# EKREM TANK TRAILER Control of the second se

















# **ABOUT US**



ETTGAS wants to show its dynamism and skill in the LPG market with high quality products. Our company, with its deep-rooted corporate structure, designs and manufactures LPG storage and transport tanks according to pressure vessels standards which are EN, ASME, CODAP and BS.

ETTGAS owes its technical knowledge and experience to its expert staff, national and international business experience and its ability to transform customer demands into products in the most intense way. In addition, its expertise in welding technology, the automation systems used in production and the professional seriousness of all kind of tests and controls without allowing any negligence or looseness are an indication of how distinguished, reliable and superior capabilities of our LPG tank production.

The paint of our products is Epoxy, which ensures that the tanks are long-lasting under all conditions. The brands we use have proven themselves from past to present and have gained the satisfaction of us and our customers.

With our potential to manufacture all kinds of tanks with diameters from 800 millimeters to 5.000 millimeters, our company is capable of meeting all possible needs in this context. The production nomenclature covers a wide range of parameters:

Our tanks capacity can be between 100 liters to 363 m<sup>3</sup>.

Working pressure storage tanks for LPG - from 15,6 to 17,65 bar, depending on the local normative requirements of using country;

Vessels for aboveground and underground installation lpg tanks.

Our products are tailored to the different LPG transport schemes for storage tanks for LPG-Trucks, standard transport containers, etc., with the possibility for land or sea transport. Potential clients are European Countries, Asian and African markets.

ETTGAS LPG vessels are designed and manufactured according to

EN 13445& AD2000 codes & ASME & CODAP for aboveground&underground storage tanks. Standard tanks size for industrials and domestics use between 100 liters up to 363 m<sup>3</sup>.







# **MISSION**

ETTGAS supplies pressure tanks with the principle of "customer satisfaction is priority", taking into account their safety and quality concerns. We know that there are sometimes unpleasant experiences when it comes to purchasing pressure vessels. Our aim is to provide the most suitable product in transportation and/or storage tanks with a stress-free service process that our customers can trust.



# **VISION**

We also believe in low

investment costs and customer profitability by offering our customers a quality product at the most affordable cost. With unexaggerated costs, the biggest profit of ETTGAS is customer satisfaction, and the satisfaction of our company's employees will return to our customers as satisfaction. In this way, a pleasant workplace with the satisfaction cycle that will occur is a gain for everyone.



# **MAIN PRODUCT GROUPS**

- \* LPG Transportation Tanks
- \* LPG Storage Tanks
- \* LPG Bobtail Tanks

- \* LPG Skid Tanks
- \* Fuel-Oil Transportation Tanks
- \* Fuel-Oil Storage Tanks

ETTGAS does not compromise on its principles in realizing the standards specified by the design code in the production of LPG transport tanks and storage tanks. The best achieved with in the framework of its quality management system is the target that must be exceeded.





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ISO 14001:2015





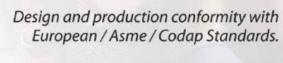








# **PRODUCTION IN QUALITY MANAGEMENT**



Use of certified materials in accordance with the design code
EN ISO 3834-2 workplace resource qualification
Certified welders in EN 9606-1 standards
Welding consumables in accordance with EN ISO 14171 standards
Body and camber welds SAW
Nozzle sources GTAW / SMAW
Surveillance and Control

The other half of correct and standardized production is training for correct observation, measurement, control, evaluation and continuous improvement.

Accurate measurement, control and evaluation are made by trained personnel and regular calibrations. All equipment used in observations and measurements are made by internationally accredited organizations.

Based on this fact, ETTGAS makes the following applications:

Non-Destructive Testing
X ray
Magnetic Particle
panetrant
Mechanical Tests and Experiments
Tensile test according to TS EN ISO 4136
Bending test according to TS EN ISO 5173
Notch impact test according to TS EN ISO 9016
Macro analysis according to ISO 17639































# **LPG TRANSPORTATION TANKS**

ETTGAS LPG semitrailer is designed in order to carry out LPG in most effective and safest transport condition on highways by comply with EN 12493 standards at the vessel production. Design and production carried out based on PI, EN 12493 standards® regulations. In case of customer request, ASME, Merkblatt or any others are available. Trailer chassis and powertrain are designed and produced by our years of experience based on real road conditions.

LPG vessel are checked by 3. Party; 100% X-ray Panetrant and magnetic particle tests Hydrostatic tests TS EN ISO 4136: tensile test TS EN ISO 5173: bending test

TS EN ISO 9016:2012: charpy impact test

ISO 17639: macro inspection test and all recorded.









### **GENERAL STANDARTS**

The tank is designed with a cylindrical section to create the most durable and lightest tank-frame combination.

Our designs have all qualified brake and roll stability performance tests.

Special high-strength, fine-grained, normalized "P' series pressure vessel steel in accordance with EN 10028-3 standard is used in our tanks. The mechanical and metallurgical properties of the steel have been tested and verified.

In the tank heads, elliptical cambered heads with tension relief in accordance with the standards are used.

It is carried out under the supervision of an independent inspection organization in accordance with standards and procedures with experienced engineer staff who are experts in production and quality processes.

Welding is done by certified welders in accordance with standards and materials.

All of our welded joints are tested and checked by our competent and internationally recognized certified NDT personnel.

The inside of the tank is equipped with a vent and a bolted ring in accordance with the standards.

All tanks are subjected to hydrostatic pressure test after they are manufactured. After this test, the connections of the tank accessories are subjected to the air tightness test.

The chassis is manufactured in accordance with the 2007/46/EC directive and a certificate of conformity is given.

Chassis will be delivered with cold marking and identification plate approved.

Chassis Made of high-strength steel to withstand all road and load conditions.

Park Legs are offered with double speed trailer type models, each with 25 tons of dynamic and 50 tons of static load capacity, and different brand options. Axles with different axle and suspension options;

- From one to four axles
- Single or double tires
- Mechanical or air suspension options available Brake system with EBS, ABS or RSP system is offered Systematically.

Warning, warning, suspension, brake etc. The systems consist of approved materials according to ADR.

Sandblasted tank exteriors in SA quality before painting











# **LPG STORAGE TANKS**

ETTGAS LPG tanks are designed and produced in accordance with EN 13445 / 12542 and ASME, CODAP, AD-2000 standards. Our production is possible from 100 Liters to 363 m³. Includes full weld protectors when using P355NH/GH/NL1/NL2 or equivalent in production. Elliptical cambers are produced according to standards and combined with tanks.

Normal working pressure is 17.5 bar-20°C/-50°C.
Lifting lugs are manufactured as standard for tanks.
Large volume LPG tanks are used for gas storage for industrial, commercial and agricultural purposes:

- \* Commercial and domestic heating
- \* In tourist arrangement
- \* In agricultural production facilities
- \* In industrial production facilities
- \* In electricity generators
- \* In filling facilities
- \* At autogas stations
- \* Capacity: 100 Liters- 250m3
- \* CE certificate
- \* Elliptical camber-save volume
- \* National and international traceability
- \* Test pressure 26.5bar & -20°C/+50°C
- \* X-ray
- \* Flanged manhole
- \* P355GH special steel
- \* Ground components
- \* White epoxy paint on sandblasted smooth surface
- \* Lifting and carrying lugs
- \* High voltage test is done for active protection



# **UNDERGROUND TANKS**

ETTGAS Underground Tanks - ETTGAS Tank's Exclusive State-of-the-Art Underground - Vessel Technology

There are many good reasons to install LPG vessels underground. Many facilities have limited real estate, and the space requirements for aboveground bulk storage vessels are prohibitive. Plus, underground LPG vessels provide added safety in the unlikely case of fire or other natural disaster.

ETTGAS's underground vessels combine the structural strength of rugged steel construction with the lasting protection of our unique coating to produce a LPG storage vessel second to none.

ETTGAS features a strong dielectric coating of high solids polyurethane for protection, even under the most difficult conditions.

ETTGAS resists surface damage from impact or abrasion.

After manufacturing and rigorous testing, the vessel's exterior surfaces are commercially blasted in preparation for coating. This process provides a superior coating adhesion The protective coating is a dense, two-component polyurethane coating system with impact properties and tensile strength Our Quality Control team then conducts a high voltage spark test to ensure the coating integrity and quarantee effective corrosion protection.

There are many reasons for choosing underground tanks. However, usage area and safety are the most important reasons.

ETTGAS production tanks are products that are produced safely with a suitable body structure and elite welding workmanship. During and after production, dyeing is done after x-ray, penetrant, magnetic and hydrostatic tests. The production of tanks resistant to impact progression is completed with surface SA1/2 sandblasting quality and epoxy paint.

Quality control. By applying a voltage test at high voltage by the personnel, a full resistance protection test of the paint against corrosion is made.

Underground LPG tanks have quite different conditions compared to above-ground tanks. Therefore, it is necessary to have a protective and preventive team.

There is a natural electric current in the soil. This is metal current. Objects have a constraint property. This electro-electric current can cause small punctures in the metal. Therefore, microorganism tanks may be exposed to electrolysis. While placing the tank, it is transmitted to the tank with a conductor and anode bags. Tank paint and embedding of the tank are other considerations. ETTGAS protective tanks are coated with quality dielectric polyurethane paint. In addition, it is necessary to avoid beam elements on the tank surface during the embedding of the tank According to the model it is manufactured as aboveground or underground storage tanks. Tank is designed with cylindrical section and designed with the most durable and safest combination.

\*Our tanks use special high strength, fine grained, normalized

"P" series pressure vessel steel in accordance with EN 10028-3.

The mechanical and metallurgical properties of the steel are tested and verified.

- \* An elliptical bomb is used in tank heads with stress relieving according to standards
- \*Manufacturing and quality processes are carried out under the supervision of an independent inspection body, in accordance with standards and procedures, by a qualified, experienced engineer.
- \* Welding is done by certified welders in accordance with standards and materials.
- \* Certified NDT personnel with competence and international competence in testing and controlling all welded joints.
- \*Once installed, all tanks are subjected to a hydrostatic pressure test.

Outer surfaces of tank are sandblasted with SA quality before painting

Provide the best product to the customers by using corrosion resistant, long lasting, high quality two component paint products of paint companies which have proven internationally for dyeing.

# **UNDERGROUND TANKS**

General Information

Tank Capacity: 0.5 m3 to 250 m3

Tank Class: Class 2 (Gas)

Products to be stored:

UN 1965

UN 1978 - Propane

UN 1011 - Butane

UN 1075 - Fuel-oil gas, Liquefied

Operating Temperature: - 20 'C to +50 °C

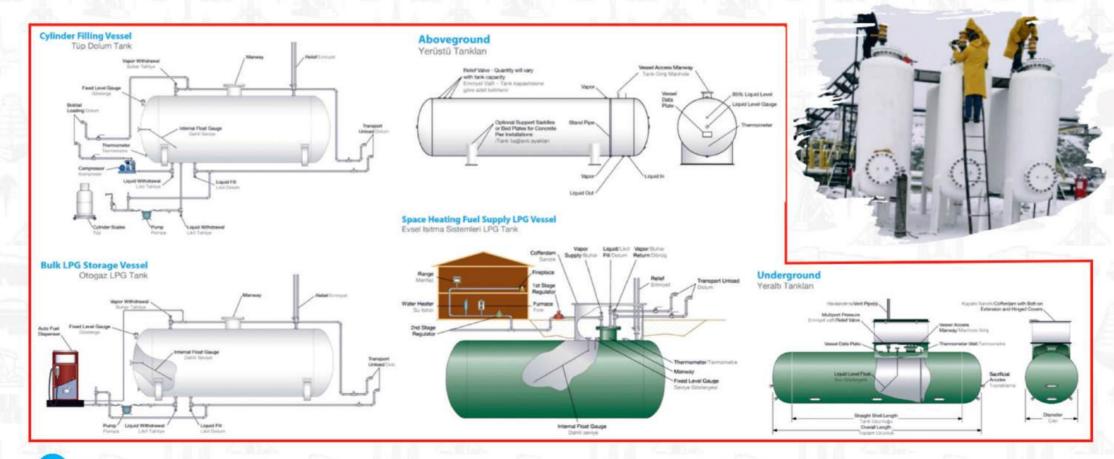
Design Standard: EN 13445/ PED, CE BRAND,

Ad2000 Merkblatter, ASME U or U2 labeled, CODAP



# **DESULPHURIZATION TANK**

In order to reduce the sulphur content of LPG for very specific purposes such as to use in propellants in cosmetics sector; or to use in gas mixtures that are used to inflate isolation foams in building materials industry; or in refrigerants in white goods sector, these special tanks utilise very specific minerals. Purified output provides corrosion and exhaust emissions less than 6 m/nm³. Single or twin tower, serial or parallel versions are available. With our expertise of years and know-how on these types of tanks, we meticulously design and engineer in accordance with your requirements of the final output LPG quality.



# **LPG SKID TANKS**

### **TECHNICIAL SPECIFICATIONS**

Tank Capacity: Between 1 m<sup>3</sup> and 115 m<sup>3</sup>

Tank Class: Class 2 (Gas)

Products to be stored: UN 1965 - Hydrocarbon gas mixture

UN 1978 - Propane UN 1011 - Butane

UN 1075 - Fuel-oil gas, liquefied

- Operating Temperature: -20 'C+50°C

- Design Standard: EN 12542, EN 13445 / PED, CE BRAND,

AD2000 Merkblatter, ASME U or U2 labeled, CODAP

### **GENERAL SPECIFICATIONS**

Ready to use. Just connect the power line and turn on the switch. It is very easy to use Includes all necessary equipment, items and connections. Can be moved everywhere. All electrical accessories are ex-proof. \*The equipment and machines conform to EU standards and are CE certified, hank is designed with cylindrical section and designed with the most durable and safest combination. -Our tanks use special high strength, fine grained, normalized "p" series pressure vessel steel in accordance with EN 10028-3. The mechanical and metallurgical properties of the steel are tested and verified. An elliptical bomb is used in tank heads with stress relieving according to standards. Manufacturing and quality processes are carried out under the supervision of an independent inspection body, in accordance with standards and procedures, by a qualified, experienced engineer. Welding is done by certified welders in accordance with standards and materials. Certified NDT personnel with competence and international competence in testing and controlling all welded joints. Once installed, all tanks are subjected to a hydrostatic pressure test. After this test, the connections of the tank accessories are tested with air against leaks. Outer surfaces of the tank are sandblasted at SA quality 2.5 before painting. Provide the best product to the customers by using corrosion resistant, long lasting, high quality two component paint products of paint companies which have proven internationally for dyeing



# **HIGH QUALITY PAINT**

The paint of our products is Epoxy, which ensures that the tanks are long-lasting in all conditions. The brands we use are those that have proven themselves and that have reached the output of us and our customers from past to present.































# LPG MEASUREMENT EQUIPMENTS

### **Mass Flow Meter**

Industrial operations often consume a lot of LPG at a very fast rate. For these purposes, ETTGAS provides you the Mass Flow Meter, a unique device which is used to measure the mass of LPG consumed in different applications in the manufacturing process. The highly sensitive sensors giving us a direct measure of the flow of liquid aily in the pipe pick up and analyse flow changes.

### Mechanic Filling Scales

Long-life & Durable
Easy Installation & Use
Adjustable to Different Type of Cylinders
Tested Security System
Low Maintenance & Service
Low Air Consumption

### Electronic Filling Scale

An advanced technology for filling cylinders of all sizes.

Extremely accurate results.

Best solution for calculating your 57 aily/weekly/monthly or annual gas consumption.

Best solution for calculating your bonuses on time.

Can transmit data to computers via wired/wireless connections.

The software manages your data and controls of your whole plant.

Alternatively, you may prefer the printer-version which does not need a computer; but prints same accurate data whenever you wish

### **LPG Dispensers**

Our range of products includes LG Dispensers with 1 nozzle up to 16 nozzles, all certified in compliance with internationally accepted safety standards, ATEX, MID and CE.

### **Transfer Pumps**

Max Operation Pressure: 35

Ambient Temperature Range: -30°C to +50 °C

Maximum Capacity: 6,6 m³/h Maximum Speed: 1500 rpm Inlet Size: PN40 DN65 Flanged











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