## LPG TANKER SEMI TRAILER

Mission: Danger









# What curiosity means to us, A better future.

The unique reason that the human "bring into being" is curiosity. Curiosity is the first "set a foot on the moon". Because curiosity; to realize a better and more beautiful future, ask questions, try to understand, produce innovative solutions, explore and never give up. It always takes us a step further.

Our job is always to move your business "one step forward". That's why we're curious. We recognize the needs of the trailer and superstructure equipment sector "before needs appearance" and produce innovative, user friendly and efficiency based products. We dominate the technologies that can go beyond your expectations. Due to our curiosity, we have changed the habits of the sector with every new project we made. We have broken grounds; but we have never been curious about being ahead only with the numbers.

The quality documents we have obtained being a catalyser that enable us to produce new technologies, make progress and be more curious. We curious not just about our sector, we curious about the whole world. For the nonce we are in 3 continents. We are constantly building strong values and collaborations for all of our stakeholders by producing special solutions for the needs of new geographies day by day.

Curiosity means to us not only innovation, engineering and technology. It means to us more beautiful and profitable day for the future.





# Mission: Danger

We produce LPG Tanker Semi Trailer in cylindrical and gooseneck cross sections suitable for transportation of all UN-Codes LPG substances in accordance with ADR Class-2, gravity and pump-driven discharge with pressure vessel steel quality and thickness determined according to different pressure and temperature calculations as well as to our customers' technical requirements in accordance to ADR, EN 12493, 2010/35 / EC (TPED), AD 2000 Markblatter regulations and geographical region, climate and road conditions it serves; being aware that "Mission: Danger".











45 ~ 60 m° olume Range

8 - 12 mm. Material Thicknes

L2 mm. -40 ~ +50 °C I Thickness Design Temperature

50 °C 18 ~ 21 Bar perature Design Pressure

ar P18BN / P21BN ssure Tank Code













## **OUTSTANDING FEATURES**



## Sun Shield

Provides protection at high temperatures and reduces the pressure inside the body



## Aluminum Armature Discharge Box's Cover

Light, without creating a risk of sparks, provides mobility and ergonomic handling even in the narrow area



## **ADR Type Approved Body**

Provides full and secure inspection by the expert team in national and international current legislation compliance.



## Seamless High Performance Robotic Welding Technology

Minimizes welding faults on the body due to tension and human factors are secures against impact



**Germany KBA approved 2007/46 / EC Vehicle Type Approval**Covers national and International up-to-date regulatory compliance and 98/91/EC chassis ADR type approval regulation



Use of robotic welding technology in OMEGA® monoblock connection saddles

Increases body strength at chassis joints, reduces tension effect, provides unity of body



Homogeneous paint application with advanced technical equipment

Provides surface gloss in varnish quality



Coloured, POLYAMID air hoses

Prevents complexity on installation cables, provides serviceability

























## Unique Style

Create a difference in style against compeers with its own position, visual aesthetic and unique style.



## **TECHNICAL SPECIFICATIONS**

1. Dimensions			* The product type and optional equipment can
Width	: max 2.550 mm		vary depending on your choice.
Height	: max 4.000 mm *		
Axle Distance	:1.300 ~ 1.400 mm *	4. Chassis Equipment:	
5 <sup>th</sup> Wheel Height	:1.250 ~ 1.350 mm *	King-Pin	: Conforms to ECE R 55 regulation, type approved
Dead Weight	:12.000 ~ 16.000 kg *		2 "or 3.5" demountable king pin
		Landing Legs	: Each is double speed, 25 ton dynamic, 50 ton
2. Capacity			static load capacity trailer landing legs
Geometrical Volume	: 45 - 48 - 51 - 57 - 60 m <sup>3</sup> *	Axles	: Axle set with 9 or 12 tonnes each, mechanical or
			air suspension, drum or disc brake
3. Tank		Rims	: 14,00 - 11,75 - 9,00 x 22,5
Tank Code	:P18BN   P21BN *	Tires	: 425 - 385 / 65 R 22,5 (Single) or
Design Pressure	:18 bar  21 bar*		31 / 80 R 22,5 (Double)
Design Temperature	:-20°C+50°C -40°C+50°C*	Brake System	: Conforms to ECE R 13 regulation
Tank Class	: Class 2		EBS/ABS brake system
Construction Material Serial	: Pressure Vessel Steel	Electric System	: Conforms to ECE R 105 regulation ADR approved
Transported Materials	: LPG, Propan, Butan *		electric system
Certification	: ADR, EN 12493, 2010/35/AT (TPED),	Bumper	: Conforms to ECE R 58 regulation rear bumper
	AD 2000 MERKBLATTER *		

AD 2000 MERKBLATTER \*

## **TECHNICAL SPECIFICATIONS**

#### 5. Tank Body:

- » Gooseneck-cylindrical section design conforming to EN 12493 design standard.
- » The pressure loaded body parts according to the EN12493 standard, high temperature steels according to EN 10028-2 standard (P ... GH) or at the fine-grained steels according to 10028-3 standard (P ... GH) or P ... N ...), high strength, special "P" series of pressure vessel material, front and rear 1 each torispherical or ellipsoid dished heads, to inhibit fluid movement in the body and a half full transport (the gross volume of the tank to 20% of 80% of the use) FR to make 12,493 accordance with its design standards, driving direction is positioned perpendicular to the cross-type baffle.
- » ISO 3834 Welded manufacturing quality qualification approved.
- » Plates, bended according to the bending direction are joined by robotic welding technology in the form of longitudinal rings by circumferential welding to obtained a cylindrical body structure conforms to the EN 12493 design standard.
- » The emergency intervention manhole located in the horizontal axis which will provide full discharge in the tank in case of possible rollover.
- » V-type brackets used at frame joints are welded to the body with pad support to increase the strength of the body and are mounted with a bolt connection to the chassis.

#### 6. Loading/Discharge Line:

- » The loading/unloading piping according to EN 10216-1 or EN 10217-1 standards or both.
- » Piping fitted to prevent damage due to thermal expansion and shrinkage, mechanical shock and vibration.
- » Closed circuit loading and discharging through ball valves in the armature discharge box.
- » Independent triple (bottom valve loading/discharge valve blind flange or cap) closing fitting for bottom loading or discharge distantness.
- » Emergency stop system connected to loading and discharge line.
- » The thermal expansion valves, arranged for evacuation at a pressure not above the design pressure of the tank, positioned in such a way that the liquid cannot be confined to the pressurized vessel and not placed in the lower quadrant of the horizontal piping.
- » ISO 3834 Welded production quality qualification approved, the patented paddles are welded, loading / discharging line extending from the bottom valves to the loading / discharging valves.

#### 7. Chassis:

- » Half "I" cross section chassis, reinforced with cross-members, body saddles connections mounted with bolts to the chassis, flexible against torsion and bending.
- » Chassis construction parts are manufactured in perfect harmony with synergic welding machines by certified welders under the approval of ISO 3834 Welded manufacturing quality qualification.

#### 8. Paint:

- » Before painting sandblasting quality Sa 2  $\,\%$
- » At least 2 coats of epoxy primer.
- » "OVEN-DRYING" application on topcoat with 2 coats of acrylic paint.
- » Improved technical equipment ensures homogeneous distribution on each side of the body and surface gloss of varnish paint gloss.



## Safe Lightness

We do not underestimate the weight! Carry out the dynamic loads under the high pressure at high volume under the heavy duty conditions with safe weight optimization and without compromising of the ergonomic driving.



## **GALLERY**















Durable body structure together with superior production technology and premium equipment turns the long lifetime into profit.













