



This image includes options and extra equipment.

Features

Alpha 20 is a robust shotcrete sprayer, diesel hydraulically driven with a large concrete pumping capacity, the main characteristics of this equipment is the high reliability and the easily and low cost maintenance. The boom is designed for an optimum application of wet shotcrete, with a maximum reach of 7 meters. The concrete pump BS7622 has been specially engineered to work with shotcrete and has a theoretical capacity of 18 m³/h.

The analog additive dosing system based on a peristaltic pump hydraulically driven, the additive tank is done in stainless steel 400 L capacity, this combination ensure a long life time of the dosing system even with the most corrosive admixtures. The spraying process can be done from the radio remote control unit, which let the operator control all the functions involved on the spraying process at a safe distance.

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

Technical specification

SPRAYBOOM

Automatic functions:

- Nozzle rotation

The speed of the movements can be adjusted from the radio remote control

All the movements are pressure compensated and have a proportional output

Boom coverage for tunnels up to 5 m x 5 m

- Nozzle rotation 360°
- Nozzle tilt 120°
- Automatic orbitor 10-50 rpm

CONCRETE PUMP

Semmco model BS 7622

- Concrete cylinders 152 x 760 mm
- Hydraulic cylinders 45/90 mm
- Cylinder stroke 762 mm
- Theoretical maximum output 18/20 m³/h

RADIO REMOTE CONTROL SYSTEM

Following features can be adjusted or switched on/off from the control box:

- Accelerator dosing rate
- Accelerator pump on/off
- Concrete pump on/off/reverse
- Nozzle rotation on/off

ACCELERATOR SYSTEM

Hydraulically driven Peristaltic pump

Max. pumping pressure 7 bar

Dosing rate 0.5...16 L/min (30 - 960 L/h)

Additive tank capacity 400L Stainless steel.

CONCRETE LINE

Concrete line diameter 65 mm

DIESEL ENGINE

- Deutz BF4M1013C water cooled ecological diesel engine 109 Kw @ 2300 rpm

DRIVER'S COMPARTMENT

Open 1-man canopy.

The driver's compartment with driving controls and pedals.

EXHAUST SYSTEM

Catalytic exhaust gas purifier and muffler

TRANSMISSION

Hydrostatic 4-wheel transmission

Variable piston pump 56 cm³

Fixed piston motor 75 cm³

AXLES

Planetary type

Dana 212

Rear end axle fixed

Boom end axle oscillation +/- 7°

PERFORMANCE

Max. speed (horizontal tunnel) 14 km/h

BRAKES

Service brake: hydraulically powered two-circuit oil-immersed multi-disc brakes in both axles

Safety/Parking brake: spring-activated, hydraulically released, fail-safe-type brake.

STEERING

Four-wheel steering as standard

Orbitrol type

Including crabwalk

FUEL TANK

Capacity 100 L. Stainless steel

DIESEL HYDRAULIC POWER

Hydraulic pump for boom Variable displacement

Hydraulic pump for concrete pumping, Fixed displacement

Hydraulic pump for tramming Hydrostatic

Hydraulic motor for tramming Hydrostatic

24 VDC ELECTRICAL SYSTEM

Battery 2 x 80 Ah

Alternator 55 A

WORKING LIGHTS

2 pcs on boom

1 pc over the concrete pump

CHASSIS

- 4 X 4 hydrostatic transmission.

- Spicer steering axles, front and rear

- Service and parking brakes

REMOTE CONTROL

Wireless remote control

Hetronic.

Joysticks for proportional movements

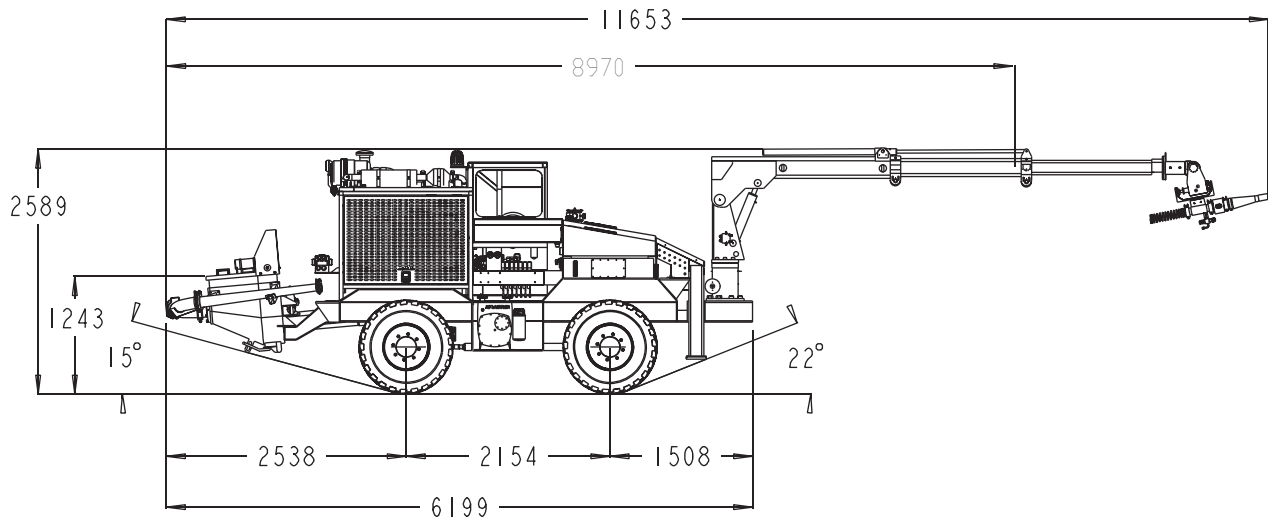
Hetronic.

Control for concrete pumping

Hetronic

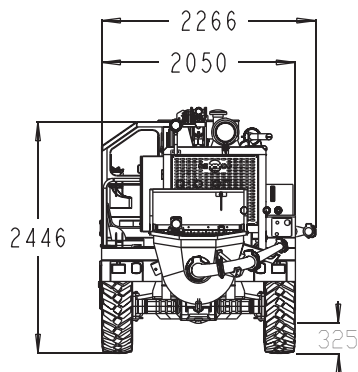
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DIMENSIONS



SIDE VIEW

Basic machine. Driving dimensions at job site.



FRONT VIEW

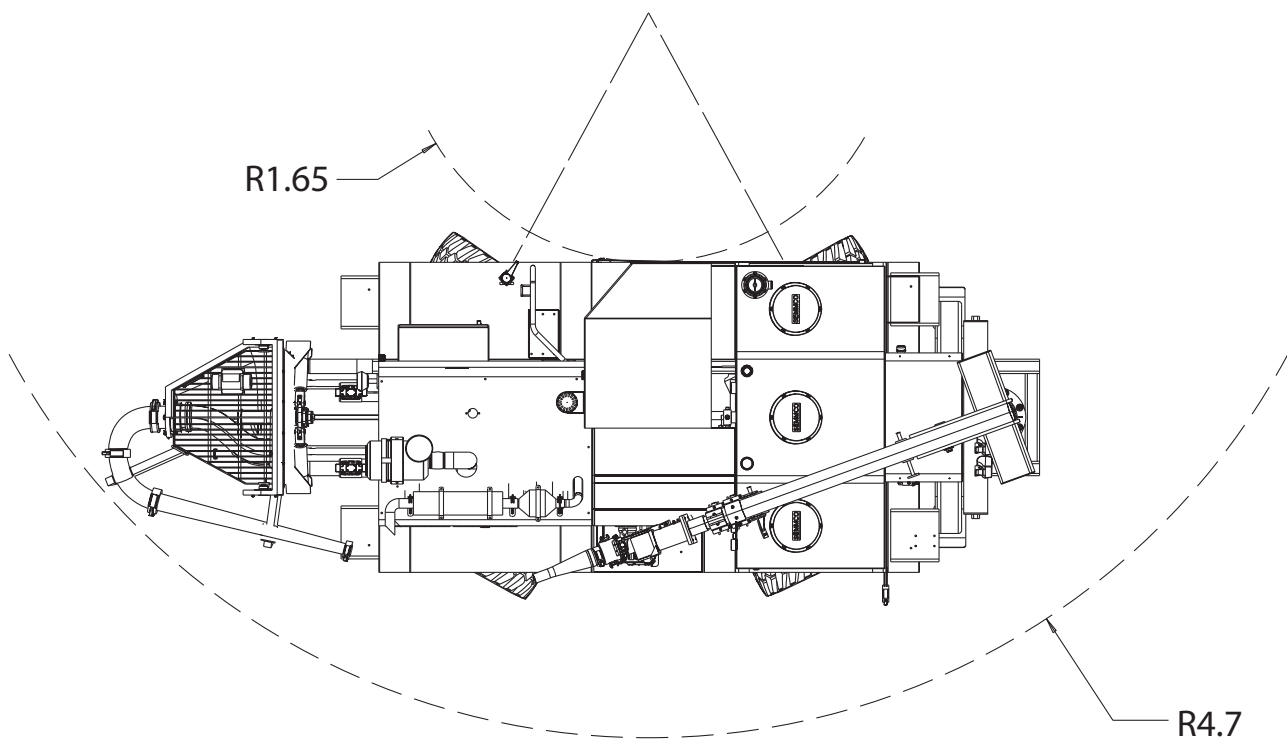
Basic machine. Driving dimensions at job site.

DIMENSIONS

Height	2589 mm
Width	2266 mm
Length	8970 mm
Weight	7500 kg

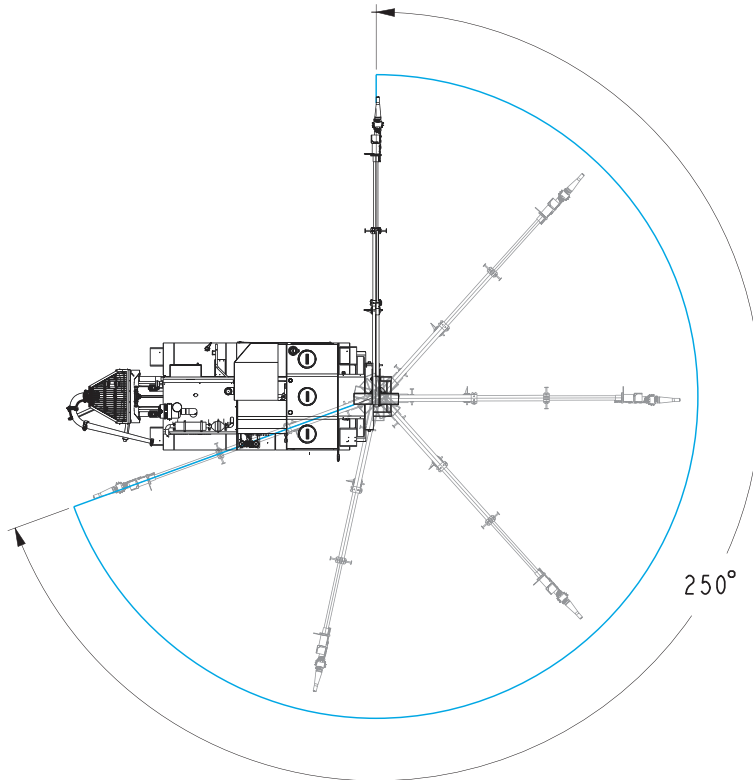
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TURNING RADIUS

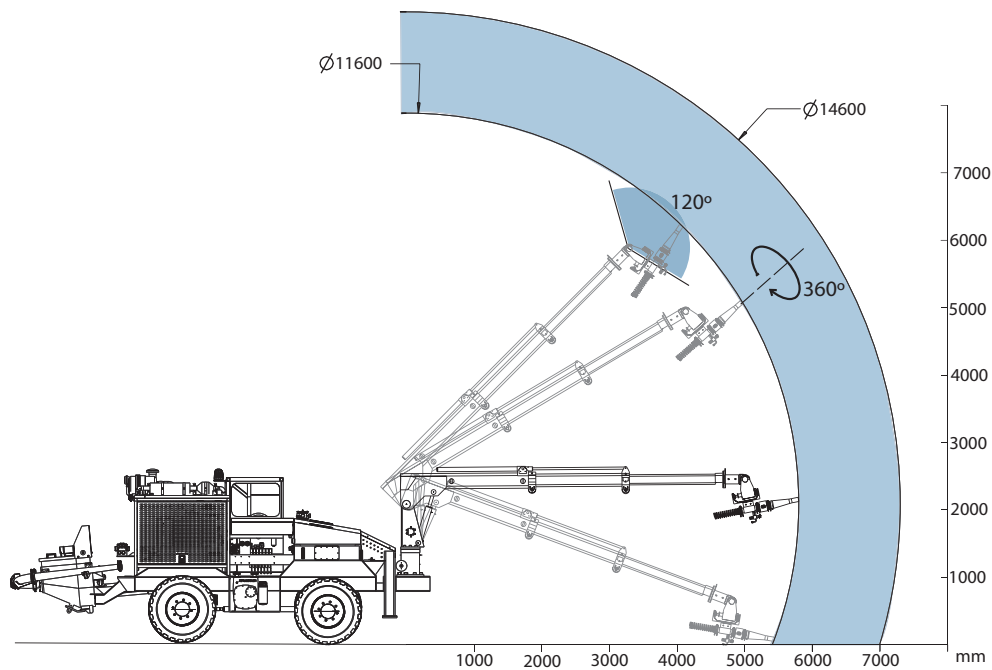


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COVERAGE



HORIZONTAL COVERAGE



VERTICAL COVERAGE

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