
Cement silo, max load dry cement 500 kg	
Logging of accumulated cement consumption	
Water/cement ratio preprogrammed recipes	
Cement hose feeding depth measurement	
Preprogrammed cleaning sequences	
Form oil kit - manual spray kit	○
Form oil kit - tank, pump & reel	○

Recommended cable sizes and lengths

Voltage	Dimension, mm ²	Diameter, mm	Length, m
380 V	3x120+3 G25+2x1.5	46.5	100
400 V	3x120+3 G25+2x1.5	46.5	120
440-500 V	3x95+3 G16+2x1.5	42	150
500-550 V	3x70+3 G16+2x1.5	37	180
660-700 V	3x50+3 G10+2x1.5	32	200
1000 V	3x35+3 G6+2x1.5	28	200

Recommendations are given for surrounding temperature of 40°C.

Tramming speed

On flat ground (Rolling resistance 0.05)	>15 km/h
On incline 1:8	>5 km/h

Dimensions

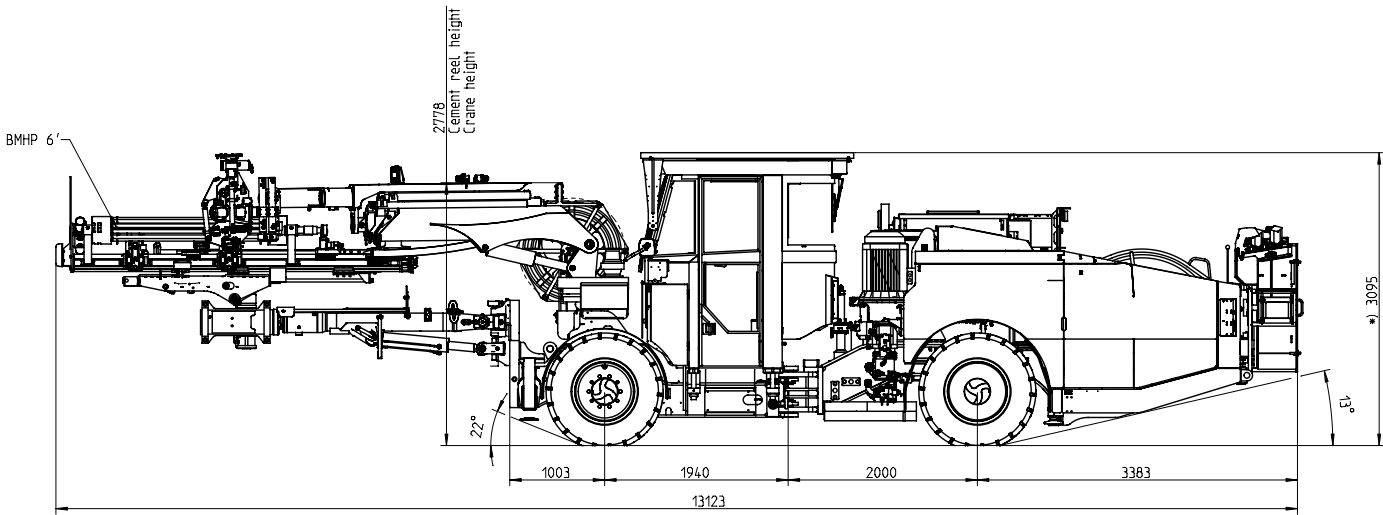
Width, transport	2 605 mm
Rig height with canopy	3 035 mm
Rig height with cabin	3 095 mm
Length	13 125 mm
Ground clearance	265 mm
Turning radius outer/inner	6 900/4 000 mm

Weight

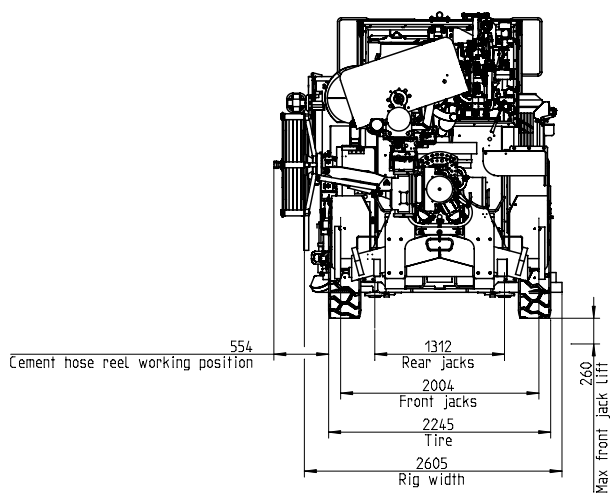
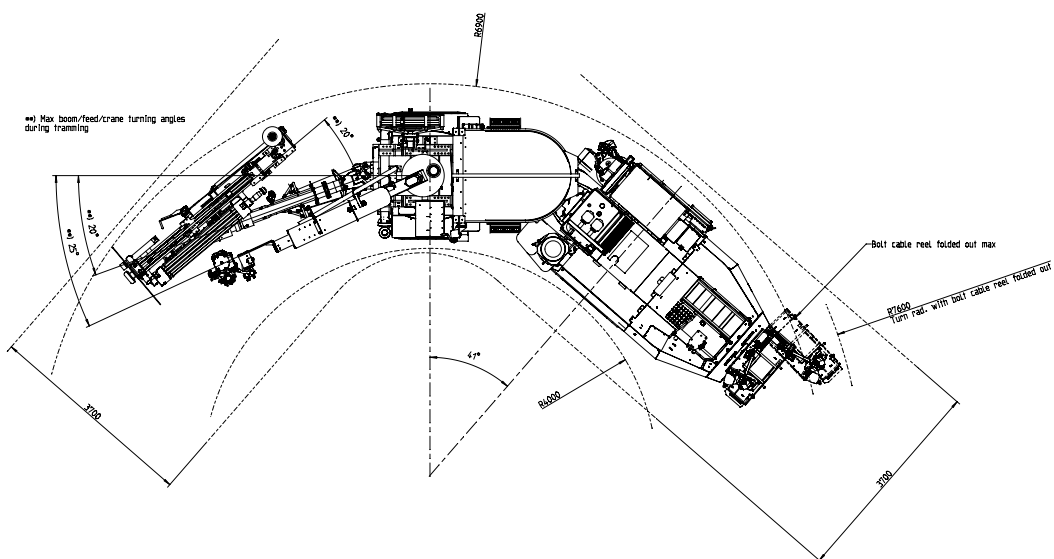
Total	26 900 kg
Boom side	14 300 kg
Engine side	12 600 kg

Noise and vibration

Operator sound pressure level in cabin, drilling, free field (EN16228 and ISO 11201)	75±3 dB(A) re 20 uPa
Operator sound pressure level in canopy, drilling, free field (EN16228 and ISO 11201)	101±6 dB(A) re 20 uPa
Operator sound pressure level working close to machine, drilling, free field (EN16228 and ISO11203)	101±6 dB(A) re 20 uPa
Sound power level (ISO 3747), drilling, free field	121±3 dB(A) re 1 pW
Peak C-weighted instantaneous sound pressure level (EN16228)	Less than 130 dB(C) re 20 uPa
Vibration levels seated, drilling (EN16228 and ISO 2631-1) Cabin	0.15± 0.15 m/s ²
Vibration levels standing, drilling (EN16228 and ISO 2631-1) Cabin	0.15±0.15 m/s ²
Vibration levels seated, drilling (EN16228 and ISO 2631-1) Canopy	0.07±0.07 m/s ²
Vibration levels standing, drilling (EN16228 and ISO 2631-1) Canopy	0.07±0.07 m/s ²



Dimension illustration (optional equipment mounted).



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