

Scaletec MC

Technical Specification



Scaling rig with RCS-controlled positioning and percussion system for high and safe productivity with a SB 300 Scaler hammer.

Features

» Control system

- Rig Control System, RCS
- Interactive operator's panel
- Integrated diagnostic system
- Logging system

» Scaler hammer

- Atlas Copco SB 300 Scaler
- Dust suppression system
- Automatic lubrication
- Dust protection system
- Hydraulic accumulator

» Hydraulic boom

- BUT SC boom designed for scaling
- Mechanical parallel holding system
- Proportional positioning
- Automatic lubrication system

» Carrier

- M-series carrier
- Articulated steering, 4-wheel drive
- Turbo-charged, water-cooled 4-cylinder diesel engine
- Jacks for stable set-up
- Cable reel

» Cabin

- FOPS-approved cabin
- Cabin lift and tilt system
- Fixed seat for tramming
- Operator's seat for scaling

» General

- Electric/hydraulic tramming
- Emergency reverse button
- Water booster pump
- Screw compressor
- Working lights
- Shovel blade

Specifications

» Hammer

- SB 300 Scaler
- Impact energy 375 J
- Impact rate 8–16 Hz
- Hydraulic pressure, max 100–110 bar
- Oil flow 50–80 l/min
- Weight 315 kg
- Automatic lubrication system
- On board refill system for hammer lubrication pump

» Boom

- BUT SC
- Parallel holding mechanical
- Weight, boom only 2 700 kg

» Hydraulic system

- Hydraulic pump 2 variable pumps and 1 gear pump
- Pumps unloaded at start
- System pressure, max 250 bar
- Hydraulic oil tank, volume min/max 200/250 l
- Low oil level indicator including shut down
- Oil temperature gauge on oil tank
- Filtration 16 µm
- Water-cooled oil cooler
- Mineral hydraulic oil

» Air system

- Hydraulic driven screw compressor Atlas Copco GA 5
- Capacity, max at 7 bar 10 l/s
- Hydraulic drive, axial piston motor 10 cc
- Air pressure gauge
- Air receiver 80 l

» Water system

- Hydraulic driven water booster pump CR 5-13
- Capacity, max at 9 bar boost 125 l/min
- Min water inlet pressure 2 bar
- Hydraulic drive, axial piston motor 5 cc
- Water pressure gauge
- Water flow gauge

» Cabin

- FOPS-approved cabin
- Noise level 80 dB(A)
- Rubber-damped for comfort during tramming and scaling
- Safety glass in front window 24 mm
- FOPS-approved protection bar in front of cabin
- Cabin light 230 V
- Adjustable reading lamp 24 V
- Fire extinguisher 6 kg
- Socket for communication radio 12 V
- Electrical socket for accessories 230 V (10 A)

» Engine

- Deutz BF4M 1013C water-cooled turbocharged engine
- Power rating at 2 300 rpm 112 kW (152 hp)
- Torque at 1 400 rpm 572 Nm

» Carrier

- Articulated steering ±38° steering angle
- Four wheel drive
- Hydrostatic power steering system
- Hydrodynamic transmission Dana 32 000
- Front axle Dana 176 HD
- Rear axle Dana 176 HD with ±8° oscillation
- Automatic differential lock on front axle, limited slip
- Tyres 12.00 x 20 Michelin X-Mine D2
- Clearance outside axles 15°
- Hydraulic jacks, front 2 extensible
- Hydraulic jacks, rear 2
- Adjustable shovel blade in the front end
- Service brakes 2 separate circuits
- Emergency and parking brakes SAHR
- Fuel tank, volume 100 l
- Exhaust catalyser
- Electric system 24 V
- Batteries 2 x 125 Ah
- Tramming lights 8 x 70 W
- Illuminated stairs for platform 2 x 70 W
- Central lubrication system
- Silencer
- Fire extinguisher
- Spirit levels, one for longitudinal and one for sideway
- Horn
- Shelf for hammer chisels and tools
- Gradeability at max load on drive wheels 1:4
- Beacon warning lamp
- Reverse alarm

» Rig Control System, RCS

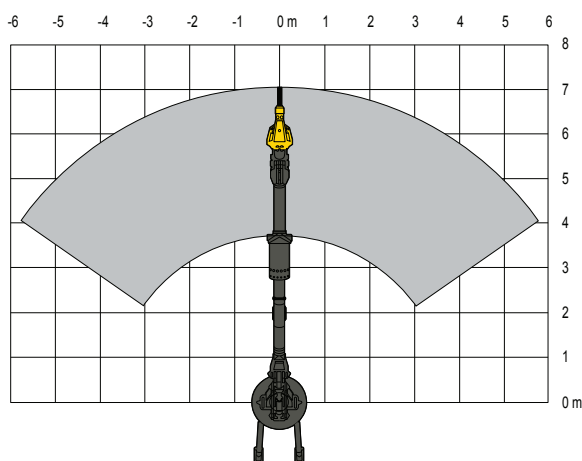
- Adjustable, electronic control panel with colour display
- PC-card for transfer of data
- Integrated diagnostic system
- Adjustable operating parameters
- Exposed components are IP65 standard

» Electrical system

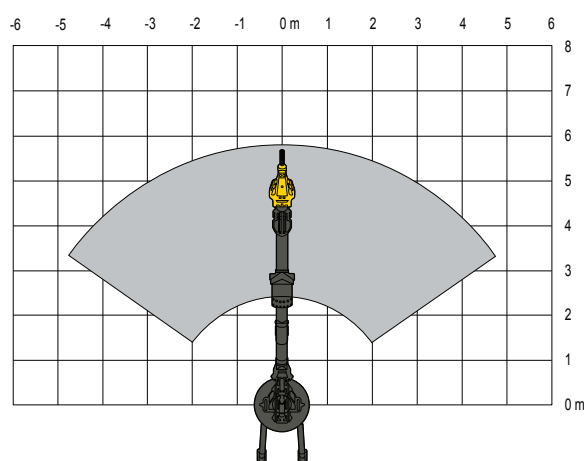
- Total installed power 83 kW
- Main motor 75 kW
- Voltage 400–1 000 V
- Frequency 50–60 Hz
- Starting method star/delta
- Electronic overload protection
- Percussion hour meters on operator's display
- Digital volt/ampere meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 8 kVA
- Working lights, halogen 4 x 500 W
- Cable reel diameter 1 600 mm

Specifications

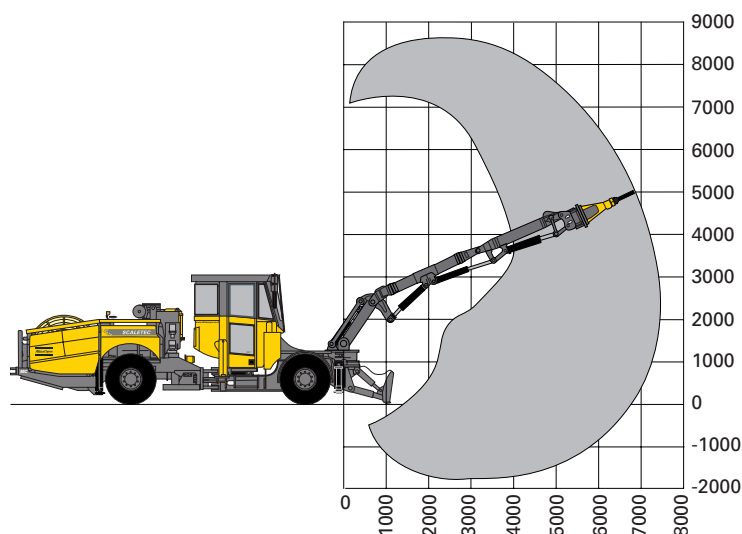
COVERAGE AREA



Coverage area at 5 meters



Coverage area at 7 meters



Optional Equipment

» Air/Water system

- Water hose reel
- Dual controls for hose reel
- Water hose
- High pressure rock cleaning device

» Cabin

- Spotlight, 2 x 70 W with joystick controls
- CD-changer
- Air Conditioner/Heating

» Carrier

- Fire suppression system ANSUL
- Fire suppression system Forrex
- Check fire system ANSUL
- Automatic fire suppression system
- High altitude setting of diesel engine
- Brake lights
- Solid tyres
- Foam filled tyres
- Particle filter

» Electrical system

- Soft start for electric motors, 400–700 V (not CSA)
- Electrical system 1 000 V, direct start only
- Electric cable type H07 or Buxflex
- Dual controls for cable reel
- Limit switch for cable reel
- Plugs, socket, connector, switchgear
- Electric outlet for accessories, 16 A
- Extra transformer 3, 10 or 15 kVA
- HID working lights, 4 x 70 W, 24 V
- CSA approved electrics (Canadian regulations), direct start only
- Australian electrics according to AUS 3 000

» Hydraulic system

- Biodegradable hydraulic oil
- Heater kit

» Miscellaneous

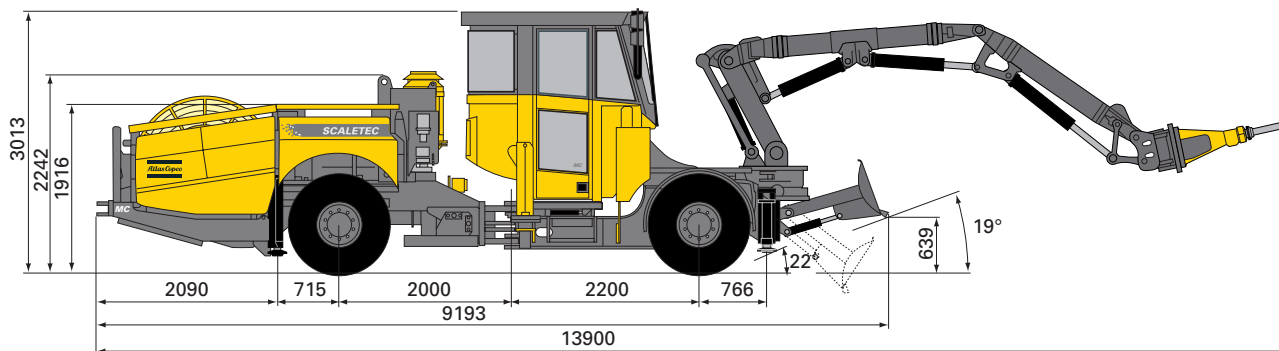
- Hose and/or cable guide at water/cable reel
- EPB on CD-CAT B
- Remote operating kit
- Special paint
- Boots washing arrangement
- Ni-Cr plated piston rods (limited selection)
- Back-up camera with monitor
- Manual lubrication kit
- Hydraulic Swellex pump
- Rig washing kit
- Diesel hydraulic rig

» Software

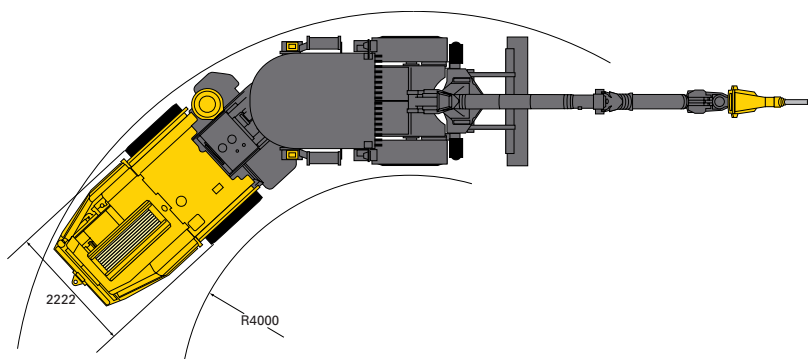
- Rig Remote Access, RRA

Measurements

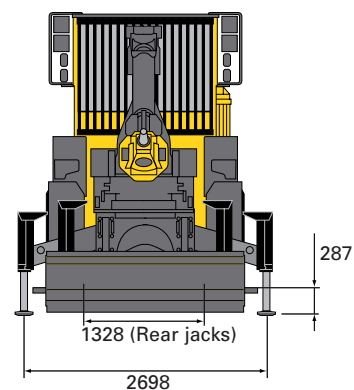
SIDE VIEW



TURNING RADIUS



FRONT VIEW



DIMENSIONS

mm		
	Width	2 222
	Height, fixed cabin	3 013
	Height, lifted and tilted cabin	3 732
	Length	13 900
	Ground clearance	280

WEIGHT

gross weight		
kg	Total	21 970
	Boom side	12 500
	Engine side	9 470

TRAMMING SPEED

km/h		
	On flat ground (rolling resistance 0.05)	>15
	On incline 1:8	> 8.5

RECOMMENDED CABLE SIZE AND LENGTH

Voltage	Type	Dimension, mm ²	Diameter, mm	Length, m
400 V	H07RN-F	4G70	49	125
440 V	Buflex	3x95+3G16	42	150
440 V	H07RN-F	4G50	44	150
440 V	Buflex	3x70+3G16	37	200
460-500 V	H07RN-F	4G50	44	150
460-500 V	Buflex	3x70+3G16	37	200
500-550 V	H07RN-F	4G50	44	150
500-550 V	Buflex	3x70+3G16	37	200
660-700 V	H07RN-F	4G35	38	200
660-700 V	Buflex	3x50+3G10	32	275

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