

Product Presentation

Application Name: Epiroc Hong Kong Ltd.

Product Name: FlexiROC T20R

Main application area:

Trenching/foundation drilling and underground service operations

Drilling method:

Tophammer

Rock drill:

COP SC14

Drill string

SR32, R32, TC35 and T35

Hole diameter:

38-64mm (1.5-2.5")

Maximum hole depth:

12 m/39.3' with RAS (option)
Single pass drilling, (standard): 3.4 m
Extension drilling, RAS and 2 drill rods: 6.5 m

Engine power:

82 kW/110 HP

Air capacity (FAD):

50 l/s (106 cfm) at 12 bar (174 psi)

Transport dimensions:

H 2 600 x L 5 700 x W 1 880 mm
(H 102,5" x L 224,5" x W 74")

Weight:

5 600 kg (12 345 lbs)

Core Function:

Quarry, Construction

Technology Used:

Tophammer

Construction Process involved:

Blasting hole, bursting system, non-explosive chemical expansion, canopy, drill and break

Key Improvement in Construction Process:

- **Productivity:** Large cover area, horizontal/vertical/upwards (11m²/42m²/8-9.1m); Rod adding system
- **Quality:** Remote control multi-angle operation, enhance drilling accuracy
- **Safety:** Safety Rod adding system, minimum amount of manual rod handling; Remote operation with Radio remote control
- **Environmental:** Water flushing achieve zero dust in the air; High capacity dust collection system; Lubricating collection system collecting used lubrication oil

Job Reference:

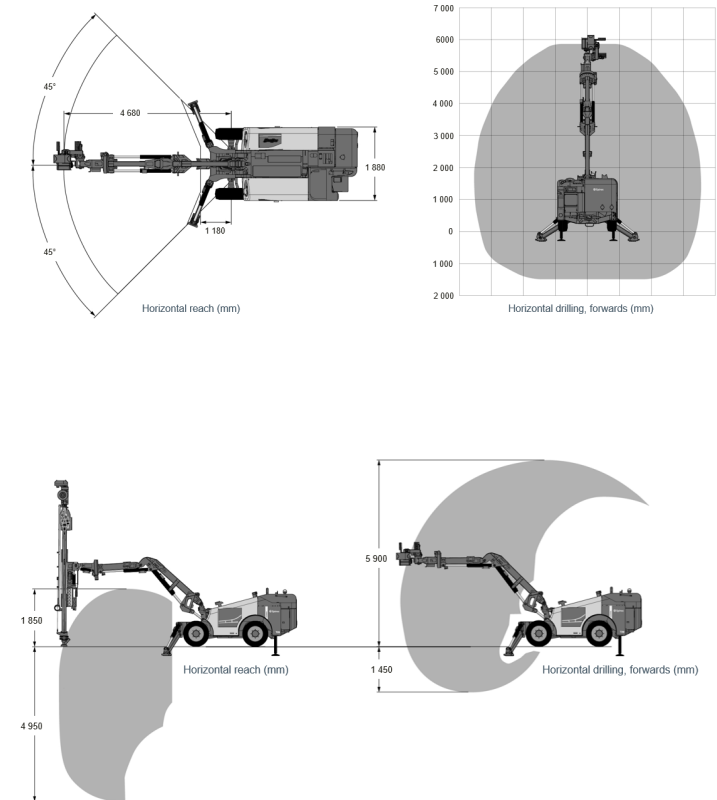
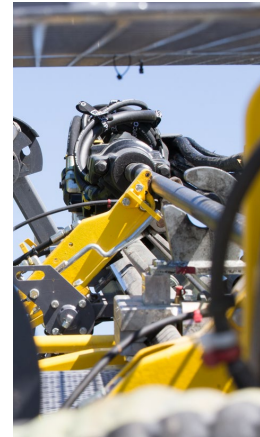
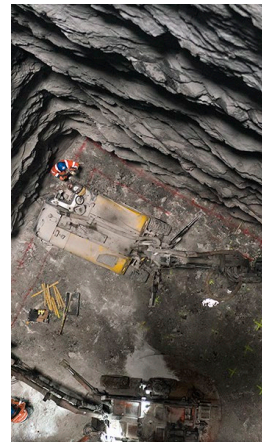
- CKR HMT Access, adoption, 2019
- Shatin Lower Shing Mun Reservoir, adoption, 2020
- TKO-LT Tunnel, adoption, 2021



Benefits – Productivity

Drilling Performance

- Great coverage area and productivity
 - boom reach of 3500mm through a 90° radius, Great face drilling large horizontal coverage area (11m²) and vertical coverage area (42m²), translates into more holes form fewer set-ups; Great reach for upwards drilling (e.g. bolting) 8 m to 9.10 m.
- Rod Adding System (RAS)
 - Less manual rod changing; more drilled meters per day
 - Capacity to drill deep without manual rod change (with underground feed foot and RAS):
 - ✓ 12' feed: 6 400 mm
 - ✓ 10' feed: 5 200 mm
 - ✓ 18' feed: 4 200 mm
- True multi-purpose
 - Three different feed lengths makes for great application versatility
 - Hole range is optimized to 38–64 mm
 - (covers most construction applications)
 - Possibility to drill even larger holes thanks to high rotation torque and flushing capacity
 - Extreme performance in relation to its size
 - Full Radio Remote Control of all functions
 - (with drill data on RRC display)
 - Easy to transport from job to job
 - Good tramming speed, 5.5 km/h
 - Three different flushing types



Benefits – Quality

Drilling Performance

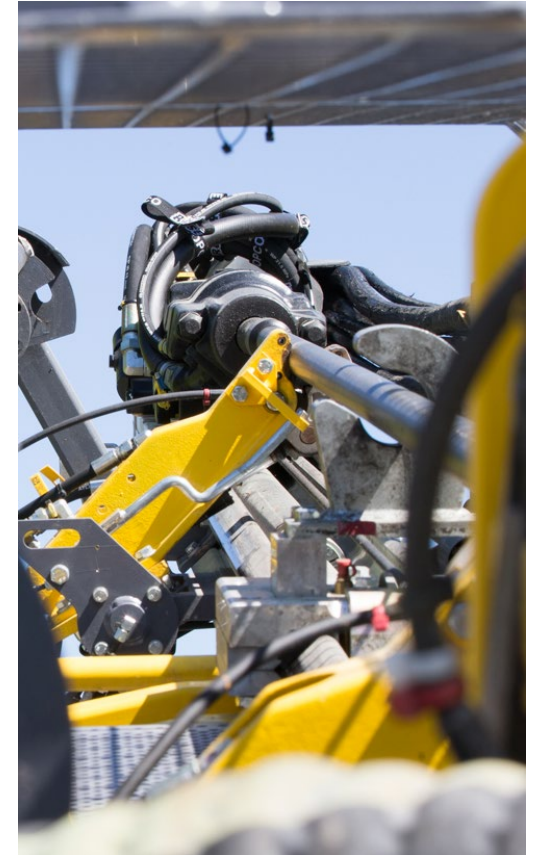
- Remote control multi-angle operation, enhance drilling accuracy
- Radio Remote Control for easy operations
- Drilling efficiency: Rock Drill COP SC14
 - Maximum exploitation of feed length; hole range 35–64 mm
 - Separate lubrication on the front head and driver
 - High penetration rates and excellent drill steel life
 - Hydraulic dual-dampening system and floating adaptor
 - Maximum transfer of crushing forces without risk of loosening threads in the drill string
 - High torque output for superior penetration.
 - Bolt hole drilling where harder rock conditions or larger hold diameters are needed



Benefits – Safety

Operations

- Rod Adding System (RAS)
 - Less manual rod changing; more drilled meters per day
 - Safer operations with minimal amount of manual rod handling
- Remote control operation, operator stand away from dangerous operations



Benefits – Environment

Low fuel consumption

- The smooth feed action keeps sleeve temperatures to a minimum even with high impact pressure.
- High capacity Dust Collection System.
- Rock drill prepared for water flushing to achieve zero dust in the air
- Lubricating collection system collecting the rock drill used lubrication oil that would pass through the return line and be stored in the collection tank. Drill prepared for water flushing to achieve zero dust in the air



Innovative Features

Automatic

- Rod Adding System (RAS):
 - Less manual rod changing with Rod Adding System (RAS) means more drilled meters per day.
 - Safer operations with minimal amount of manual rod handling.
 - Capacity to drill deep without manual rod change
- Full Radio Remote Control of all functions (with drill data on RRC display)
- Large boom coverage makes the rig suitable for a variety of construction applications

