



Pictured machine may include options and additional equipment.

Features

Spraymec MF 050 VC is an electrohydraulic self-propelled mobile concrete sprayer for modern mining operations in small and medium size tunnels. It can be operated either with electric hydraulic power-pack or with diesel engine. It features a new Normet NSP 30 concrete spraying pump with maximum theoretical concrete output of 27 m³/h with electric operation.

Three different accelerator dosing system and concrete pumping control system configurations give possibilities to choose best feature for purpose in question.

Basic version is **Nordoser XH** with mono -style dosing pump and with manual adjustment for dosing and for concrete pumping output volume. Optional dosing system **Nordoser XE** comes with mono -style pump with electronically adjusted concrete output volume control and accelerator dosing is synchronized automatically with concrete output volume. High-end model **Nordoser XI** includes low-pulsation concrete pumping feature and electronically adjusted concrete output volume control together with synchronized accelerator dosing.

All Nordoser models are available with optional low-pulsation Normet peristaltic dosing pump Normet LPP-D and additional process information display in cabin.

New improved cabin has more space for operator and ergonomic drivers place. New dashboard with new LCD multi information display (MID) replaces previous separate gauges.

Improved spraying boom SB 500 B includes strengthened steel structure, modified joints and has larger diameter hydraulic cylinders to give more power for smooth spraying operations.

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

Technical specification

SPRAYBOOM SB 500 B

- Boom rotation 270°
- Boom lifting -20°...+75°
- Boom folding -60°...+165°
- Extension 2200 mm
- Nozzle rotation 420°
- Nozzle tilting 105°

CONCRETE PUMP

Spraypump NSP 30

Low-wear and low-maintenance double piston pump:

- Pumping capacity theoretical with electro-hydraulic 4 - 27 m³/h
- Pumping cylinder diameter 200 mm
- Cylinder stroke 600 mm
- Pumping pressure max. 51 bar
- Hydraulic pressure max. 250 bar

High pumping pressure enables the conveying of stiff concrete

The pump is able to pump up to max. aggregate size of 16 mm (including crushed) and all types of fibres (max. length 60 mm) in the mix

ACCELERATOR SYSTEM

Nordosor XH

Hydraulically driven accelerator mono pump

Max pumping pressure 12 bar

Dozing rate 0.6...16 L/min (36 - 960 L/h)

Manual dosing control, flow L/min and dosing % readable on the display

Manual concrete output control, readable on the display

Hydraulic pilot control system for concrete pump

Accelerator tank 500 L

COMPRESSOR

Electric driven screw type compressor

- 10 m³/min / 7 bar FAD
- 55 kW electric motor

REMOTE CONTROL

10 m cable control with 2 joy sticks as a standard when open cabin

CONCRETE LINE

Left hand side assembly

Concrete line diameter 65 mm

WATER HOSE REEL

Manual, 3/4" hose 30 m

ENGINE

Liquid cooled turbo charged Deutz TCD 2013 L04 2V, 120 kW/2200 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 123

Load end axle fixed

Engine end axle oscillation +/- 10°

TYRES

12.00 - 20 PR 20

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 upward 1:7 inclined tunnel 9 km/h

Performance curve 100018584

BRAKES

Service brake: hydraulically powered two-circuit oil

immersed multidisc brakes in both axles

Safety/Parking brake: spring applied hydraulically released

fail-safe -type brake. Brake test possibility in cabin

STEERING

Hydraulic frame steering

Orbitrol type

Frame articulation +/- 40°

FUEL TANK

Capacity 240 L

HYDRAULIC SYSTEM

Carrier hydraulics:

Variable displacement pump system for carrier and SB 500

B, pump unloaded at start

Pressure setting 210 bar, 130 L/min/2200 rpm

Indication of level, filtration and temperature

Hydraulic oil tank capacity 400 L

Return oil filtration 10 µm

For spraying functions:

Electro hydraulic power pack 55 kW/ 50/60Hz /1500RPM

Variable displacement piston pump systems

unloaded at start:

- 140 L/min for concrete pump (piston type)
- 110 L/min for boom (piston type)
- 24 L/min for agitator and dosing system (gear type)

Technical specification

24 VDC ELECTRICAL SYSTEM

CAN Bus controlled spraying process control system with fault diagnostics

Carrier electric functions NGE2

Exposed components are min IP 65 standard

Battery 2 x 115 Ah

Alternator 100 A

LED driving lights

- Front (4 pcs) 18 W
- Back (2 pcs) 18 W
- Side reversing (2 pcs) 43 W

LED working lights

- On cabin (4 pcs) 43 W
- On boom (2 pcs) 43 W
- On load end (2 pcs) 18 W

LED parking, brake and indicator lights

LED side lights; amber

Rotating beacon; amber

Wire harness (self extinguishing) with tinned wires and water tight conduits

HIGH VOLTAGE ELECTRICAL SYSTEM

400 V / 50 Hz , 3 x 70 mm² + 3 x 16 mm²

Cable lenght 100 m

CABLE REEL

Power supply of the electric functions

Max cable diameter/lenght 3 x 95 mm² + ground / 100 m

Hydraulically driven

Cable in/out reeling function from the cabin and near the the reel

DRIVER'S COMPARTMENT

Open 1-man cabin FOPS/ROPS approved

Suspended driver's seat

Seat with retractable lap seat belt

The driver's compartment with driving controls and two sets of pedals

3 different mounting heights

MID 070 S Multifunctional Display with:

- Meters; e.g. speed, RPM, operating hours
- Status indicators; e.g. fluid levels, temperatures, pressures, alarms, faults

GREASING SYSTEM

Centralized grease fittings for the carrier

OTHER

Hydraulically driven high pressure washer 180 bar / 30 L

12 kg hand-held fire extinguisher

Standard symbol labels

Basic tool set:

- Cleaning plug
 - Washing ball
 - Hitting tool for nozzle
 - Claw coupling
 - Hose clamp
 - Rubber hose 3/4" 4 m
 - Carabiner
 - Wrench for spraymec nozzles
 - Sledgehammer 800g
 - Nozzle tip d45mm plasttic
 - Nozzle tip d45 boron steel
 - cone for concrete piston assembly
 - special bolt for concrete piston assembly
- 3 pcs manuals in one language
3 pcs spare part books (English only)

Optional equipment

ACCELERATOR SYSTEM

Nordoser XE:

Hydraulically driven mono-style dosing pump with electric control

Max pumping pressure 12 bar

Dozing rate 0.6...16 L/min (36 - 960 L/h)

Accelerator flow fully synchronized with the concrete output

Dosing % adjustable from the remote control unit and from the cabin

Hydraulic pilot control system for concrete pump

Concrete output adjustable from the remote control unit and from the cabin

Nordoser XI:

Hydraulically driven mono-style dosing pump with electric control

Max pumping pressure 12 bar

Dozing rate 0.6...16 L/min (36 - 960 L/h)

Accelerator flow fully synchronized with the concrete output

Dosing % adjustable from the remote control unit and from the cabin

Electrical control system for concrete pump with low pulsation pumping feature

Concrete output adjustable from the remote control unit and from the cabin

Normet LPP-D Peristaltic accelerator pump

Accelerator tank 850 L

CONCRETE LINE

Right hand side assembly

Concrete line diameter 50 mm

HIGH VOLTAGE ELECTRICAL SYSTEM

690 V / 50 Hz. Cable type 3 x 50 mm² + 3 x 10 mm²

Cable length 130 m

1000 V / 50 Hz. Cable type 3 x 35 mm² + 3 x 6 mm²

Cable length 150 m

With 1000 V and 690 V electrics it is possible to use longer cable length than 130 m and 150 m. In these cases cable length and size must be checked case by case

440 V, 60 Hz. Cable type 3 x 70 mm² + 3 x 16 mm²

Cable length 100 m

440 V, 60 Hz with 12 m³ compressor. Cable type 3 x 95 mm² + 3 x 16 mm²

Cable length 100 m

COMPRESSOR

Electric driven screw type compressor

• 12 m³/min / 7 bar FAD

• 75 kW electric motor

Requires cable type 3 x 95 mm² + 3 x 16 mm²

Soft start with 400 V / 440 V

DRIVER'S CABIN

Enclosed cabin, FOPS/ROPS

Spraying process controls and boom controls

ENGINE

Liquid cooled turbo charged MB OM 904 LA, 110 kW/2200 rpm, TIER 3 approved:

1st gear max. 6 km/h

2nd gear 13 km/h

3rd gear 25 km/h

Max. tractive effort 120 kN

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

Performance curve 100006272

EXHAUST SYSTEM

Particle filter for Deutz TCD 2013 120 kW

OTHER

Hydraulically operated water reel:

• Hose length max 120 m

• Hose size max 1 1/2"

Must be used with the wall washing system

Additional equipment

Warning lights, 1 unit:

- Rotating beacon; red
- Rotating beacon; blue

REMOTE CONTROL**Radio control with cable support****HIGH VOLTAGE ELECTRICS****Soft start system for compressor:**

- 690 V / 50 Hz

CONCRETE PUMP**Diesel operated concrete pumping with required hydraulics**

- Pumping capacity theoretical with diesel 4 - 19 m³/h
- NOTE: Spraying requires external air supply

Variable displacement pump system for concrete pump, pump unloaded at start

Pressure setting 250 bar, 135 L/min/2200 rpm

Gear pump system for agitator and Nordoser

Pressure relief valve setting 250 bar, 24 L/min/2200 rpm

Common hydraulic tank for all functions

Capacity 400 L

Return oil filtration 10 µm

ACCELERATOR SYSTEM**Extra display for Nordoser in cabin****FORM OIL SYSTEM****Electric driven pump with hose reel:**

- Tank capacity 30 L
- Hose length 20 m
- Working pressure 7 bar

FOR MACHINE AND WALL WASHING**Rock wall washing system 180 bar / 90 L, hydraulic motor driven:**

Can only be used when power pack is connected to the electrical mains

When using this equipment, the vehicle washing is also carried out by this washer. The washing power will automatically adjust to the correct level.

Hydraulically driven water reel must be selected

Wall washing system 180 bar / 90 L/min, piston to piston type hydraulic pump**Wall washing system 460 bar / 50 L/min****SUSPENSION****Front axle suspension system**

- Hydraulic front support legs

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****GREASING SYSTEM****Automatic greasing system (Lincoln) for the concrete pump****Automatic greasing system (Lincoln) for the carrier and spray boom****OTHER****Fast fuel filling system: Wiggins****Oil evacuation kit with sample points****Extra hand held fire extinguisher (12 kg)****Hydraulic front support legs****Warning lights, 1 unit:**

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

Text labels in: Fin / En / Por / Swe / Rus / Nor / Ger / Fra / Spa / Ita**Tools for maintenance****2 wheel chocks with brackets****Spare wheel with tyre**

LTC services

SPARE PARTS

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

Spare parts package B: Available for 3000 h of use*. Include 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.

NOTE! after/during Start up / Commissioning as additional training days these are cheaper.

In general training reduces operation costs.

Product training:

Operation and Maintenance

NorSmart

Foundation of electrics, hydraulics and mechanics

Audit

Process training:

Concrete spraying

Charging

Scaling

Process audit

AUDIT SERVICES

To improve machines performance

To improve your processes performance and quality

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

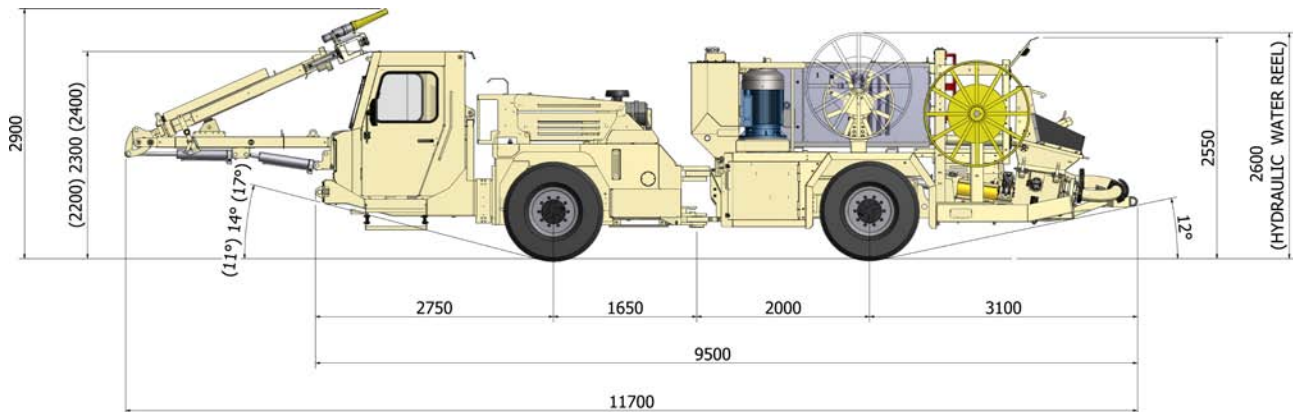
Extended warranty

normet

Spraymec MF 050 VC

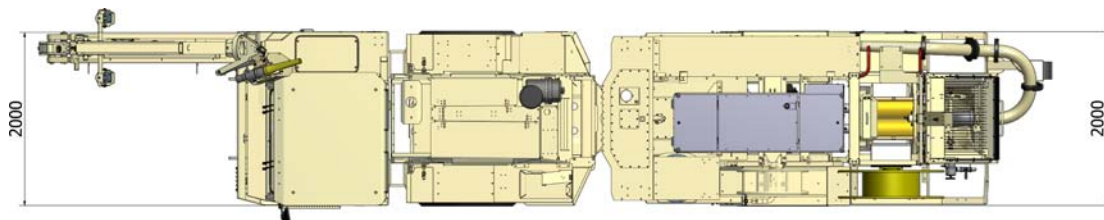
Technical data sheet
100068557
07.10.2014

Dimensions



SIDE VIEW

Machine with enclosed cabin



SIDE VIEW

DIMENSIONS

Length	11 700 mm
Width as shown	2000 mm
Height	2550 (2600) mm
Wheel base	3650 mm
Track	1650 mm
Ground clearance as shown	320 mm

TURNING RADIUS

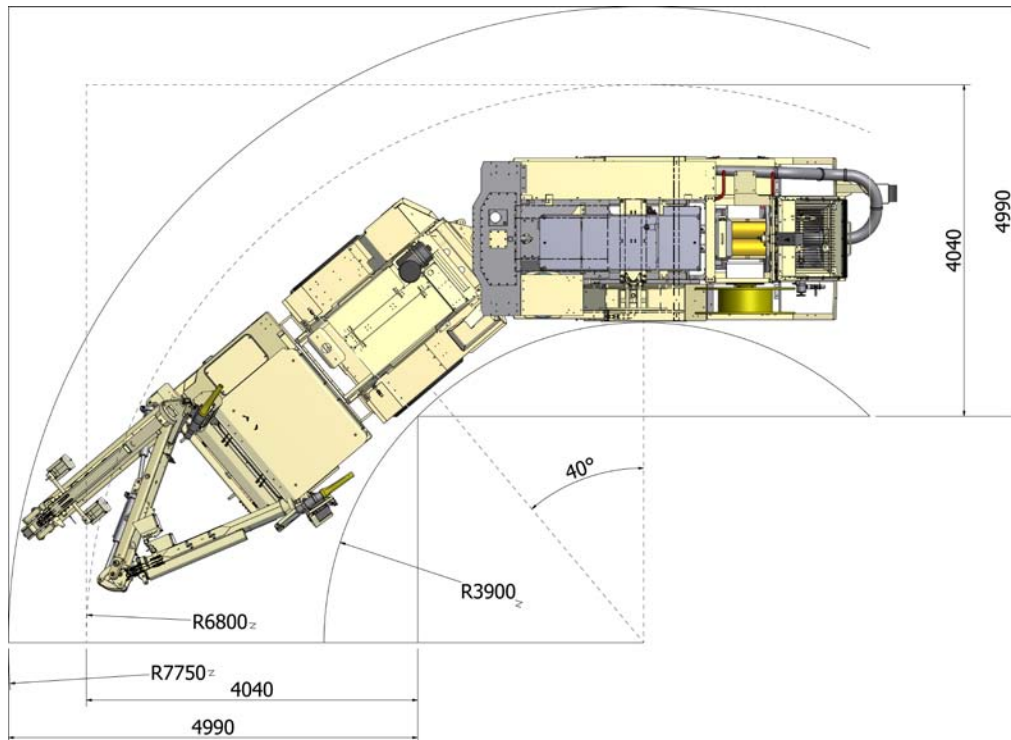
Outer	6800 mm
Inner	3900 mm

WEIGHT

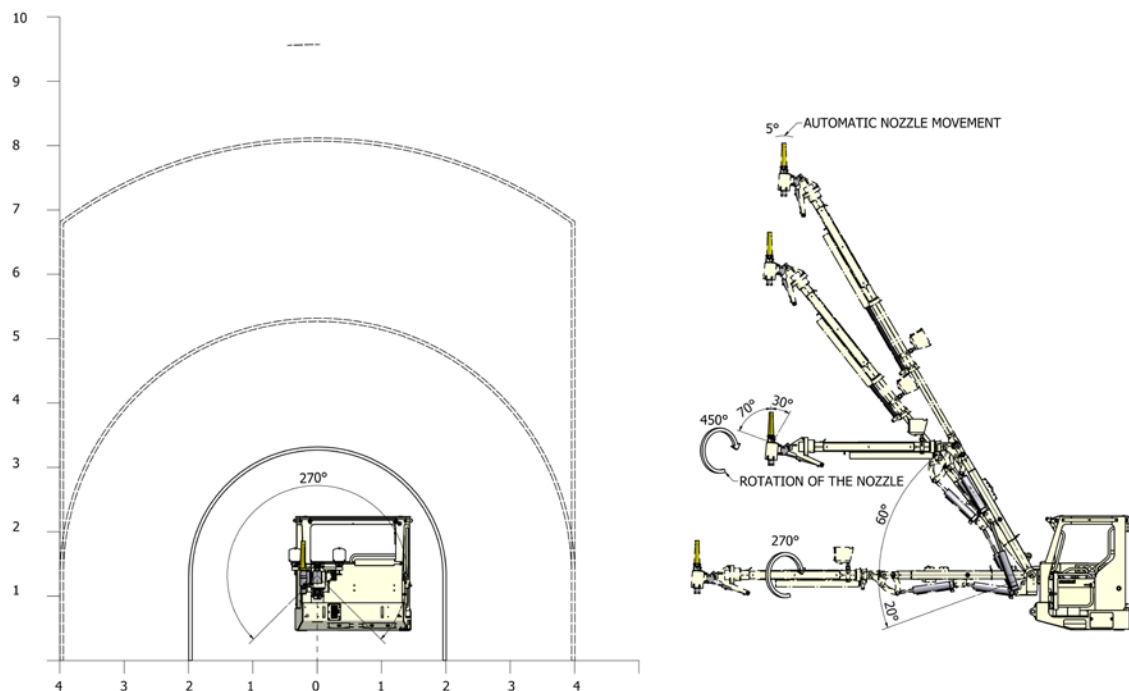
Operating	18 000 kg
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Normet reserves the right to change this specification without further notice.

Dimensions



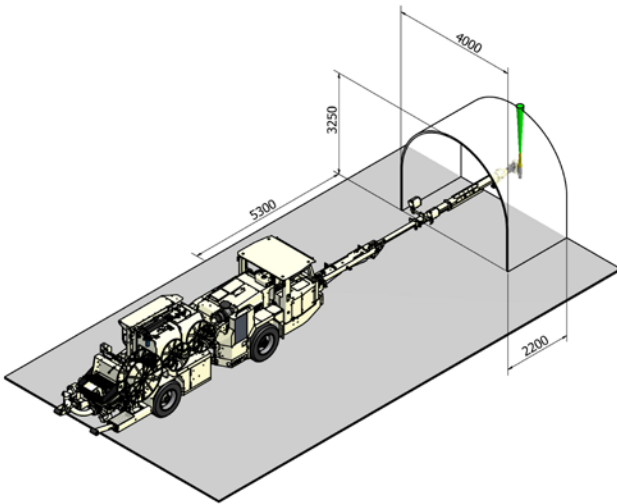
TURNING RADIUS



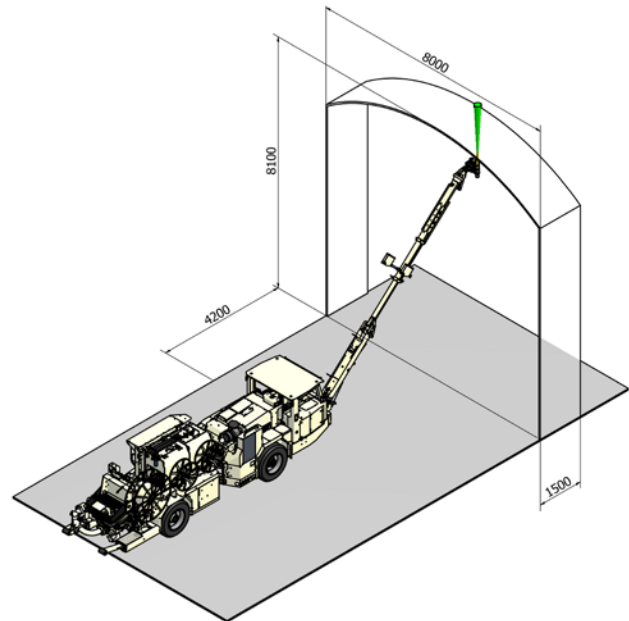
SB500 B BOOM MOVEMENTS AND REACH AREA

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

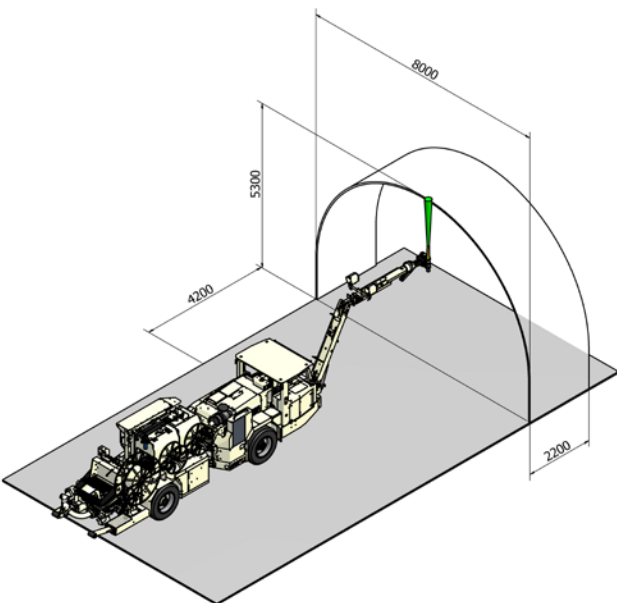
Dimensions



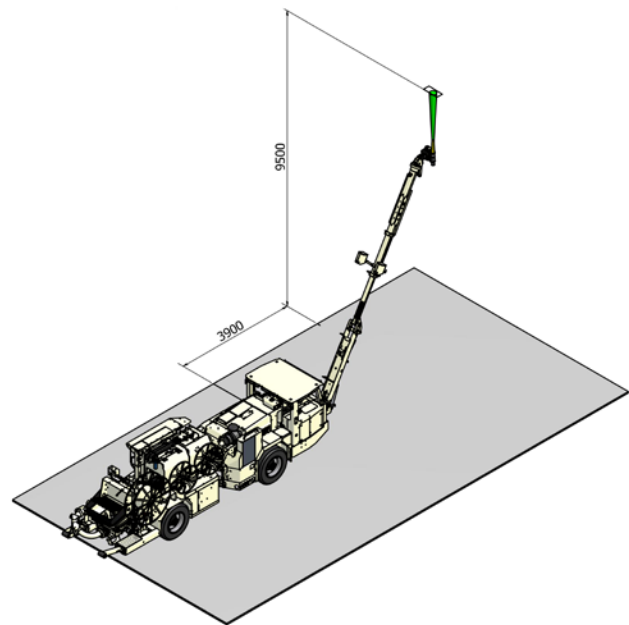
MINIMUM SPRAYING AREA



MAXIMUM SPRAYING AREA



OPTIMAL SPRAYING AREA



SPOT SPRAYING REACH

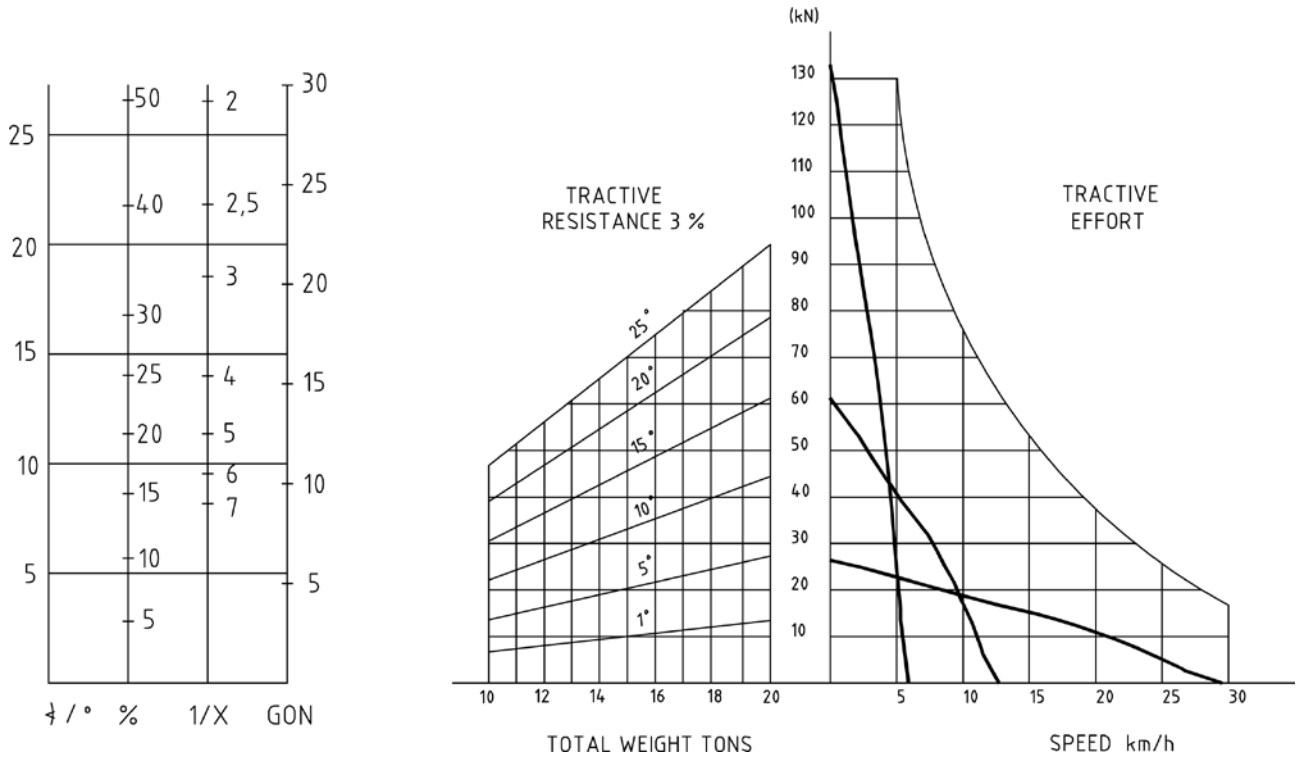
SPRAYING AREAS

Spraying area from one stand with:

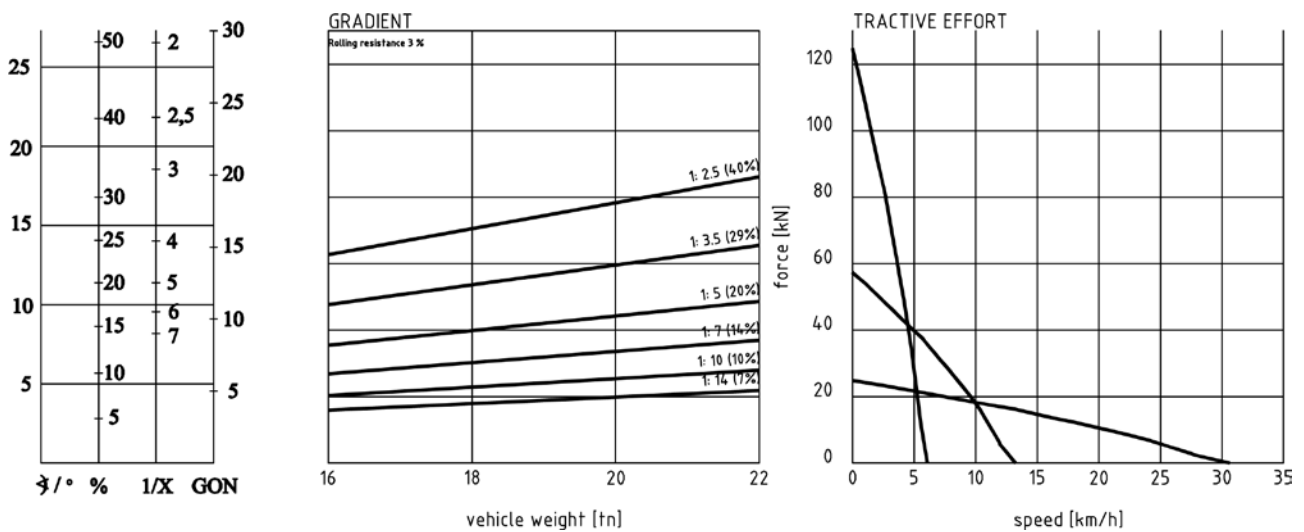
- maximum tunnel size 33 m²
- minimum tunnel size 19,3 m²
- optimized tunnel size 32,8 m²

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Tractive efforts



DEUTZ TCD 2013 L4 120 kW
Performance curve 100018584



MERCEDES-BENZ OM 904 LA 110 kW
Performance curve 100006272