



*Pictured machine may include options and additional equipment.*

## Features

Scamec 2000 S is a diesel driven unit designed for mechanised scaling in underground mines and tunnels where tramming height is 2.4 m or more. Scamec consist of NC200 carrier, NSB1000 boom, scaling tool and other scaler accessories.

The powerful liquid cooled turbo charged 120 kW or 155 kW Deutz or MB 170 kW TIER 3 approved engine provides clean and efficient operation. MB gives a maximum speed of 7 km/h in an upward inclined 1:7 tunnel. In a horizontal tunnel, the maximum speed is 17 km/h.

The FOPS and ROPS approved safety cabin provides superior visibility and comfortable compartment for the driver. The enclosed cabin provides noise level < 75 dB. All daily checks can be done from the ground level.

Normet reserves the right to change this specification without further notice.

### Technical specification

#### NORMET SUPER BOOM NSB1000

Heavy duty telescopic scaling boom	
Max. vertical reach of hammer	8.4 m
Max. horizontal reach of hammer	11 m
Boom slew	+/- 40°
Hammer turn	+/- 45°
Hammer tilt	120°

#### SCALING TOOLS

Hydraulic hammer, Rammer BR555:	
• Impact energy	450 J
• Impact rate	max.1500 bpm
• Weight	315 kg
Push plate	

#### ENGINE

Liquid cooled turbo charged Deutz TCD 2013 L4, 120 kW/2300 rpm, TIER 3 approved

#### EXHAUST SYSTEM

Catalytic exhaust gas purifier and muffler

#### TRANSMISSION

Dana 24 000 series power shift with pump drive group  
3 speeds forward and reverse  
4-wheel drive

#### AXLES

Planetary type	
Dana 113	
Load end axle fixed	
Engine end axle oscillation	+/- 7°

#### TYRES

14.00 - 24 PR 28

#### PERFORMANCE

1st gear max.	6 km/h
2nd gear	12 km/h
3rd gear	25 km/h
Max. tractive effort	133 kN
Max speed in 1:7 inclined tunnel	9 km/h
Performance curve	100018584

#### STEERING

Hydraulic frame steering  
Orbitrol type  
Frame articulation +/- 40°

#### FUEL TANK

Capacity 140 L

#### BRAKES

Service brake: hydraulically powered dual-circuit oil immersed multidisc brakes in both axles  
Safety/Parking brake: spring applied hydraulically released fail-safe -type brake. Brake testing possible from cabin

#### HYDRAULIC SYSTEM

Variable displacement pump system,  
190 bar, 155 L/min/2200 rpm  
Hydraulic oil tank capacity 240 L  
Return oil filtration 10 µm  
Indication of level, filtration and temperature

#### 24 VDC ELECTRICAL SYSTEM

Exposed components are min IP 65 standard  
Battery 2 x 115 Ah  
Alternator 100 A  
Driving halogen lights (2 + 2 pcs) 70 W  
Working halogen lights (6 pcs) 70 W  
LED parking, brake and indicator lights  
LED side lights; amber  
Side reversing halogen lights 70 W  
Rotating beacon; amber  
Wire harness (self extinguishing) with tinned wires and water tight conduits

#### DRIVER'S COMPARTMENT

Open one-man cabin FOPS/ROPS approved  
Cabin lift: + 600 mm  
Cabin tilt: 15°  
Suspended seat for driver  
Seat with retractable lap seat belt  
Driving controls and a set of pedals  
CAN Cockpit, Master Gauge:

- Tacho, rpm
- Operating hours
- Fuel level
- Transmission temperature
- Cooling water temperature

#### GREASING SYSTEM

Centralized grease fittings for the carrier  
Ramlube lubrication system for hammer

#### OTHER

12 kg hand held fire extinguisher  
Standard symbol labels  
Support legs: 4 pcs for scaling with hammer

### Optional equipment

#### SCALING TOOLS

##### Atlas-Copco SB302

- Impact energy 450 J
- Impact rate max. 1300 bpm
- Weight 304 kg

##### Normet pick unit

##### Rotating Normet pick unit

##### Turnable push plate

#### DRIVER'S CABIN

Enclosed cabin, FOPS/ROPS approved

#### ENGINE

Liquid cooled turbo charged Deutz TCD 2012 L6, 155 kW/2300 rpm, TIER 3 approved with Dana 32 000 series power shift

1st gear max.	5 km/h
2nd gear	10 km/h
3rd gear	18 km/h
Max. tractive effort	164 kN

Max speed in 1:7 inclined tunnel

- Fully loaded 8 km/h
- Empty 10 km/h

Performance curve DOC000805

Liquid cooled turbo charged Mercedes-Benz OM 906 LA, 170 kW/2200 rpm, TIER 3 approved with Dana 32 000 series power shift

1st gear max.	5 km/h
2nd gear	10 km/h
3rd gear	19 km/h
Max. tractive effort	172 kN

Max speed in 1:7 inclined tunnel: 7 km/h

Performance curve 100003433

#### EXHAUST SYSTEM

Particle filter for Mercedes-Benz OM 906 LA, 170 kW

#### OTHER

Xenon working lights on cabin (2 + 2 pcs) 35 W

LED driving lights (4 + 2 pcs) 18 W

LED working lights on cabin (2 + 2 pcs) 43 W

Working lights 4 x 500 W

(Only for electrically powered unit)

Warning lights, 1 unit:

- Rotating beacon; red
- Rotating beacon; blue

### Additional equipment

#### HIGH VOLTAGE ELECTRICAL SYSTEM

Electro-hydraulic 55 kW power pack for powering the scaling boom including:

Hydraulically driven cable reel with 100 m cable

#### SCALING TOOLS

##### Normet pick unit

##### Rotating Normet pick unit

Hammer maintenance tools for:

- Rammer BR555
- Atlas-Copco SB302

#### FOR SCALING PROCESS

Dust suppression system with manual water reel

Hose length 30 m

Water tank 200 L

Hydraulically powered 0,4 m<sup>3</sup>/min compressor for air flushing of hammer's tool

Emergency escape system:

Manually triggered, automated conversion from work mode to tramming mode with revved engine and selected reverse gear

#### FOR ENCLOSED CABIN

CD/Radio system

Cabin ventilation:

- Cabin heating
- Air conditioning

#### FIRE SUPPRESSION SYSTEM

Fogmaker: Manually actuated

Fogmaker: Automatically actuated

Ansul: Manually actuated

Ansul: Automatically actuated

Tempus: Manually actuated (Non CE)

#### GREASING SYSTEM

Automatic lubrication system for carrier and Normet boom: Lincoln

#### OTHER

Fast fuel filling system: Wiggins

Extra hand held fire extinguisher (12 kg)

Warning lights, 1 unit:

- Rotating beacon; amber
- Rotating beacon; red
- Rotating beacon; blue
- Strobe light; white

Text labels in: Fin / Por /GB / Swe / Rus / Nor / Ger / Fra / Spa / Ita

2 wheel chocks with brackets

Reversing camera

Scamec 2000 spare wheel

Scamec 2000 spare wheel with rack

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### LTC services

#### SPARE PARTS

**Spare parts package A:** Available for 1000 h of use\*.  
Includes periodical service, most common wearing parts,  
and most critical safety parts

**Spare parts package B:** Available for 3000 h of use\*.  
Includes periodical service, most common wearing parts,  
and most critical safety parts

\* Recommendations are based on average  
hours - can vary a lot depending on work site conditions.

#### TRAINING SERVICES

Available before delivery, at start up and after  
delivery

##### Product training:

Operation and Maintenance

NorSmart

Foundation of electrics, hydraulics  
and mechanics

Audit

##### Process training:

Concrete spraying

Charging

Process audit

#### AUDIT SERVICES

To improve performance of the machines

To improve the performance of your processes

To help improve the quality of maintenance operations

#### SERVICE CONTRACTS

**Spare parts supply programmes**

**Scheduled inspection programmes**

**Supervision programmes**

**Periodic maintenance programmes**

**Machine usage programmes**

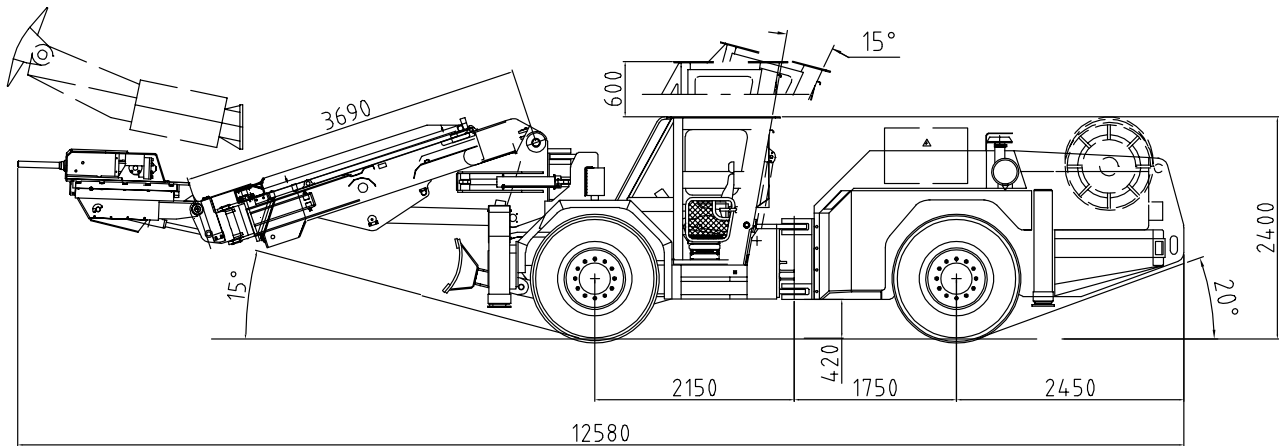
#### LINK ONE

Link One electronic spare part manuals

#### WARRANTY SERVICES

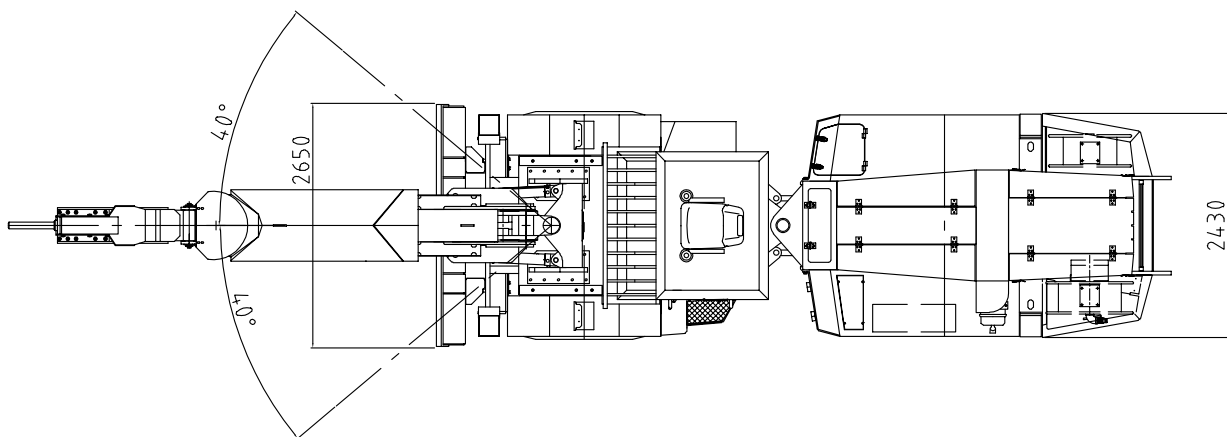
Extended warranty

### Dimensions



#### SIDE VIEW

Basic machine.



#### TOP VIEW

Machine with options and extra equipment.

#### DIMENSIONS

Length	12580 mm
Width	2650 mm
Height (standard)	2400 mm
Wheel base	3900 mm
Ground clearance as shown	420 mm

#### TURNING RADIUS

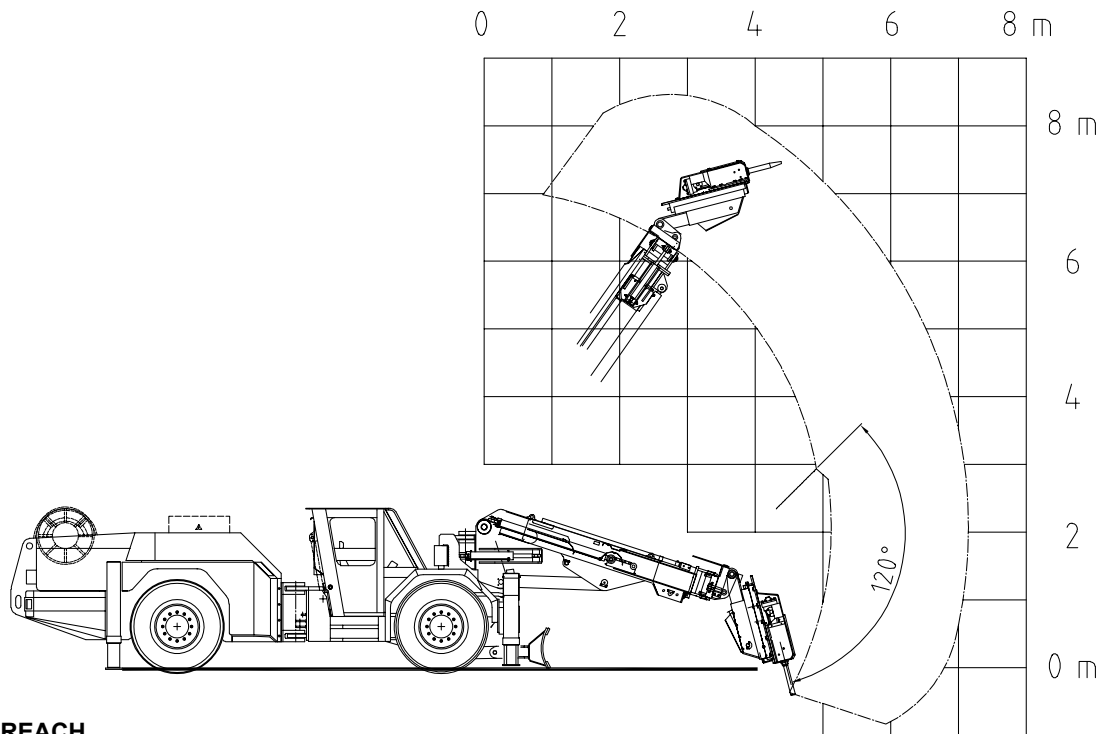
Outer	6790 mm
Inner	4050 mm

#### WEIGHT

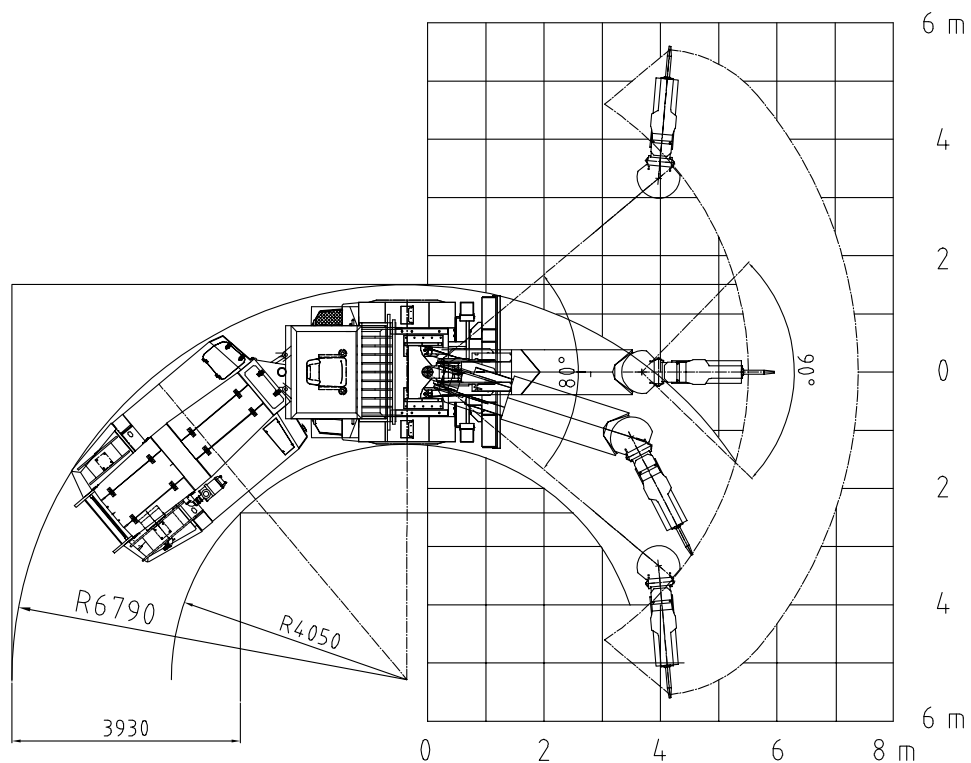
Operating weight:	24 200 kg
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### Dimensions



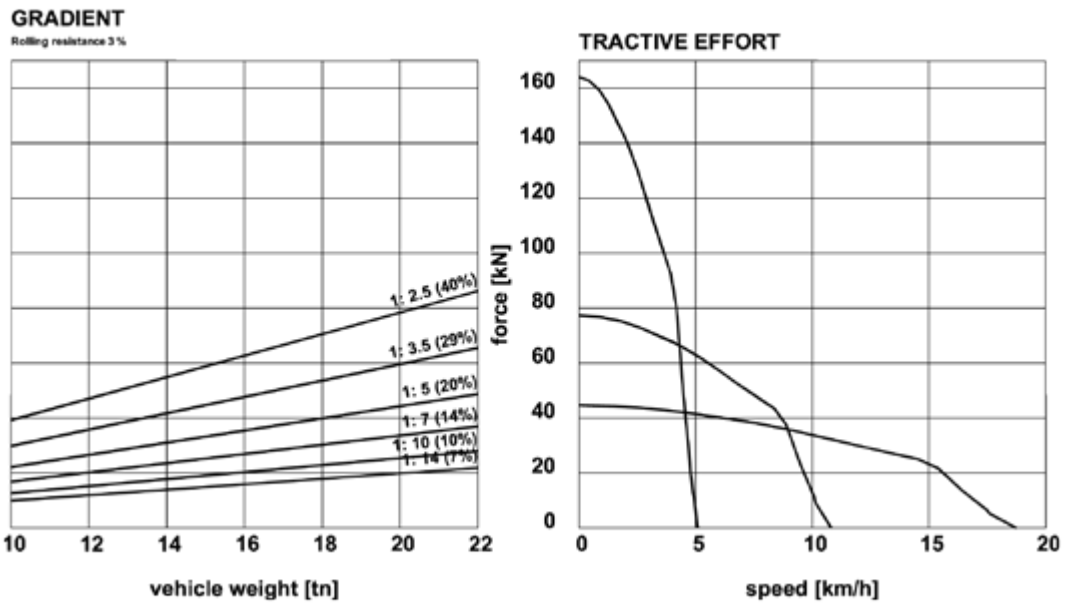
### BOOM REACH



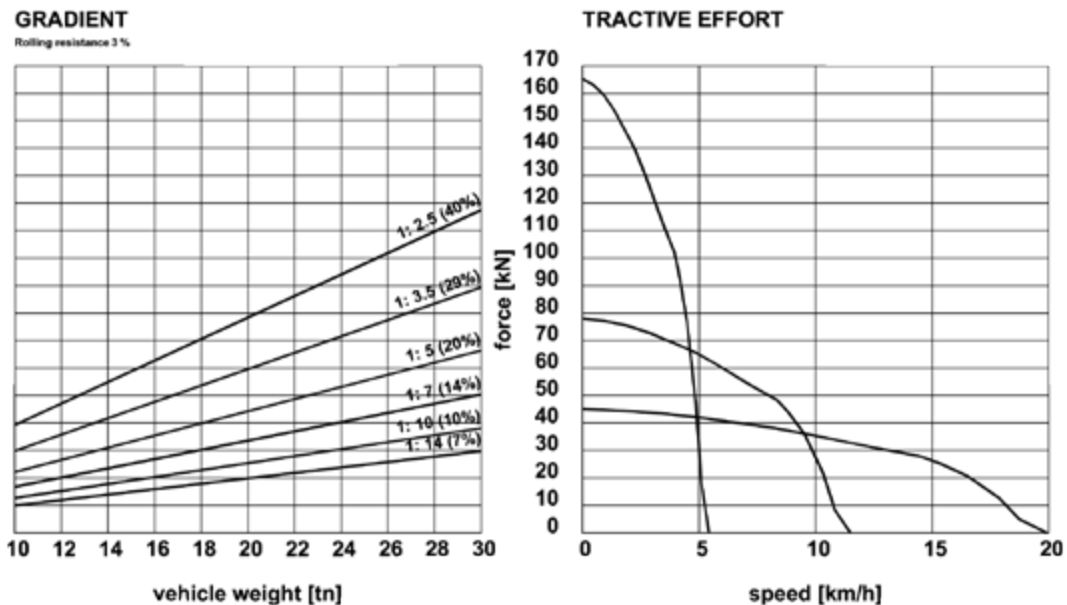
### TURNING RADIUS

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### Tractive efforts



DEUTZ TCD 2012 L6, 155 kW  
Performance curve DOC000805



MERCEDES-BENZ OM 906 LA, 170 kW  
Performance curve 100003433

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