



SS-10

Underground Mining water spray Truck

SS-10 underground sprinkler truck is specially developed for underground tunnel watering. It is equipped with a 10m³ water tank with high pressure water spraying and sprinkler functions to meet the needs of underground tunnel dust reduction and pavement cleaning. This model has innovative features that can easily cope with harsh working conditions and provide strong power, strength and reliability. The heavy-duty front and rear frames are specially designed to cope with the harsh underground environment. The excellent quality, reliability and durability meet the requirements of users, making the vehicle operation simpler, more efficient and more efficient.

The central hinge swing reduces the large center-of-gravity deviation of the entire vehicle, and ensures that the front and rear frames can swing freely, ensuring good contact with the ground under harsh conditions.



Main parameters

Dimensions (mm)	8650×1990×2700
Water tank volume	10 m ³
main traction force	130 kN

Forward and backward speed

1st gear	4.5 km/h
2nd gear	8.5 km/h
3rd gear	14.9 km/h
4th gear	24.3 km/h

No load *

Operating weight	14 700 kg
Front axle load	9 700 kg
Rear axle load	5 000 kg

Full load *

Operating weight	24 700 kg
Front axle load	11 900 kg
Rear axle load	12 800 kg

* Equipment weight depends on options selected

Operating conditions and restrictions

Ambient temperature	-15 °C ~ +45 °C
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Equipment design standards

Safety requirements for GB 21500 trackless tire-type mine transporter for underground mines

Motion transfer system

power system

diesel engine	DEUTZ TCD2013L04
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rated power	120 kW @ 2300 rpm
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Torque	618 Nm @ 1600 rpm
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Number of cylinders	Inline 4-cylinder
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Displacement	4.7 L
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cooling system	Water-cooled engine
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Fuel System	Integrated hand oil pump, remote fuel filter
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Air intake system	Turbocharged Dry air filtration, two-stage filtration
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Control System	Electronic fuel injection control system
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Start the system	24V starter motor
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Emission Standards	Euro III
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Exhaust system	DOC + POC + Silencer
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Fuel tank volume	210 L
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Torque converter

Dana C270 Torque converter

Gearbox

Dana 32000 Gearbox	Pilot shift Four gears forward and backward
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Axle

Front axle	
Spring brake hydraulic release	XYUK-12 Standard differential

Rigid axle

Rear axle	
Spring brake hydraulic release	XYUK-12 Standard differential

Rigid axle

Tires

model	14.00-24
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Hydraulic system

Hydraulic oil radiator	Maximum heat dissipation can meet ≤ 45 °C ambient temperature
Transmission oil radiator	

Connector Standard	JIC standard
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Hose Standard	GB 3683
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Hydraulic oil tank volume	215 L
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Steering hydraulics system

Full hydraulic central articulated steering	Handle operation
Two double-acting steering cylinders	

Steering main valve	Open style
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Steering hydraulic cylinder	2 pieces
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Steering pump form	Gear pump
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Brake hydraulic system

Spring brake, fully enclosed multi-disc wet brake; integrated service brake, parking brake and emergency brake;

The braking system performance meets the requirements of EN ISO 3450, AS2958.1 and SABS 1589.

Driver operation

SS-10 underground sprinkler cab provides ample ergonomic operating space, a console layout that meets the requirements of human-machine interaction, and a lateral cab with a steering handle to control vehicle steering. Facilitates driver operation, improves comfort and productivity.

SS-10 underground sprinkler cab has passed ROPS / FOPS certification to protect the safety of the operator.

Cab

ROPS certification according to ISO 3471

FOPS certification conforms to ISO 3449

Driver seat

SS-10 underground sprinkler driver seat adopts ergonomic comfortable seat, equipped with two-point safety belt.

Cab dashboard

Equipped with IFM 4.3-inch color display, the required engine information is displayed on a large display, allowing the operator more time to look at the road.

Warning and alarm system	Sound and light alarm
dash board	IFM 4.3-inch color display Fully featured rocker switch control

water system

The sprinkler system has the function of watering and spraying. The self-absorption function can be realized by adjusting the four-position three-way valve.

Sprinkler pump	Self-priming centrifugal pump with speed increasing box
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Water tank

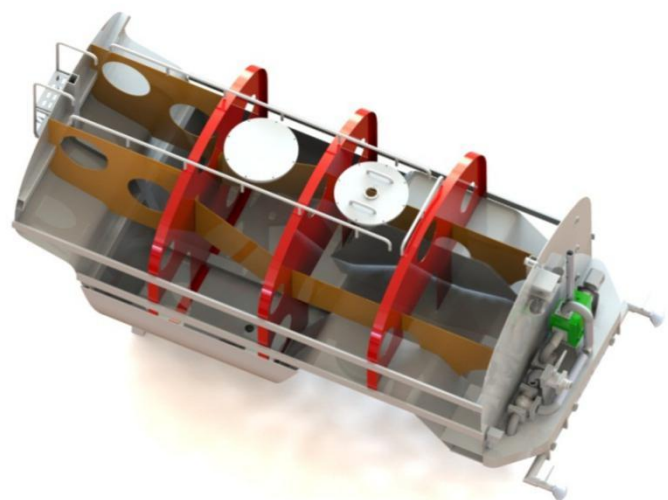


The overall design of the water tank is a skeletal structure, and a wave shield plate is installed inside, including a longitudinal and a transverse wave shield plate. The wave prevention plate can effectively prevent water fluctuations during the running of the vehicle, improve the stability of the vehicle, and have high reliability. The vertical and horizontal wave-proof plates and the water tank shell form an integral skeleton structure. The steel plate uses a high-strength alloy Q460C steel plate, which has a stable water tank structure and high overall strength. The inside of the water tank is sprayed with anti-corrosive material to prevent oxidation corrosion of the water tank and the water tank has a long service life.

Frame

The front and rear frames are heavy-duty, which can better stabilize the vehicle during operation. The heavy-duty design of the front frame and cab minimizes damage from impacts and collisions in the walls of the roadway. High-strength alloy Q460C steel plate is used to optimize material thickness, reduce self-weight, improve overall transport capacity, high structural reliability and long service life.

Central hinge	Slewing ring
tank	Integrated with rack



Electrical System

Main configuration

generator	28 V, 80 A
Accumulator	2 × 12 V, 100 Ah
starter	24 V / 4 kW
Lighting and work lights	2 pieces in front rack 2 pieces in the rear rack
Alarm prompt	Low oil pressure alarm Rotating alarm light
Dual speaker configuration	standard
Back-up image system	standard



Included safety features

Fire Safety

Portable fire extinguisher	2 kg 1pcs
Exhaust pipe insulation cotton protection	standard
Energy isolation	
Main power switch can be locked	standard
Emergency stop button	1 in the cab
Engine water supply tank manual pressure release tank cover	standard
Front and rear rack locking device	standard



Document

Standard Manual

Operation Manual	English
Maintenance Manual	English
Spare Parts Manual	English
Maintenance manual	English
Label	English

Optional

Security Options

Manual centralized fire extinguishing system

Emergency steering function

Automatic centralized lubrication system

Other optional configurations

Customizable other water tank capacity



Good performance

DEUTZ TCD2013L04, Euro III engine (3% rolling friction coefficient)

Running speed at no load and full load

No load

slope(%)	0	10	15	20
1st gear (km / h)	4.7	4.6	4.5	4.4
2nd gear (km / h)	8.8	8.6	8.5	8.4
3rd gear (km / h)	14.8	14.2	13.8	12.8
4th gear (km / h)	24.6	20.8		

Full load

slope(%)	0	10	15	20
1st gear (km / h)	4.5	4.4	4.2	4.0
2nd gear (km / h)	8.5	8.0	7.7	6.8
3rd gear (km / h)	14.9	12.1		
4th gear (km / h)	24.3			



Dimension

