

VACUUM & WATER JETTING TRUCK 10 000L + 3 000L

KEY FEATURES

The following specification ensures that this vehicle is the most suitable for the cleaning of wastes and blockages accumulated in the sewage and rainwater channel with high pressure water and vacuum. The materials, design and manufacturing of this model are consistent with the best practices of engineering.

The superstructure can be mounted on a variety of MAN chassis, according to specific needs.

TANK

Total capacity of 13 000 liter ($\pm 3\%$): sludge compartment of 10 000 l capacity, clean water compartment of 3 000 l capacity

Tank body of cylindrical structure and manufactured of AISI 304 quality steel sheet, with a minimum thickness of 6 mm

Tank body, front lids, rear lids, manufactured from high quality steel (minimum EN10025-S355)

Rear lid 1 mm thicker than the body, manufactured of the same material

Special neoprene gasket between the lid and the tank for impermeability

Lid connection to the tank with 2 hinges, opened-closed on a vertical axis – minimum 1 double-acting hydraulic cylinder -, and fixed to the tank by a minimum of 4 hydraulic locks

NPU support rings mounted at the junction of the rear lid and the sheet metal joints on the sewage tank for reinforcement

Connection to the auxiliary frame made by flexible joints

3 dish shaped transparent level gauges on the rear lid

Adjustment of the amount of material to be carried performed by the float system, keeping the volume in case of carrying capacity of the vehicle is exceeded

4" mechanical controlled bronze/brass gate type suction valve, and 4" mechanically controlled bronze/brass type gate discharge valve on the rear lid

Detachable baffle plates made of EN10025-S335 high quality steel of min. 5 mm thickness, with a manhole of at least 500 mm, and 70 mm of space left at the bottom

TANK (continued)

450 mm diameter manhole with aluminum cap on clean water

Compartment; clean water can be filled via manhole on the tank or at least 2" diameter nonreturn valve with STORZ coupling in front of the tank

Level indicator made of acrylic material to see the clean water level

Overflow pipe on clean water tank

Tank inclination of at least 30 degrees by means of a telescopic piston

Two stage float system which will stop the suction when the tank is full during suction and thus prevent the sewage from leaking out to the vacuum pump

Canal jetting hose reel and its components mounted on a stand on the back lid of the sewage tank

Sludge chute with side wings at the rear to prevent depositing sludge underneath the vehicle and sideways

HIGH PRESSURE WATER SYSTEM

High-pressure water pump COMET-HPP 109/290 driven by PTO

- Max. power: 61,7 KW
- Min. flow: 109 l/min
- Min. pressure 290 bar

Stainless material cleanable filter between clean water tank and high-pressure water pump

Adjustable pneumatic controlled pressure regulator on the high-pressure water line of the pump

Water pump and vacuum system will be able to work together simultaneously without any loss of efficiency

VACUUM SYSTEM

Vacuum pump JUROP PVT 200 driven by PTO

- Max. operating speed: 3 300 rpm
- Min. free air suction capacity: 1280 m³/h at maximum operating speed
- Max. vacuum capacity: 85%

Audio-visual warning system of pump overheating

Sound absorber at the pump's outlet

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Registada Cons. Reg. Com. Funchal
NIPC 514 591 889
Capital Social 505.000,00€

Rua Ivens, Nº22, 4º Direito
Ilha da Madeira, Funchal (Sé)
9000-046 Funchal

CONTROL SYSTEM

Leak proof control panel at the rear right side of the tank, containing:

- Vacuum Meter
- Water Pressure Manometer
- Low Clean Water, Level Alarm
- Engine RPM Control
- Engine RPM Indicator
- Working Hour Meters for Water Pump and Vacuum Pump
- System Start/Stop Switch

Second control panel on the main hose reel, containing:

- Water pump control
- Water and vacuum hours
- Bypass

Control panels are closed and protected against external factors and the required working positions on the control panel will be indicated by light

Main hose reel will be driven by a hydraulic motor controlled by hydraulic control valve; winding and rewinding movement of the main hose reel will be done through control sticks next to the reel

Vacuum and water pump will be mounted on the chassis sides or available spaces on the vehicle; PTO (transfer case) will be activated or deactivated by electro-pneumatic control from the driver's cab

HYDRAULIC SYSTEM

Hydraulic gear pump which has working pressure of at least 140 bar for:

- Winding-rewinding movement of the main hose reel
- Opening/closing of the rear lid
- Locking/unlocking of the rear lid
- Tipping and lowering of the tank

Suction filter and return filter mounted on the line

Oil tank with temperature and level indicator, ventilation pipe; drain valve at the bottom

HIGH PRESSURE WATER JETTING SYSTEM

2 water jetting system are provided

- Main water jetting system at the rear lid of the sewage tank
 - 80 m 3/4" hose
 - Hose min. operating pressure: 200 bar
 - Min. burst pressure: 500 bar
 - Hose is reinforced by linen layers and channel type, plane surface
 - Hose reel bushing is rolling bearing type, driven by hydro-motor
 - Guide system consisting of a sprocket arrangement and a worm screw system that will allow synchronous operation with the hose reel

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HIGH PRESSURE WATER JETTING SYSTEM (continued)

- Secondary water system at the right side of the vehicle's rear
 - 25 m ½" hose
 - Hose min. operating pressure: 200 bar
 - Min. burst pressure: 500 bar
 - Hose manufactured on SBR rubber and channel type, plane surface
 - Main hose reel bushing is rolling bearing type, driven by hydro-motor
 - Washing gun is provided

NOZZLES

Suitable headers are provided according to the channels of different diameters, to be mounted to the main hose

- 2 Units of steel Egg-shaped Nozzles
- 1 Units of Heavy-Duty Nozzles
- 1 Units of Chain Type Nozzles

ELECTRIC, HYDRAULIC, PNEUMATIC SAFETY

Superstructure electrical installation mounted apart from the chassis installation; certified cables are used

Complete electrical installation made by passing cables through tubes and a separate fuse and relay box, suitable grouped in a common fuse box

In case of need, the air required by the pneumatic system can be taken from the truck's original air compressor

Air lubrication and air pressure regulator

ACCESSORIES

2 lockable lockers on both sides of the trucks throughout the tank

Mudguards and mud flaps on the rear wheels

Foldable bicycle barriers made of double-row aluminium

Spare wheel support

Working lights

Rotating yellow beacon – 1 in the cab, one on the rear of the tank

Coupling and pipe wrench

2 hoses 4", 3 m long, with globe-type galvanized steel coupling

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ACCESSORIES (continued)

3 m discharge hose

Aluminium extension venturi pipe

PAINTING & LABELING

All surfaces to be painted will be washed with thinner after sandblasting and will be painted with epoxy-based primer. After the primer, the inside of the sewage tank will be painted with an epoxy-based topcoat, the outside of the tank and other exterior surfaces will be painted with acrylic enamel. Stainless surfaces will not be painted.

The superstructure (except for stainless surfaces) will be painted in the color determined by the customer. Otherwise, painted by suitable colors. Auxiliary chassis, will be the same color as the vehicle's main chassis.

Paint drying will be done by oven.

If the sub-frame is made of sheet metal, the rear fenders (if not plastic) and body sub-surfaces will be painted on the epoxy primer in the same color as the frame.

All instructions, warnings or precautions must be lettered as stickers or plates which are made from non-corrosive material. Also, particular attention shall be paid to areas where water could be trapped during road travel and vehicle washing. Mandatory markings, warnings and function tagging shall be of an easily visible size and color, and shall be permanent not to be erased or dropped.

At both sides of the superstructure and at its back, there shall be reflective strips and markings, in accordance with ECE R-104 (2002) requirements.