



FK20-1BCDL

Robust design and common-sense control system guarantee best reliability. FK20-1BCDL single-boom hydraulic face drilling rig is optimized for small to medium size tunnels and drifts up to 6 meters high X 6 meters wide.

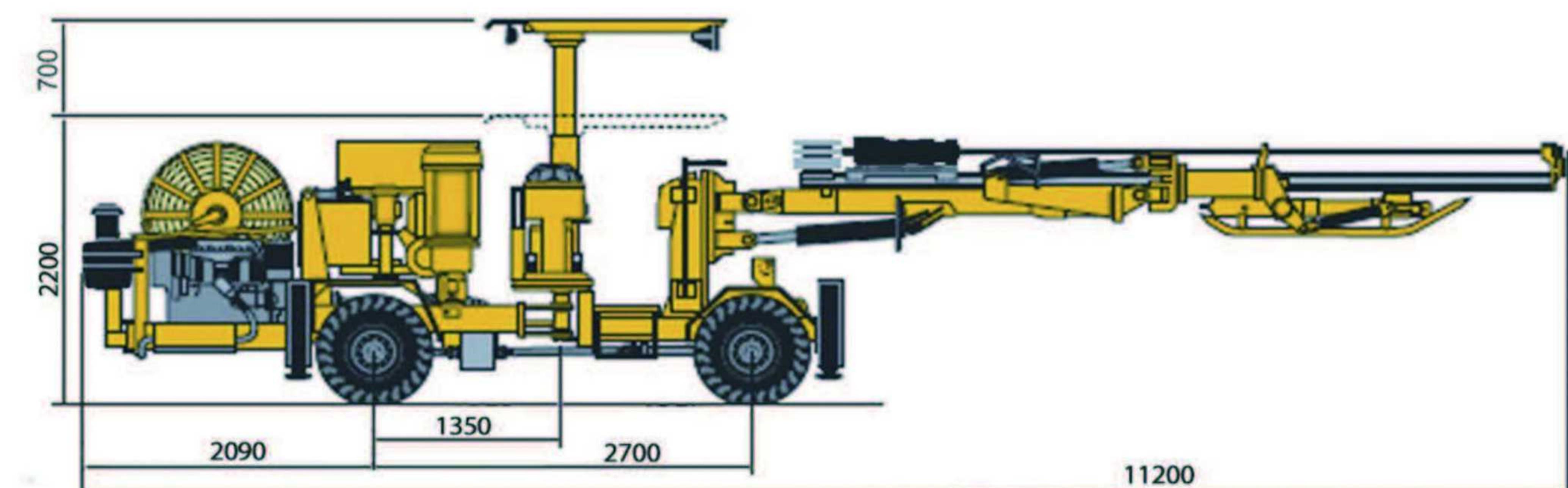
FK20-1BCDL is equipped with a heavy-duty boom with unique features for efficient and trouble-free operation with coverage area of 48. It is intended for use in mining and tunneling and designed for operation with medium size drifts and underground openings.

#### Standard Features

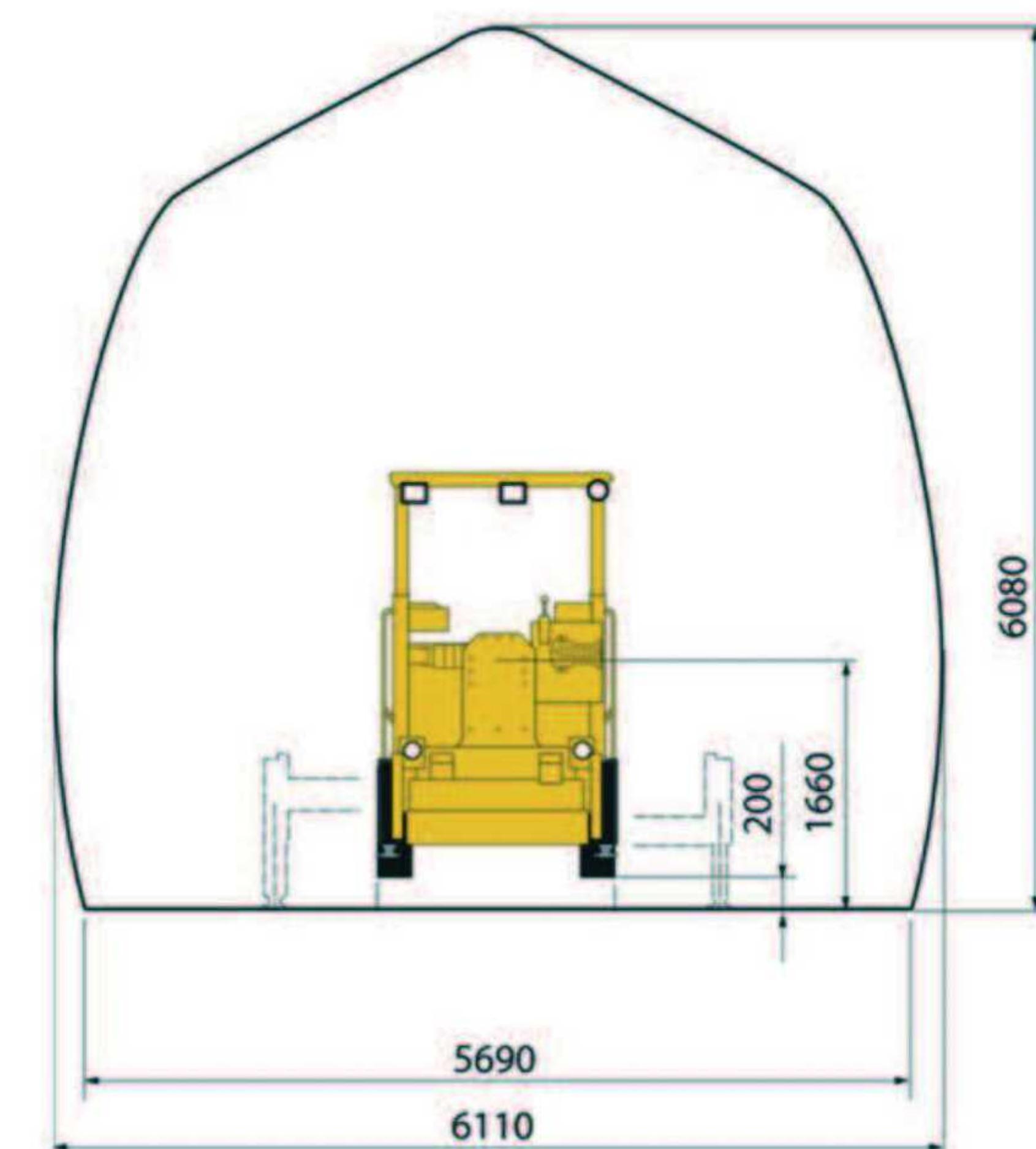
- Safety and control: A FOPS-approved ergonomically designed telescopic protective roof ensures safety plus excellent visibility and surveillance for the operator in control. The industrial PLC control system guarantees.
- Outstanding drill steel economy: The rock drill available for the rig feature dual damping for productivity, high-speed drilling and greater drill steel longevity.
- A double tripod on the heavy-duty boom allows for fast, precise positioning with hydraulic parallel holding in all directions.

- Option: A telescopic feed for blot hole drilling, face drilling, and cross cutting, in a limited space where both long and short rods have to be used. The telescopic feed consists of upper and lower feed. When the feed is at minimum length, short holes can be drilled. When the feed is at maximum length, long holes can be drilled.

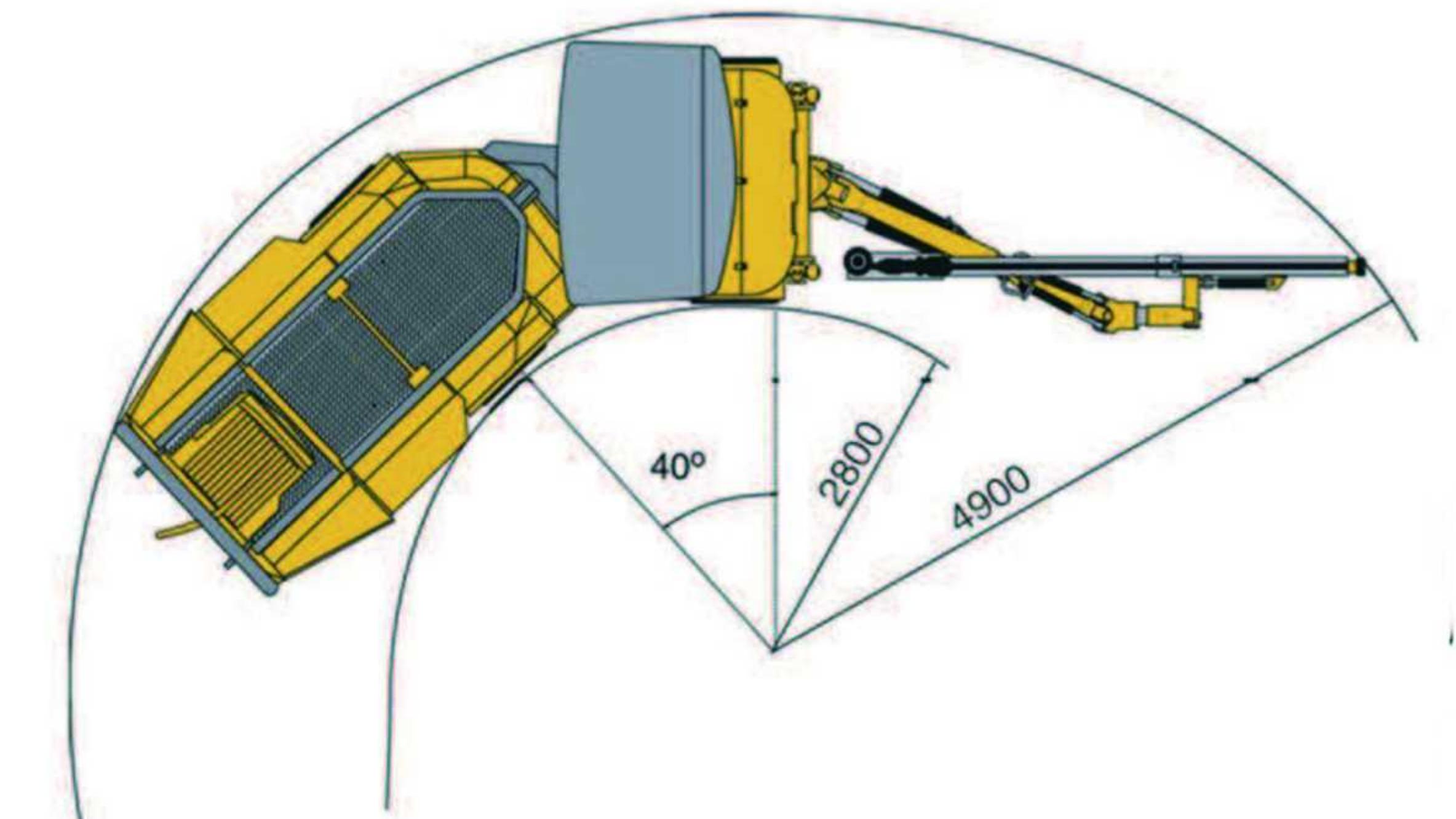
#### Side View



#### Coverage area



#### Turning Radius



## Technical Specifications

### » Rock Drill

- FOCOR550
- Shank adapter R32 R38 T38
- Impact power 24kW
- Impact rate 60–75 Hz
- Hydraulic pressure, max 230bar
- Rotation motors: Separate rotation
- Rotation speed 0–300 rpm
- Lub. air consumption 5L/s
- Water consumption 50L/min
- Weight 190 kg

### » Feed

- HYTL
- Total length: 5850 mm
- Drill rod length: 4310 mm

### » Boom

- Feed extension ..... 1250 mm
- Boom extension ..... 1250 mm
- Parallel holding ..... Complete
- Feed roll-over ..... 360°
- Feed dump ..... +65° / -30°
- Max. swinging angle ..... ± 35°

### » Control system

- Direct Electric Control System (DES)
- Anti-jamming included

### » Hydraulic system

- Hydraulic pump ..... 1 unit
- Pump unloaded at start
- System pressure. Max ..... 200 bar
- Hydraulic oil tank, volume max ..... 165L
- Low oil level indicator including shut down
- Oil temperature gauge on oil tank, electronically supervised
- Electric oil filling pump
- Filtration ..... 10 um
- Oil filter indicator
- Water cooled oil cooler in stainless container
- Mineral hydraulic oil

### » Electrical system

- Total installed power ..... 62 kW
- Main motors ..... 55kW
- Voltage ..... 380–1000V
- Frequency ..... 50 – 60 Hz
- Starting method ..... star/delta (380V–690V)  
direct (1000V)
- Thermal overload protection for electric motor
- Percussion hour meter on operator display
- Digital voltmeter / amperage meter in electric cabinet
- Phase sequence indicator/ Earth fault indicator  
/Battery charger
- Transformer ..... 1.5 kVA
- Cable reel, inner / outer diameter, mm .....  
..... Ø660/1195 mm

### » Air system

- Compressor ..... High quality
- Capacity max at 6bar ..... 10 L/s
- Air pressure gauge

### » Water system

- Hydraulic driven water booster pump
- Water booster pump max capacity at 7 bar .....  
..... 80l/min
- Min. water inlet pressure, bar ..... 2 bar
- Water flow guard

### » Carrier

- Diesel engine ..... Deutz D914L04
- Power rating at 2200 rpm ..... 58kW
- Torque at 1550 rpm 258Nm
- Fixed seat for tramping with safety belt
- Articulated steering ..... ± 41°
- Four-wheel drive
- FOPS roof
- Hydrostatic power steering system
- Front axle ..... Dana 112
- Rear axle ..... Dana 112 , ± 10° oscillation
- Tyres ..... 8.25 x R15
- Clearance outside axles ..... 15°
- Hydraulic jacks, front ..... 2 extendable
- Hydraulic jacks, rear ..... 2
- Service brakes 2 separate circuits (hydraulically applied, fully enclosed wet disc. brakes)
- Emergency and parking brakes ..... SAHR

- Fuel tank, volume ..... 60L
- Electric system ..... 24V
- Batteries ..... 2x70 Ah
- Tramming lights ..... 8 x 70 W
- Illuminated stairs for platform/ brake lights
- Central lubrication system
- Catalyser, silencer, spirit levels
- Gradeability at max load on drive wheels ... 1:4
- Traming speed on flat ground ..... >10km/h
- Traming speed on incline 1:8 ..... >4km/h
- Horn, beacon, and reverse alarm