

# TECHNICAL SPECIFICATION

## VACUUM – JETTING – FLUSHING – TANK - TRUCK

For the transport and suction  
of oil, mud, waste-water (sewage)  
and for high-pressure cleaning

Volume: approx. 20 000 ltr. (19.000 + 1.000)

High Quality Product.

Custom-made

MADE IN GERMANY

### Superstructure

The “*Special Low-Torsion body mounting system*” for tank bodies is recommendable due to their strongness, torsion-resistant design, in particular for “Off-Road” operation under rough cross-country conditions.

The elastic connection between the truck chassis and the sub-frame provides a torsion-absorbing function.

This arrangement absorbs any stresses passing from chassis to tank.

The sub-frame is mounted to the truck frame in a way to ensure equal load distribution.

Otherwise mounted according to truck supplier’s “Assembling Instruction”.

### Tank support

The tank itself is supported in tank saddles which are bolted on the reinforced longitudinal frame members with heavy duty rubber mountings in front.

### Tank Body

Tank shape:

**Cylindrical**

Capacity:

**20 000 ltr.**

Tank compartments:

**Two (2)**

**19 000 ltr for Sewage / Oil / Mud / Sludge**

**1 000 ltr for fresh water**

Manufactured of thick high-grade steel –S235JRG2-, **thickness 4 mm** electrically welded throughout with accurately finished welding seams. Dished bulkheads on both sides with 6 mm thickness and appropriate nos. of baffles, 5 mm thick.

Tank body completely **hot-galvanised** in and out-side

Reinforcements made of U-channel, welded on the outs-side of the tank

The tank is mounted with approx. 2,0% slope to the rear and is vacuum as well as pressure resistant, designed for:

+ 1,00bar pressure

- 0,9bar vacuum

### Walkway

Open mesh walkway, 400mm wide on one side of the manhole cover, with access ladder and hinged grab rail

## **Vacuum Tank with vacuum system**

### **Full rear opening**

Hydraulic operated rear opening made of 6mm dished plate and fitted with acid resistant sealing gasket.

Manual operated tightening bolts to secure the rear opening absolutely tight and pressure/vacuum proofed.

**The rear opening** is supported by heavy-duty hinges and to be **opened hydraulically** by manual operated pump with double acting hydraulic cylinders. A beaver tail is mounted for a smooth discharge after opening. At the lowest part of the rear dish-end, two (2) flanges mounted.

One flange 4" for suction and one flange 4" for pressure.

### **Top fittings**

One (1) 380 mm dia. opening with Vacuum valve, secured by bolts.

### **Discharge fittings**

At the rear of the tank, there are two (2) out-let valves, with manual operated knife valves mounted.

- One (1) 4" DN100 for suction which is mounted to approx. 75% inside tank height, leading downwards with 4" Perrot coupling and blind cap
- One (1) 4" DN100 for pressure and the lowest part of the rear dish-end with 4" Perrot coupling and blind cap

### **Pipes and fittings for suction and pressure system**

All made of DN80-100, tensionless mounted and supported by flexible connections

### **Vacuum system**

One (1) air cooled vacuum pump, type Jurop installed at the vehicle's chassis, hydraulically driven by PTO of truck engine and can be operated pneumatically from the drivers cabin The suction pipe is equipped with a suction filter. Suction and delivery connections are provided with hose coupling and cab.

**Pump capacity:** approx. 732m<sup>3</sup>/h - Air cooled

Pressure gauge for vacuum and pressure, located in piping system

There is a manual operated 4-way valve for suction, ventilation and pressure

### **Safety system**

- Air chamber to prevent over suction at the top of container
- Safety chamber with ball-valve to protect the vacuum pump
- Suction filter in front of vacuum pump
- Automatic pressure limited valve, set to 0,7bar, mounted on piping system
- Automatic vacuum limited valve, set to 0,7bar, mounted
- Level indicator at rear of tank
- Three (3) sight glasses mounted rear part of tank
- Silencer with oil-trap

### **Operation panel for vacuum pump**

The control panel is located at the rear of the chassis and made of water splash-proof panel and consists of:

- ON/OFF for vacuum pump
- ON/OFF for engine
- Emergency cut-off
- Pressure gauge for suction and pressure
- Pressure gauge for hydraulic system
- Adjustment of RPM
- Working lights switch

### **Delivery options**

- Cleaning of tank to the rear
- Pressure and suction with vacuum / pressure pump

## **Fresh-water-tank with Jetting System**

### **Water tank**

**1 000 ltr.** water-tank integrated in main-tank, completed hot-deep galvanised

Upper man-hole cover DN550 with ventilation valve,

Side-filling via STORZ C coupling

Side discharge pipe 2"

Level indicator with colour ball for measure the water level, mounted on the right-hand side

Access ladder with walkway

### **High pressure system**

One (1) high-pressure pump, hydraulically driven by PTO of truck chassis. Hydraulic system with oil-cooler and fan.

Capacity, approx.: approx. 50ltr. / min at 150bar

#### Equipment

- Safety valve and independent circuit for water filling
- Regulation valve with manual controlling
- Independent cock for hand washing

### **Hose-reel**

- Located at the rear end of truck chassis, left or right-hand side
- Manual turning and hose guiding
- **Hose-type:** 40 m of DN13, 1/2" high pressure with operating pressure of 150 bar
- One (1) standard cleaning nozzle 1/2"
- 10m HD hose DN13 with high-pressure cleaning nozzle for general cleaning

### **Hydraulic system**

The hydraulic system consists of:

- Oil-tank with oil-cooler and fan
- Hydraulic pump
- Return filter
- Control valves with integrated pressure relief valves for all hydraulic operations

### **Hose-carrier with hoses**

Two (2) open hose carrier boxes, one (1) on each side of the tank

Two (2) rubber suction and pressure hoses NW 100, with Perrot 4" ball coupling, length approx. 4,00 m

One (1) rubber hose NW 100, with Perrot ball coupling 4", length approx. 4,00 m with steel lance

One (1) filling hose with STORZ C coupling

### **Standard accessories**

Wheel chokes (provided by TRUCK supplier) mounted with brackets

One (1) spare wheel carrier with winch mounted on chassis

PVC mudguards with rubber mud-flaps

One (1) lockable tool box mounted on chassis

One (1) beacon light mounted at rear

Two (2) working lights are mounted at the rear

### **Paintwork and finishing**

All steel parts are sand-blasted and prime-coated.

Tank body completely **hot-galvanised in and out-side**

Tank body painted in one (1) RAL colour outside

Substructure, spare-wheel carrier, painted in chassis colour

Yellow reflective strips on rear tank shape and along both sides of tank and cabin

### **Acceptance test**

Hydro-pressure test of tank 1,50 bar

NDT of tank

Functional test

### **Documentation**

One (1) spare part list (Paper and USB-Stick)

One (1) operating manual (Paper and USB-Stick)

All instruction plaques, lists, manuals and signs in English language.

*Reserve the right to modify or change Specification at any time!*

Delivery time (ex works): start of delivery approx. 10 -14 weeks after receipt of written order confirmation and clarification of all technical and commercial issues and approx. 6-8 weeks after delivery of truck chassis.

Warranty: starting from date of vehicle taking over, 12 months unconditional warranty on body and welded construction. The warranty is limited to the repair or replacement of broken parts due to construction faults and does not cover damage caused by improper use.

Please do not hesitate to contact us for further information and your [special requirements](#).  
All trucks are custom-made.

Example of truck chassis:



Truck chassis. Wheel base 4500 mm. M- or S-Cabin. **40 tons. Version** (9/16/16 tons. axles)



Hydraulic operated rear opening



**OPTION**



**Hose reel**

40 m of DN13, 1/2" high pressure with operating pressure of 150 bar

**OPTION**



Vacuum Tank Version without hydraulic rear opening, but incl. manhole 600 mm.  
(Less cost)



**OPTION**



Vacuum Tank Version with Telescopic Tipping Cylinder (HYVA, Germany). Including **Pneumatic Interlock System** for additional safety.

**Of course smaller vacuum tank trucks are available:**



For example: 10.000 ltr. on IVECO 4x4 truck chassis



All trucks are custom-made in accordance with your individual requirements.  
Just ask us.