



 **akvia**[®] tanks
LNG & LPG



www.akviagroup.com



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Vision

Our aim is to manufacture quality products with the consideration of our customers suggestions and demands, to increase customer satisfaction and to become mentionable in the pressure vessel sector with our high quality, our innovation and our after-sales service.



Mission

Our mission is to be a valuable company both for our customers and staff members as well as due to our reliability and business ethic, which we offer in our products, solutions and after-sales service to become the first choice for customers.



LPG TRANSPORTATION TANK

Semi-Trailers from 36m³ to 65m³ Capacity
Customise your own trailer.

AK-011

 **akvia** tanks
LNG & LPG

LPG TRANSPORTATION TANK

Semi Trailers from 36 m³ to 64 m³



EN

TECHNICAL SPECIFICATIONS

Akvia expands its offering of tankers for LPG, type semi-trailer or on truck-mounted, with new models and equipment options. Consult us your needs for transportation, transfer and supply of LPG and will help you get the best solution! Our technical team will be actively involved in adapting your LPG transportation and supply needs to the most suitable tanker model, with the appropriated capacity and characteristics and type vehicle, with the main objective to get the ideal set covering your forecast at the most competitive price. With a range of capacities from 15 to 64 m³, Akvia carries out all testing and approvals of the vehicle and the equipment incorporated in accordance with ADR requirements and delivers the tank ready for use, with the agreed criteria for customization finish. For more information, please ask for quotation and send us your requirement or contact us directly. We will be happy to assist you! Akvia's design principles are:

Vehicle safety, Ride quality, Self eliminating of operator faults, Operational reliability, High performance, Low maintenance, Durability and long-life Total economy, Health and safety of operators and other people, Environmental impact, Uses of LPG Semi-Trailers, LPG transportation from terminals to depots/filling plants. LPG distribution to bulk customers or service stations; equipped with an LPG pump.

Alternatives of pump drive are:

Electric
Hydraulic

Volumes

45 m³ - 47 m³ - 48,5 m³ - 50 m³ - 55 m³ - 57 m³
62,2 m³ - 65 m³

Types of Axles

Mechanical Suspension
Axles with mechanical suspension best suit for harsh roads and extreme conditions. Akvia has double axle and triple axle models. Several axle models with different capacities; single or tandem wheels are available.

Pneumatic Suspension

Axles with pneumatic (air) suspension are used in most European countries. Pneumatic suspension offers ride quality and high-tech safety features. Akvia has models with double, triple or quadruple axles; with single or tandem wheels. A choice of drum type or disk type brakes, with ABS or EBS anti-lock brake system option and RSS stability system are available.

Semi-Trailer Accessories / Standard

Safety relief valves

Loading and unloading connections
Safety systems

Emergency stop
Pneumatic internal valves
Level gauges
Equipment cabin made of metal, with long-life and ergonomic design
Anti tow-away system
Earthing rod
Fire extinguisher
Reflectors, safety marking and labeling
Side protection bars

Semi-Trailer Accessories / Optional

Equipment cabin of rust-free material
Hose fixture of rust-free material
LPG pump, Hydraulic driven
Electric driven
LPG hose reel; liquid phase, vapor phase or both (only with LPG pump)
Electric power rewind
Hydraulic power rewind
Pneumatic power rewind
Selector (only with LPG pump)
Remote emergency stop
Light fixture (inside or outside of cabin)
Earthing cable reel
Dead man button
Hydraulic operated internal valves
Sunshield
Logo
Aluminium rims



LPG STORAGE TANKS

LPG Storage for Tanks from 1m³ to 500 m³
All type of Usage

AK-005

 **akvia** tanks
LNG & LPG

LPG STORAGE TANKS

From 1 m³ to 500 m³



EN

TECHNICAL SPECIFICATIONS

Industrial tanks are means of LPG storage for cylinder filling plants or big scale fuel requirements. Industrial tanks have different models for installing over ground or under the ground. Our manufacturing standards are EN 13445 and PED. Upon customer's requirements design and manufacturing can be done according to AD2000 Merkblatter, ASME, CODAP, BS 5500 or other standards. Manufacturing and testing of the tanks are made under supervision of an independent inspection body. CE marking is provided. Upon customer's requirement, ASME U or U2 stamps can be provided. Shell and heads are manufactured from P355 quality, fine grain pressure vessel steel according to EN10028-3 standard. Metallurgical and mechanical properties of steels are tested and verified.

All welded joints are tested according to the manufacturing standard. A combination of X-ray, ultrasonic, dye penetrant and magnetic particle tests are utilized.

After manufacturing, all tanks are subjected to hydrostatic pressure test. After this test, the connections of tank accessories are tested against leaks, using nitrogen.

Tanks are sand blasted and coated with premium quality paints. The right type and thickness combination of primer, undercoat and top coating are determined according to the above ground or under ground service. Akvia quality will offer highest performance during the whole service life of tank.

General Specifications

Design Temperature: -20°C / +50°C

Design Pressure: 17,16 bar

Test Pressure: 24,54 bar

Head Type: Ellipsoidal

Standard Tank Volumes

17 m ³	22 m ³
30 m ³	35 m ³
45 m ³	50 m ³
60 m ³	76 m ³
93 m ³	113 m ³
118 m ³	135 m ³
164 m ³	192 m ³



FUEL TRANSPORTATION TANKS

Various Capacities Upon Your Request

AK-002

 **akvia** tanks
LNG & LPG

FUEL TRANSPORTATION TANKS

Various Capacities Upon Your Request



EN

TECHNICAL SPECIFICATIONS

Capacity and Size

Tank type: EN 13094 Design Standard that meets the type of bottle design.

Width: 2.550 mm

Filling and Discharging Systems

Imported from Italy and from the top to the bottom filled NORMEC appropriate ADR system.

Chassis

Any ground under full load conditions in accordance with international transportation standards designed in accordance to seamlessly move 100x200x6 mm manufactured from profile material certified.

Brake System

It has been designed according to European standards. WABCO products are used in hardware .

Brake Valve , trailer can be changed into two pieces and are protected break sockets .

Axle

Name GIGANTI brand BPW 3 12 ton loading capacity is used axles produced disc set European standards. There are also 3 12 -ton brake pads of the drum axle used.Named SERTEL domestic brand

standards, and heavy-duty brake levers . (OPTIONAL)

Standart Accessories

1 buffer.

1 imported plastic water tank .

1 pilot type strap spare tire carrier .

2 plastic wheel chocks and connection.

2 fire extinguisher cabinet .

1 anti slipping walking platform.

Aluminum case.

2 , carrier PVC pipe to discharge hoses.

1 ladder from behind .

2 flagpoles and flags.

ADR norms appropriate plates and signs .

Front Axle Removal

The single lift can be operated from the driver's cabin.

Tires and Wheels

The size 385/65 R22,5 Bridgestone, Goodyear or Lassa brand is 6 + 1 . (OPTIONAL)

6 JANTSA brand dimensions are 22.5 x 11.75 wheels of steel . (OPTIONAL)

Electrical Components

According to the EU rules 24 V electrical equipment certified ADR SABA TRAILLIGHT brand. Trailer on the fog lamp and reversing lamp containing multi-compartment stop lamps.2 PCs 4 PCs plate illumination lamps and side lights to speed plates and reflectors. 2 electrical socket on the front panel (24N/24S) and 1 unit of EBS socket

Mudguards
There are 6 pilot wing.

King-Pim

DIN 74080 standard 2 "or DIN 74 083 standard 3 ½ " 42 CRMO4 steel king- pin is used .

Screw Jack

Each 25 ton capacity dual-speed mechanical foot OMS brand .

Suspension

Lowering and lifting height adjusting system; parabolic z trusses and shock absorber elements constitute limiting overloading axle movement.

Paint

Chassis and superstructure Sanding Epoxy Primer + 2 + 1 floor is painted with acrylic paint . Color is determined in accordance with customer requirements .



LPG SKID SYSTEMS

LPG Distribution Solutions for Your Business

AK-007

LPG SKID SYSTEMS

LPG Distribution Solutions for Your Business



EN

TECHNICAL SPECIFICATIONS

Quick Solution for LPG Business

- Akvia Dispansary is ready to use, just connect to electric main and switch on.
 - Ideal for a new starting business.
 - Effective during maintenance and shut-off periods.
 - Includes all necessary machinery, piping and wiring.
 - Akvia Dispansary can be transported to anywhere.
 - For mobile operation we advise the option Akvia Dispansary mobile.

Capacities

Tank capacity	16 m ³
Dispensing capacity	60 li/min
Cylinder filling (*)	50 cylinders/hr
LPG Pump	3-4.5 m ³ /h 5,5 – 8,4 bar (di")

Standard Package

LPG storage tank, equipped with baffle plate	1 pc 16 m ³
LPG dispenser	1 pc Single hose
LPG cylinder filling scale (*)	1 pc 50 cylinder /hr
Side channel LPG pump	1 pc 3-4-5 m ³ /h
Air compressor	1 pc 2 Nm ³ /hr
Electric panel, ex-proof	1 pc 230/ 400 V 50 Hz
Light fixture, ex-proof	1 pc 60 W/ 9-11 W

Gas detector	2 pcs. Ex-proof
Sunshade	1 pc. Aluminum
Fire extinguisher	2 pcs. 6 kg.

(*) The given capacity is for one filling scale, for domestic cylinder with 10-13 kg gas capacity. For filling camping or industrial cylinders, filling capacity will be proportional to the gas weight.

Options

Package with one filling scale, without dispenser, Package with two filling scales, without dispenser, Package with double hose dispenser, without any filling scales, Extras for Akvia Dispansary Mobile; Electronic filling scale, truck meter resistant to road conditions, extra strong chassis, Voltage/frequency other than 230-400 Volt 50 Hz, Protective aluminium cabinet with lock
 One pair of 2" LPG hoses, 6 m. length, both ends with ACME 3 ¼" couplings

- Akvia Dispansary is engineered and constructed according to NFPA 58.
 - All electric equipment of Akvia Dispansary has ATEX certification.
 - Equipment and machinery conforms the EU standards and has CE markings.
 - Performance of the machinery and equipment of Akvia Dispansary has proven by LPG industry.



VERTICAL TANKS

From 044 to 10.000 litres.

AK-011



VERTICAL TANKS

From 044 to 10.000 litres.

EN

TECHNICAL SPECIFICATIONS

You will not find gas tanks with a longer operating life - «Akvia Tanks» products will serve you and your home for more than 10 years;

- Today it is the best in price and quality aspects; • Unique approach: complete assembling and equipment on Turkish factory, no need to perform any assembling works on place;
- Proved quality - all goods are certified, tested and correspond to all engineering standards
- The capacity of the tank is choosing individually, considering supposed intensity of gas consumption (any required volume is obtained by cascade connection of several gas tanks), so, you'll get your individual gasification;
- Comfort in use – minimized maintenance of vertical gas tank: only chairing and occasional reducing gear monitoring (blowing off and moisture removal);
- The possibility to use almost in any climatic areas, even during hard winters. Temperature operating range for vertical “Akvia Tanks” gas tanks is from -40 to +50°C (this is the only one tank with included temperature specification data on the plate)

Accessories

Level Gauge
Gas Regulator
Excess Flow
Valve Safety Valve

Areas of Usage

Residences, Hospitals, Restuarants, Schools, Industrial Kitchens, Shopping Malls Etc.

Capacites

440 L - 1000 L - 1650 L - 2000 L - 2250 L 4500 L - 5000 L - 7250 L - 10000 L



D-Cylinders

Under-Ground or Above-Ground
Vertical or Horizontal



LIN, LOX, LAR, LNG TANKS

Cryogenic Bulk Tanks, Semi-Trailers and Rigid Tankers

AK-012

LIN, LOX, LAR, LNG TANKS

Cryogenic Bulk Tanks, Semi-Trailers and Rigid Tankers



EN

TECHNICAL SPECIFICATIONS

Akvia Tanks designs and manufactures a comprehensive range of cryogenic products and systems for the storage, transportation, and distribution of liquefied technical gases, LIN, LOX, LAR, LCO₂, and hydrocarbons, especially LNG and LPG.

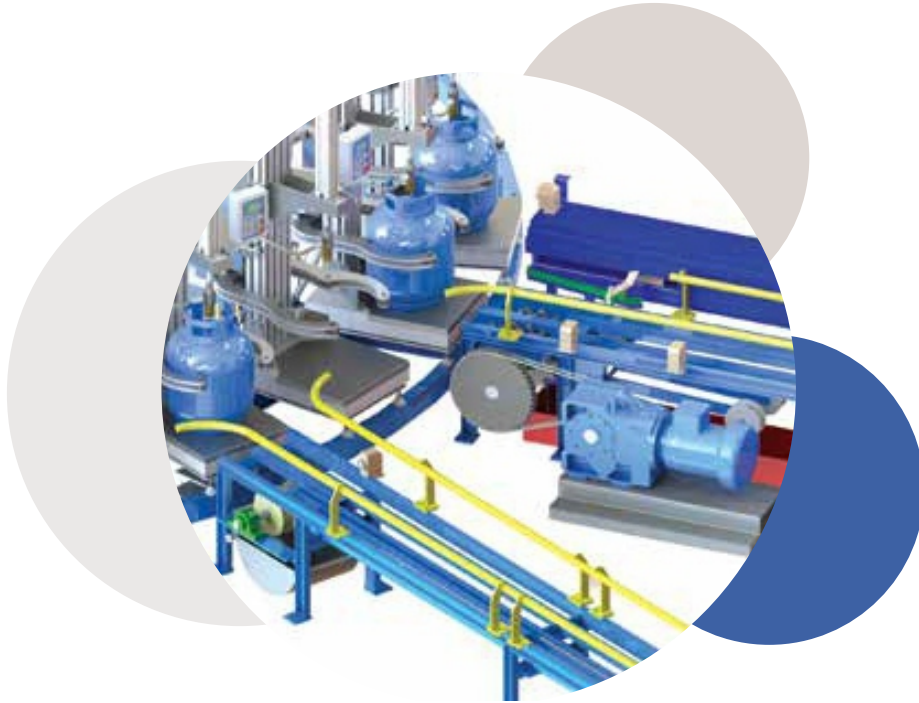
The extensive product range of Akvia Tanks includes cryogenic bulk tanks, semi-trailers and rigid tankers for LIN, LOX, LAR, LNG; stationary tanks, rigid tankers and semi-trailers for oil products, LPG and CO₂, evaporators and vacuum insulated pipe lines.

Akvia Tanks has recently added 20" and 40" tank containers for LIN, LOX, LAR, LPG and LNG as a new item to its product range.

We develop products according to market and customers' requirements. In accordance with the developments at geothermal power generation, Akvia Tanks has started to offer new products in recent years, used in deep drilling and in geothermal power generation plants, such as steam jet ejector, pentane tanks, air tanks, separator, distillation columns and silencer. Also, we proudly offer higher capacity and customized storage tanks, turn-key cylinder filling stations, tailor-made pressure vessels, heat exchangers and process tanks.

Apart from the new production, Akvia Tanks deals with installations, final cryogenic solutions upon request, repair and refurbishment of cryogenic equipment. Akvia Tanks facility can provide testing, inspection and rehabilitation for cryogenic vessels of all sizes and pressures.

To be able to offer a complete solution for almost all cryogenic applications under one roof and to develop industry standards, Akvia Tanks has focused on LNG storage and application systems including transportable liquid cylinders and fuel tanks and also, satellite and filling stations and ship & vehicle fuelling systems for LNG.



LPG Fillings Plants

It is a system which can be used either automatically or manually to refill LPG Cylinders. The Telescopic Conveyor is used to put the cylinders on the conveyor of the system. The Tare Control scale placed on the conveyor conveys the weight of the empty cylinders to the weighing electronic machines. The Input Mechanism pushes the cylinders on the conveyor to be placed over the filling machine on the Carousel. While the Carousel is rotating, the filling machines fill the cylinders and push the cylinder back to the conveyor using the piston placed on it. Cylinders placed on the conveyor go to the Check-Scale. Correctly filled cylinders continue their path. Cylinders filled with extra or less weight go to the Correction Filling Scale. The remaining cylinders on the conveyor continue their way to the Gas Leakage Detector, or to the Water Pool, to check them. In the last stage of filling process, correctly filled cylinders go to the Branding Machine. (Shrinking Machine) to cover their valves by the shrinking sleeves with the company logo print it on it. Cylinder then go to the trailer.





Akvia Group Company Ltd. based in Turkey and has widened the spectrum of its services and products over the past years with the support of our local and global partners to better cater to the emerging needs of Industrial and Oil & Gas field world-wide

SERVICE INTRODUCTION

Pressurized Tanks

Custom tanks are needed for a myriad of applications, for specialized needs in a variety of industries. Akvia Tank is proud of its proven track record for customizing storage tank design and fabrication for its customers needing solutions to tricky applications.

Our wide range of custom tanks include:

LPG Tanks

Chemical Tanks

Ammonia Tanks

Oil Field Tanks

LNG Tanks

Bonus

LPG Cylinders Filling Plant

Utilizing the experience of our engineering department and sale personnel, Akvia Tank can bring your vision to reality. From art and unique structures to detailed equipment, we can help you achieve your objectives. Contact us to discuss your custom tank needs.





Quality Policy

Primarily occupational safety

Reliability

High sense of responsibility

Awareness of responsibility toward customers

Punctual delivery

Teamwork and communication

Compatibility with current and evolving technologies

At Akvia, quality is all-encompassing and applies to everything we do

Quality is a common interest and an important factor in our success one that guarantees satisfied customers. Akvia's quality policy is a commitment to our customers and other interest groups.

Making the Quality Policy is an integral aspect of our practical, everyday work is a continual challenge of quality management.

We all both management and employees alike must be committed in order to succeed.

Core Values Of Akvia

To pay particular attention to offer high quality services to companies

To fully preserve and protect company benefits

To encourage our people to adopt principles of quality, justice and loyalty

To respect traditions and be open-minded

Akvia Group Brands



**WHERE ARE
WE NOW?**





Head Quarter

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P.O Box : 06560
Yenimahalle - Ankara / Türkiye

Sales Office

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