

## TECHNICAL SPECIFICATION

### HEAVY DUTY 3-AXLE FUEL-TANK SEMI-TRAILER

TYPE: TSA 40 SD

Volume: approx. 40 000 ltr +3% expansion

#### Weights

Fifth wheel load	approx.	20 000 kg
Axle load	approx.	36 000 kg
Total gross weight	approx.	56 000 kg
Dead weight	approx.	13 500 kg
<b>Payload, techn.</b>	<b>approx.</b>	<b>42 500 kg</b>

#### Dimensions

Total length	approx.	12 500 mm
Total width	approx.	2 550 mm
Total height	approx.	3 700 mm
5 <sup>th</sup> wheel height*	approx.	1 415 mm – matching to 6x4

\* unloaded

***All data mentioned above, are approximations. Depending on additional options and accessories as well as the selected tractor unit, deviations are possible.***

#### Chassis

Heavy duty reinforced TSA 40 SD chassis with reinforced axles.

The tank's framework consists of two fabricated steel beams of high-quality steel. The two beams are fully welded all over their length on the tank. The beams are strongly connected with the cross members supporting the suspension and the kingpin upper coupler.

Upper coupler plate with JOST 3 ½" king pin

Skid plate bolted on frame.

### **Running gear**

3-axle, BPW capacity 12 T each in heavy-duty execution, with special shock absorbers and reinforced hangers with additional arrester cable to withstand heavy-duty operation

All axles with ASA (automatic slack adjuster), ECO-Hub system

420 mm brake drums, with S-cam.

### **Air-suspension**

Air suspension type WABCO, with levelling system, load divider, including lifting and lowering device

1<sup>st</sup> and 3<sup>rd</sup> axle as lifting axles

### **Wheel and tyres**

Units : Twin mounted tyres 12 + 1 complete spare wheel included

Wheel type : Disc-wheel, type 9,00x22,5

Tires : 315/80R22,5

Brand : First class European brand, approved for off road operation.

### **Mudguards**

Heavy duty mudguards made of PVC with rubber mud-flaps.

Side-guard made of aluminium mounted between landing gear and 1<sup>st</sup> axle

### **Landing legs**

Two (2) speed landing gear, with large pad feet, one-side operation, 24 tons total lifting capacity and 50 tons static.

### **Brake**

Two-line compressed air brake system with mechanically operated brake pressure regulator and release valve, diaphragm-brake-cylinder.

EBS brake system installed with integrated load depending brake-valve according EU regulations

Two (2) air couplings ISO 1728 without connection hoses

Connections mounted on the front bearer.

### **Electric system**

System voltage : 24 Volt, acc. to RL 76/756/EWG

Coupling : 15 poles

Rear light system : Two (2) 6 chamber lights for 24 Volt, protected in rear bumper with steel protection

Side-marking lights : Four (4) mounted on each side, 24 Volt

Position lights : Two (2) at the front, 24 Volt

Reflectors : Two (2) triangles at rear

Additional LED rear stop-, tail- and indicator lights are mounted on the upper part of the rear tank body.

All cables fixed with protection, either in steel tubes or PVC hoses

**Tank body**

Tank shape:	Elliptical
Compartment:	Four (4)
	10 000 ltr / 10 000 ltr / 10 000 ltr / 10 000 ltr
Total volume:	Approx. 40 000 ltr. + 3% expansion

Manufactured of thick high-grade steel –S235JRG2-, thickness min. 4 mm electrically welded throughout with accurately finished welding seams. Dished bulkheads on both sides and appropriate nos. of splash walls. The splash walls are mounted not less than 900 mm and not more than 1750 mm between each other *according ADR*.

**Dome-pan**

Overflow protection welded along the tank with drain pipe and shutoff cock at the rear and front. Drainage pipes leads downwards to the chassis

The dome pan is designed as an over-roll protection in order to protect the dome armatures.

**Walkway**

Open mesh walkway on the right-hand side of the manhole cover, with rear mounted access ladder.

One (1) collapsible handrail made of aluminum, operated manually, fixed as safety barrier, according UVV regulation along the dome-pan, right-hand side.

Operation of handrail next to access ladder.

**Top fittings per compartment**

One (1) according DIN EN 13094 certified dome-covers (ADR chapter 6.8.2.6), DN500, including 265 mm dia. hinged lid. Flame proofed safety vent valve (90mbar/-10mbar) and pneumatic operated tipping valve DN 65.

Complete with one (1) dipstick each, increments 500 / 500 ltr.

**Discharge fittings per compartment**

At the lowest point of each compartment one (1) pneumatic bottom valve DN 100 with filling/discharge pipe DN 80.

For all four (4) compartments together, one (1) discharge leads to the right-hand side, ending with 4" MAPI coupler, sight-glass and strainer, leading into armature box.

**Bottom loading**

Bottom loading via external pump, including all necessary valves and fittings.

When reaching approx. 95% volume of the compartment, the overfill sensor activates a 3" pneumatic valve, which closes the filling pipe.

Bottom loading via 4" MAPI coupling.

**Armature box**

Right hand side between the landing gear and 1<sup>st</sup> axle one (1) armature box mounted with discharge outlets, 4" MAPI coupling and pneumatic operations.

**Delivery options**

- discharge by gravity via 4" MAPI coupling
- bottom loading via 4" MAPI coupling
- filling from top

**Hose and hose-carrier**

Two (2) galvanised, painted and lockable hose-tubes, one (1) on each side of the tank with two (2) hoses.

Hose type: NW 80 with 3" Cam-lock coupling

Hose length: approx. 5,00 m

**Standard accessories**

One (1) spare wheel carrier mounted on main-frame

PVC mudguards with rubber mud-flaps

One (1) lockable tool box, mounted on chassis frame

Four (4) each earthing pieces welded on each side of the chassis

Two (2) fire extinguishers 6 kg each

Two (2) wheels choke

**Paintwork and finishing**

Tank body: Sand blasted, base coated, synthetic enamel finish one (1) RAL-colour

Chassis: Sand blasted, base coated, synthetic enamel finish one (1) RAL-colour

Accessories partially galvanised

**Additional signs**

Yellow reflective safety line, 5cm wide, mounted on the side and rear of tank body.

Three (3) warning boards according GGVSE/ADR

Speed limit disk

**Acceptance test**

Leakage testing of tank, 0,35bar, according ADR

Functional test according ADR

Material certificate according ADR

**Documentation**

One (1) spare part list and one (1) operating manual

All instruction plaques, lists, manuals and signs in English/French.