



## UNI 50-3 BS

Compact carrier vehicle as concrete sprayer for use in underground mining

- Concrete spraying machine with manipulator
- Flexible boom
- Large range

## DEFINITION OF OPTION / OPTIONAL EQUIPMENT

13667-2

In the following, the selectable equipment of the machine is identified by the terms "option" or "optional equipment."  
The option describes equipment that can be selected in addition to the standard machine.  
The optional equipment describes equipment that replaces other equipment on the machine.

## KEY FEATURES OF THE MACHINE

13462-1

Compact carrier vehicle as concrete sprayer for use in underground mining

## SAFETY

13369-4

All machines are designed and manufactured in accordance with the applicable legal requirements. They offer a correspondingly high level of safety for users.

Some safety features at a glance:

- ROPS/FOPS protective canopy
- Battery main switch, lockable
- Emergency stop button: one in the driver's cab, two outside
- Automatic shutdown when engine-specific parameters are exceeded
- Audible reverse signal
- 3-point safety entry
- Non-slip and color-contrasting entrances and exits
- Articulation lock
- Connector protected against moisture
- Brake test function

In the event of operator absence, the following happens automatically if the door contact switch is activated:

- Travel drive gear shift in neutral position
- Parking brake is activated
- Steering is deactivated

## OPERATING CONDITIONS

12998-5

Permitted ambient temperature \* -20 °C to +40 °C

*\* Observe the cold start limit temperature of the engine*

Permitted longitudinal inclination, maximum 35 %

Operating height without power reduction, maximum < 1,500 m

## WEIGHTS AND LOADS

13463-1

Operating weight \* 13,000 kg

Permitted front axle load, maximum 9,000 kg

Permitted rear axle load, maximum 4,000 kg

*\* Depends on selected options and optional equipment*

## CHASSIS

13293-1

Articulation angle, maximum ±10°

- Split chassis with articulated steering
- Fixed front axle and oscillating rear axle

## ENGINE

13296-4

### DEUTZ TCD 2013 L04 2V diesel engine

Manufacturer	DEUTZ
Type	TCD 2013 L04 2V
Emission standard EU	Stage III A
Emission standard USA	EPA Tier 3
Output	126 kW
At speed	2,300 rpm

## Technical data

4410-00-175 - 18.04.2026

Alternator	28 V 80 A
------------	--------------

Starter motor	24 V 4 kW
---------------	--------------

Cold start limit temperature	-15 °C
------------------------------	--------

- Catalytic converter with measuring points
- Fuel prefilter and fuel fine filter with water separator
- Manual fuel feed pump
- Dry air filter with pre-separator
- Liquid-cooled

### FUEL SYSTEM

13307-1

Fuel tank capacity	125 L
--------------------	-------

- Electric level indicator
- Shut-off valve to prevent fuel leakage in the event of a hose breakage

### DRIVE

13311-1

Manufacturer	DANA
--------------	------

Type	24300
------	-------

Travel speed:

1st gear	5 km/h
----------	--------

2nd gear	10 km/h
----------	---------

3rd gear	25 km/h
----------	---------

Tractive force (loaded):

1st gear	130 kN
----------	--------

2nd gear	60 kN
----------	-------

3rd gear	26 kN
----------	-------

Climbing power (loaded):

1st gear	97 %
----------	------

2nd gear	34 %
----------	------

3rd gear	14 %
----------	------

- Hydrodynamic travel drive
- "Full power shift" transmission
- Three forward and reverse gears
- Single-stage torque converter
- Drive reversible under load
- Continuous all-wheel drive

### AXES

13315-1

Manufacturer	DANA
--------------	------

Front axle type	113
-----------------	-----

Front axle differential	Open
-------------------------	------

Rear axle type	113
----------------	-----

Rear axle differential	Open
------------------------	------

### SERVICE BRAKE

11330-3

- Hydraulic foot brake as 2-circuit external force brake system
- Wet brake in oil bath

### PARKING BRAKE

11332-1

- Spring tensioned, hydraulically released (SAHR)
- Manual pump to release the brake in case of system failure

### EMERGENCY BRAKE

13234-1

- The parking brake also acts as an auxiliary brake

### TIRES

13323-1

Tire size	12.00x20
-----------	----------

## Technical data

4410-00-175 - 18.04.2026

Tire filling Air

- Single tires with inner tube

### TIRES (OPTIONAL EQUIPMENT)

13325-1

Tire size 12.00x20

Tire filling Air

- Single tires without inner tube

### STEERING

13318-1

- Hydraulic articulated steering with two double-acting hydraulic cylinders
- Steering wheel steering
- Emergency steering

### HYDRAULICS

13467-1

1. Hydraulic tank capacity 120 L

2. Hydraulic tank capacity 100 l

- 1. Hydraulic tank for the compressor drive, working hydraulics, steering system and brake system
- 2. Hydraulic tank for the concrete pump drive
- Inspection gauges for min/max level display
- Electric level indicator
- Temperature sensor
- All fittings as JIC version

### HYDRAULICS (OPTIONAL)

13376-1

- Manual pump for filling the hydraulic fluid reservoir
- Electric pump for filling the hydraulic fluid reservoir

### ELECTRICAL SYSTEM

13237-1

Operating voltage 24 V

Number of batteries 2 pcs.

Battery voltage 12 V

Battery charge 155 Ah

### ELECTRICAL SYSTEM (OPTIONAL)

12822-3

- Jump start socket
- Enhanced sealing of the connectors with grease filling and sealing tape

### LIGHTING

13469-2

All headlights and lights as LED variants:

- Two main headlights at the front, with high beam, low beam, parking light and turn signals
- Two working lights at the rear of the cabin
- Two tail lights with tail light, brake light, reversing light and turn signals
- Two additional reversing lights
- One yellow flashing light
- Two working lights on the boom
- Two working lights at the rear of the machine

### LIGHTING (OPTIONAL)

13375-2

- Direction indicators red / green, front / rear
- Two impact lights in the articulated joint area
- Two additional working lights on the front of the cabin
- Blue rotating flashing beacon / flashing lights \*
- Red rotating flashing beacon / flashing light \*

\* Maximum of two lights possible

### CAB

13329-7

#### Driver's seat and passenger seat

- Lap belt
- Vinyl cover
- Adjustable backrest and seat surface
- Height adjustable
- Mechanical suspension

#### Open cabin

- Open cabin with half doors
- Exit on both sides
- Storage under the passenger seat
- Windshield made of laminated safety glass
- Wiper/washer system for windshield
- Interior lighting
- Reading light
- Ventilation for windshield
- Two mirrors
- Document box
- All drive relevant switches, displays and operations are located within reach of the operator
- Information display for all engine-specific data

#### DRIVER'S CAB (OPTIONAL EQUIPMENT)

13353-6

- Mechanically sprung seats for driver and passenger with 3-point harness and seatbelt monitoring
- Air-sprung seats for driver and passenger with 3-point harness and seatbelt monitoring
- Heated exterior mirrors
- WEBASTO water heater

#### Rotating driver's seat

- Rotates 90° for better rear view
- Brake pedal, accelerator pedal and gear shifting controls are also rotated
- Mechanical locking mechanism

#### Enclosed cabin

- Enclosed cabin with doors and sliding windows
- Exit on both sides
- Storage under the passenger seat
- Windshield made of laminated safety glass
- Wiper/washer system for windshield
- Interior lighting
- Reading light
- Heater with ventilation and filter
- Two mirrors
- Document box
- All drive relevant switches, displays and operations are located within reach of the operator
- Information display for all engine-specific data

13354-5

#### DRIVER'S CAB(OPTIONAL)

- Air conditioning system
- Rearview camera system or 4-camera system
- Vandalism protection
- Activation of the parking brake when the travel drive is in the neutral position for longer than 3-4 seconds
- Tire pressure monitoring
- Dead man's switch for driving mode
- Electric emergency steering
- Engine start warning
- Holder for self-rescuer
- Second passenger seat \*

\* *Not possible with rotating driver's seat*

#### Radio preparation

- Ignition voltage
- Battery voltage
- Vehicle mass

#### CAN bus interface preparation

- Ignition voltage
- Battery voltage
- Vehicle mass
- CAN High
- CAN Low

## SUPERSTRUCTURE

13475-4

### Telescopic spraying arm with manipulator

- Hydraulically driven by the diesel engine
- Rotary column of the spraying arm mounted on a console at the front of the machine
- Telescopic boom at the upper end of the rotary column
- Manipulator at the free end of the telescopic boom

### Telescopic boom

- Lifting, lowering and telescopic extension with hydraulic cylinders
- Guard plates against rebounding material

### Manipulator

Pendulum nozzle, articulation angle	8 °
Angle of rotation	240 ° / 360 °

- Two swivel motors for the manipulator movements
- Hydraulic motor for the permanent drive of the pendulum nozzle

### Concrete pump

Delivery rate at 50 bar	0-11 m <sup>3</sup> /h
Delivery rate at 25 bar	0-20 m <sup>3</sup> /h

Grain size for concrete sprayers, maximum	8 mm
---	------

Grain size for concrete pumps, maximum	32 mm
--	-------

- Hydraulic piston pump driven by the diesel engine
- Electric vibrator on the hopper
- Cleaning sleeve on the pressure port of the pump

### Centralized lubrication system

- Central lubrication system for the concrete pump
- Active when the concrete pump is in use

### Compressor

Delivery quantity	8.0 m <sup>3</sup> /min
Operating pressure	10 bar

- Screw compressor
- Hydraulically driven by the diesel engine
- Load control
- Compressed air connection IN/OUT

### Metering pump for curing accelerator

Automatically adjustable delivery rate	20-700 l/h
--	------------

- Peristaltic pump
- Hydraulically driven by the diesel engine
- For various liquid additives
- Switchable, for suction from external containers
- Switchable, for filling the tank for the curing accelerator

### Automatic metering system

- Setting the mixing ratio between additive and concrete quantity on a display
- Automatic regulation of the mixing ratio during operation in the event of changes to the concrete quantities using a controller
- Monitoring in the event of malfunctions

### Tank for curing accelerator

Tank capacity	500 l
---------------	-------

- Stainless steel tank
- With level monitoring

## Technical data

4410-00-175 - 18.04.2026

### Control system

- Operation of the concrete spraying device with remote control operation
- Remote control operation can be connected to 20 m cable
- Emergency operation in the event of control system failure
- Emergency operation directly on the directional control valves on the boom

### Pressure washer

Operating pressure	200 bar
Hose length	20 m

- Hydraulically driven by the diesel engine
- Spring hose reel with hose
- Spray lance
- Pressure washer can be switched to water pump

### Water tank

Tank capacity	200 l
---------------	-------

- Stainless steel tank

### Anti-adhesive sprayer

Tank capacity	10 l
---------------	------

- For manual application of non-stick agent
- Backpack design with two padded carrying straps, quick-release system and back support
- Stainless steel tank

### Tool

- Two special locksmith's hammers 500 g
- A sealing plug for reverse cleaning
- Three cleaning balls

### Front supports

- Two supports in front of the front wheels of the machine
- Vertically extending
- With hose rupture protection

### SUPERSTRUCTURE (OPTIONAL)

13477-1

#### Water hose reel

Hose length	50 m
Hose diameter	DN 20

- Hose reel with manual hand crank winding
- For connection to the pit network for cleaning the concrete spraying system

#### Anti-adhesion spray device

Tank capacity	40 l
Hose length	20 m

- For manual application of non-stick agent
- Spring hose reel with hose
- Spray lance
- Stainless steel tank

### FIRE PROTECTION

12818-6

- Handheld fire extinguisher

### FIRE PROTECTION (OPTIONAL EQUIPMENT)

12993-3

- HRD fire suppression system (PROTECFIRE) with manual trigger and dry chemical extinguishing agent
- HRD fire suppression system (PROTECFIRE) with automatic trigger and dry chemical extinguishing agent
- HRD fire suppression system (ANSUL) with manual trigger and wet agent solution
- HRD fire suppression system (ANSUL) with automatic trigger and wet agent solution
- Portable fire extinguisher (ANSUL) with 7.7 kg of dry chemical extinguishing agent

## Technical data

4410-00-175 - 18.04.2026

### FIRE PROTECTION (OPTIONAL)

13365-1

- Additional handheld fire extinguishers
- \* Type depends on the handheld fire extinguisher selected*

### PAINTWORK

13366-1

Color of cabin / driver's cab	RAL 7016
Chassis color	RAL 1007

### ACCESSORIES

12249-5

- Two wheel chocks
- Two hazard warning triangles
- Tool bag
- Safety helmet and hearing protection
- First aid kit

### ACCESSORIES (OPTIONAL)

13368-1

- Spare rim
- Spare tire
- Expanded tool kit
- Central lubrication system on basic vehicle
- Deflector for windshield and mirror as tubular construction

### DOCUMENTATION

11344-3

- A printed operating manual in the local language in the document box
- Operating manual, spare parts list and circuit diagrams in electronic form via online access

### DOCUMENTATION (OPTIONAL)

12825-4

- An additional operating manual in local language, in printed form, included with the machine
- A spare parts list in local language or English, in printed form

### MAINTENANCE KITS (OPTIONAL EQUIPMENT)

12824-3

- Service package, 2000 operating hours
- Service package, 3000 operating hours
- Service package, 5000 operating hours

### PAUS CONNECT CLOUD (OPTIONAL)

11355-8



The PAUS CONNECT CLOUD collects and visualizes data, messages or location information of the machine. The data is transmitted to the cloud using a built-in telemetry unit.

## Technical data

4410-00-175 - 18.04.2026

Your advantages:

- Faster service
- Lifecycle cost management
- Data transmission via existing wi-fi and/or cellular networks
- Data buffering of all data in case of no connectivity (up to 30 days)
- Access to the PAUS CONNECT CLOUD
- Remote diagnostics/remote maintenance
- Statistical usage analysis
- Vibration monitoring
- Individual evaluation and statistics

11353-2

### CUSTOMER SERVICE

Repair work and maintenance work are central points in customer support. Here, PAUS is broadly positioned and offers its customers and dealers worldwide an extensive service program. Trained employees are available on our service hotline, as are competent contact persons at our local dealers.

11354-2

### SPARE PARTS

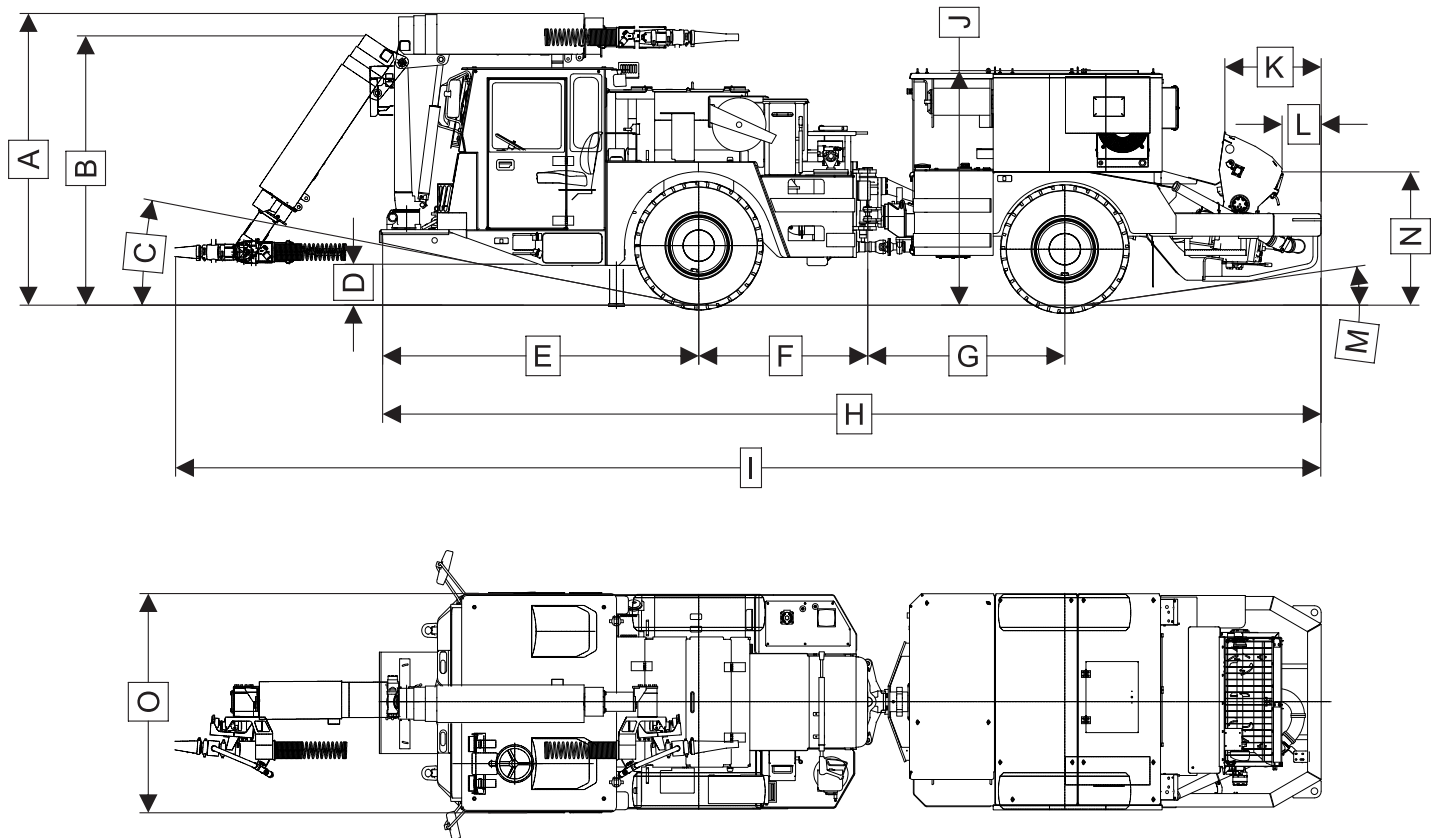
We attach great importance to a high level of availability of PAUS spare parts. In addition to maintenance and service parts, which are available at any time, customers and dealers are able to purchase spare parts for engines, axles, transmissions, etc. easily and quickly through us. Benefit from our online catalog with refined spare parts lists.

# Technical data

4410-00-175 - 18.04.2026

## DIMENSIONS

11255-3



840107-02

*The illustration may differ from the scope of delivery*

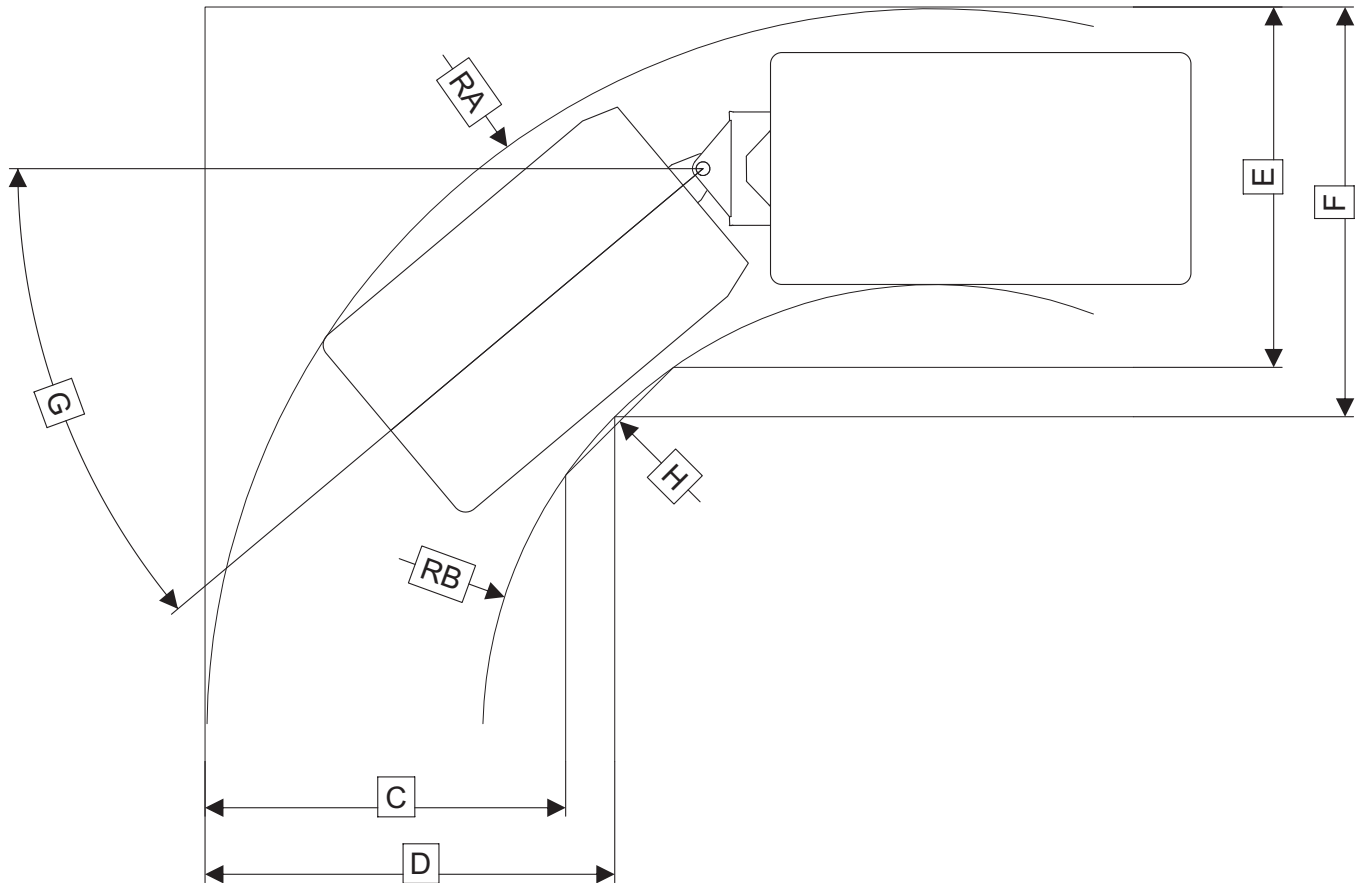
Dimension	Value	Unit
A	2,650	mm
B	2,400	mm
C	11	°
D	350	mm
E	2,850	mm
F	1,500	mm
G	1,750	mm
H	8,400	mm

## Technical data

4410-00-175 - 18.04.2026

Dimension	Value	Unit
I	10,500	mm
J	2,130	mm
K	850	mm
L	345	mm
M	8	°
N	1,200	mm
O	1,900	mm

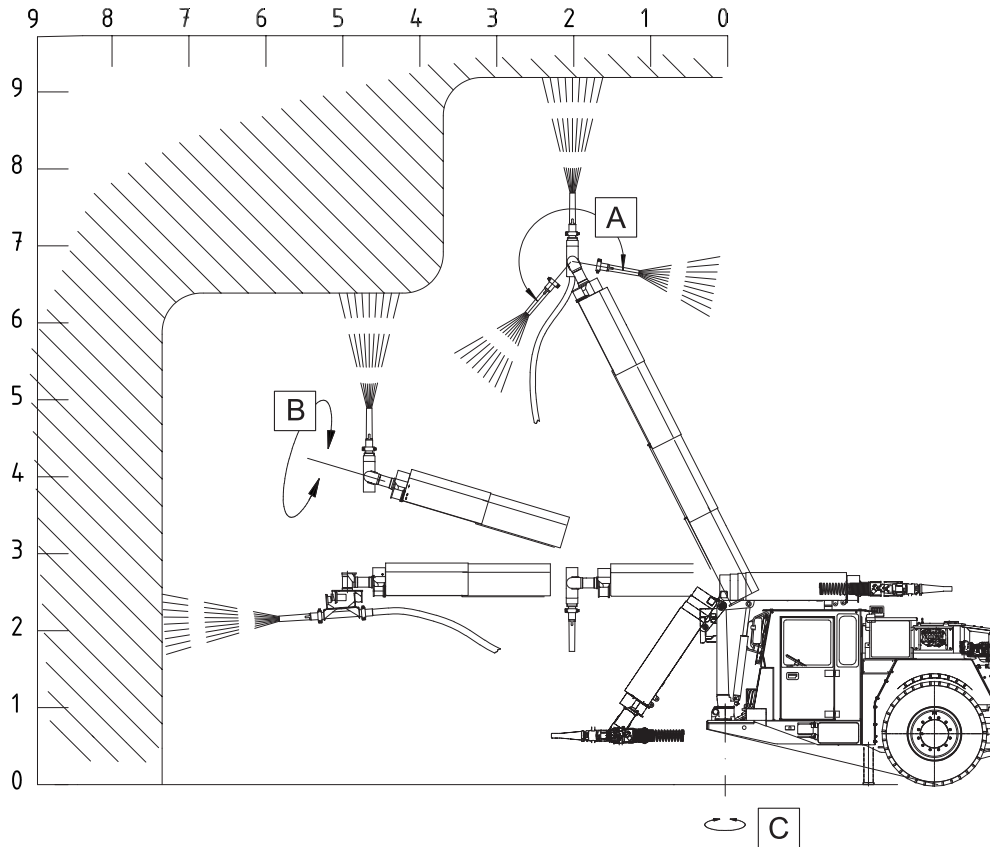
## TURNING RADII



*The illustration may differ from the scope of delivery*

Dimension	Note	Value	Unit
RA		5,950	mm
RB		3,400	mm
C		3,000	mm
D		3,500	mm
E		3,000	mm
F		3,500	mm
G	Steering angle, maximum	40	°
H	Beveled corner	1,000x45°	mm

## WORKING AREA OF SIDE SPRAYING ARM

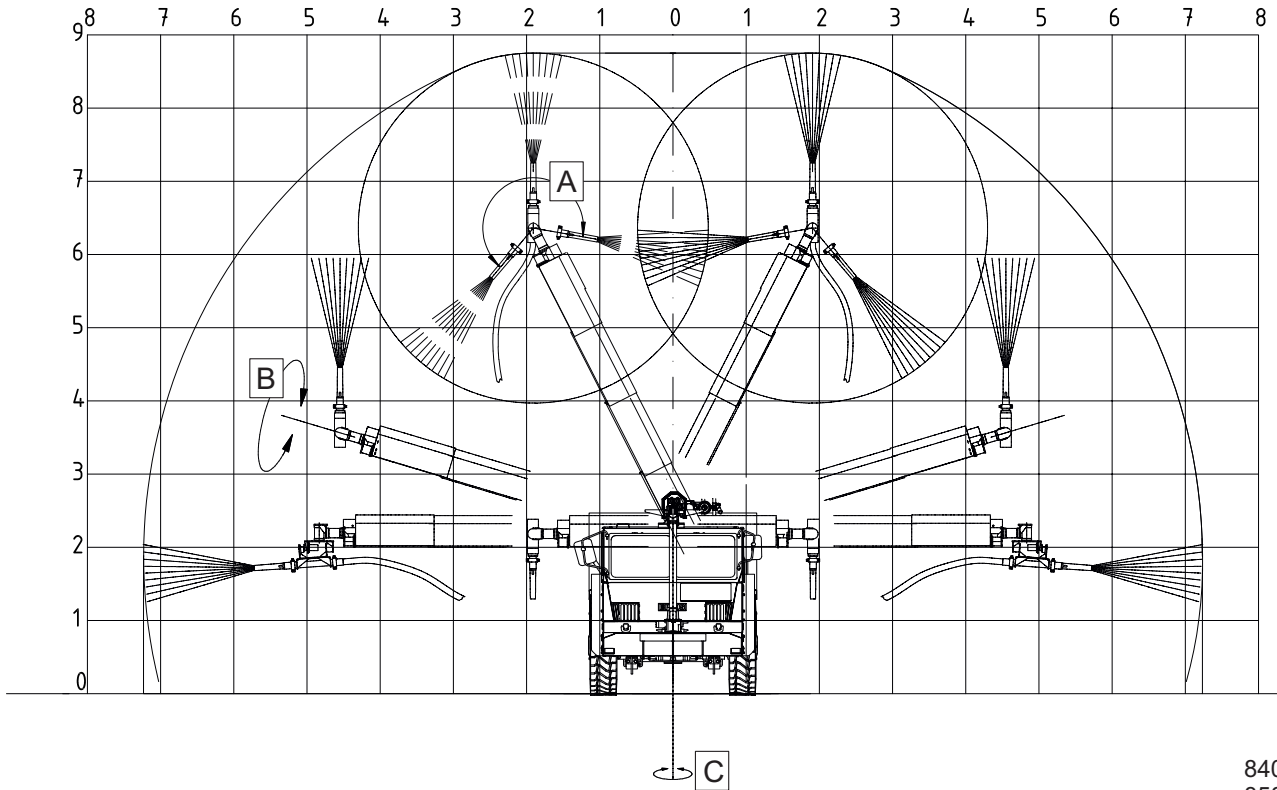


840107-02  
858080-01  
388260-01

*The illustration may differ from the scope of delivery*

Dimension	Value	Unit
A	240	°
B	360	°
C	270	°

## WORKING AREA OF FRONT SPRAYING ARM



840107-02  
858080-01  
388260-01

*The illustration may differ from the scope of delivery*

Dimension	Value	Unit
A	240	°
B	360	°
C	270	°