PRODUCTS AND SERVICES CATALOGUE

YOUR RELIABLE PARTNER IN OIL AND PROCESSING INDUSTRY

DELTA PETROL
KAKANJ D.O.O.
www.delta-petrol.com

"I believed I could contribute to something. That is the best reason to start a business."

- *Sir Richard Branson*

INTRODUCTION

Following the end of the war, the major part of the oil market in Bosnia and Herzegovina was devastated and neglected. Since the reconstruction of the war-torn land was the primary aim, the revitalization of the retail network and oil terminals had to begin.

The retail network was mostly owned by the pre-war energy giant Energopetrol Sarajevo.

We noticed an enormous business potential in this area and immediately started enabling the existing gas stations using minimum technical equipment.

This included machine mechanical cleansing of underground and above ground tanks, the maintenance of measuring systems for fuel dispensers and the calibration of tanks and flow meters. In the period before the war, this was carried out by specially equipped companies from the whole area of former Yugoslavia.

Professional approach, constant investment in young, expert staff and cutting edge technology has made us an essential partner to all the major actors in the oil industry in Bosnia and Herzegovina.

Our business ethics sees us strive to offer our clients the utmost quality and fair service, and the fact that we have been present at the market for 20 years speaks on our behalf.

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The company "Delta Petrol d.o.o. Kakanj" was founded at the beginning of March 1996. Following its foundation, it began creating a modern facility for a calibration station in Čatići close to Kakanj. Since November 2003, the company has been authorized by the then Institute for Standards, Metrology and Intellectual Property of BiH for the calibration and verification of flow meters in the oil and processing industry.

The company represents a modern, flexible and dynamic organizational structure, capable of offering goods and services in one place to all actors in the oil and processing industry.

We carry out machine-technological installation for liquid and gas fuels during the construction or reconstruction of gas stations and terminals in Bosnia and Herzegovina and wider.

The special feature is the created identity of the company as a professional maintenance company, certified by renowned producer Tokheim, and the quality certificate "Tokheim Qualified Service".

The company also has a modern station for collecting, treating and disposing of used oil, oil filters, oily and other special waste. We possess all the necessary documents and certificates for carrying out the above-mentioned activities: water permits by the Sava Waterways Agency and water management permit by the Ministry of Forestry and Water Management, ISO 14001:2004 Certificate, the permit for waste management issued by the Canton, and the environmental permit for hazardous waste management by the Federation.

The company possesses the Decision to conduct periodic inspection of electrical installations, lightning protection installations and static electricity protection.

The facility of the company also includes a carwash and modern gas station, equipped for the sale of liquid fuels, retail sale of gas and car care products.

We are the representative of a number of global brands in the construction, equipping and maintaining gas stations and terminals.

Our company operates in Bosnia and Herzegovina, Montenegro, Kosovo, Macedonia, making us an essential partner in the technical and advisory support for our clients in the region.

We are always following global trends and strive to offer the best quality service to our clients. Therefore, we invest greatly in our vehicles and equipment which has to comply to the highest standards enabling us to achieve extraordinary results, and securing better and easier working conditions, modern equipment and technology for our workers.

High-quality, steady and educated staff, the complexity and quality of goods and services, environmental and quality policy have set strong foundations of a recognizable company in the region and determined the path to customer satisfaction.

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SOCIAL RESPONSIBILITY

"Delta Petrol" team is aware of its engagement and role in the society. We are also aware of the responsibility arising from it. Our aim is to develop and maintain a particular relationship with the local community and undertake a number of activities that would contribute to the development of the community and a better and more prosperous future of our town.

In addition to observing the laws and bylaws in the field of our work, the developed management system and environmental protection, the training of our employees, our social responsibility is also mirrored in the following areas:

- Educating young people: the key to a success of one society is educated staff that will employ their abilities for the development of the society itself. For that purpose, we give out scholarships to a certain number of young people from the area of the Kakanj municipality with the aim of investing in our common future.
- Sports and culture: we sponsor sports clubs and cultural and arts events.
- Charity activities: we help the treatment of severely ill and socially disadvantages members of our community.
- Fair relationship with local religious communities and aid for numerous activities they conduct.

We believe that it is important to maintain strong relationships with the local community, and to take care of the future of our society through selfless investment in its development; and that is one of the ways our company is recognized as conscious and professional, ready to use its position and direct it at the benefit of the society and every individual, as well as our potential clients and partners.

As a company which intends to play an important part in the oil sector of Bosnia and Herzegovina and wider, our responsibility is to be susceptible to all aspects of our social environment, to act and live in interaction with it and to continuously contribute to its economic development.

MISSION AND VISION

"Delta Petrol d.o.o. Kakanj" is a modern, socially responsible privately-owned company, that is a recognizable actor in the oil sector of Bosnia and Herzegovina.

We are proud to point out that in the past two decades of our existence we have reinforced our position in the oil and processing industry, not only in Bosnia and Herzegovina but wider through developing and maintaining good quality business and services we offer, implementing contemporary work methods and representing a large number of world renown brands – which resulted in a considerable number of satisfied customers.

We have been an environmentally conscious company, minding the health and safety of our employees and the local community, and through our business activities in the environmental sector we would like to implement European and global environmental standards in our country as well.

As a leading maintenance company and laboratory for the calibration of flow meters in the oil sector, we will strive to maintain the excellence continuity, and preserve the satisfaction of our clients through quality.

With young, promising and trained staff, we aim at remaining an essential partner in Your operations, gain Your permanent trust, and improve both our operations using the service which accompanies the cutting-edge technology of the twenty-first century, and thus remain the standard of professionalism and quality in the oil and processing industry in the territory of Bosnia and Herzegovina and wider.

SERVICES

CALIBRATION LABORATORY

CLEANING IN THE OIL AND PROCESS INDUSTRY

TV INSPECTION SYSTEM

FUEL TRANSPORT

MACHINE - TECHNOLOGICAL INSTALLATIONS

SERVICE AND MAINTENANCE

PERIODIC INSPECTION

TESTING SAFETY VALVES

VAŠ POUZDAN PARTNER U NAFTNOJ INDUSTRIJI

DELTA PETROL

KAKANJ D.O.O.

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SALES PROGRAM

FUEL DISPENSERS

AUTOMATIC TANK GAUGES

EQUIPMENT FOR CONTROLLING THE TRANSFER OF FUEL

POS SYSTEM– DELTAPOS

HIGH QUALITY POLYETHYLENE PIPE SYSTEM

SUBMERSIBLE FUEL AND LPG PUMPS

PIUSI - TRANSFER MEASURING SYSTEMS AND EQUIPMENT

COMPOSITE MANHOLE COVERS

LEAK DETECTION SYSTEMS FOR TANKS AND PIPES

KROHNE FLOW AND LEVEL MEASUREMENT

ELAFLEX

SYSTEMS FOR HIGH FLOW RATE TRANSFER

LED LIGHTING

SALES PROGRAM

DELTA PETROL

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Following the end of the war in BiH, the company "Delta Petrol d.o.o Kakanj" recognized the enormous potential in the devastated oil industry in Bosnia and Herzegovina and in 1996, it started investing into basic capacities, with the aim of becoming the market leader in this industry, which the company succeeded in doing. In order to achieve, and maintain the abovementioned aim, it was necessary to find renowned suppliers who would accept our initiative in becoming their representative in Bosnia and Herzegovina. We chose our partners based on the guaranteed quality of the supplier's products for satisfying the needs of end users, and the competition advantage at the domestic market. Our basic brand and what makes us stand out is the delivery and installation of flow meters for fuel dispensers at gas stations of the manufacturer "Tokheim". The flow meters come with adequate certificates, complying with all the standards which contributed to winning over the European and global market in flow meter system production. The most important fact for our end user is that the products are of guaranteed and proven quality, efficiency and an affordable price. "Delta Petrol" offers complete service to our clients during construction, maintenance and servicing their gas stations and terminals.

With the aim of offering our clients goods and services of the best quality on one place in the area of oil and processing industry, we build our business concept on the foundation of business excellence as the best practice in organization management and result achievement. We have started and maintained cooperation with top global companies in our area of expertise, primarily with the aim of satisfying our clients' needs, as a guarantee of our success and to sustain these results in the future.

MJERNI SISTEMI ZA TOČENJE GORIVA

TOKHEIM QUALITY

OPW A DOVER COMPANY

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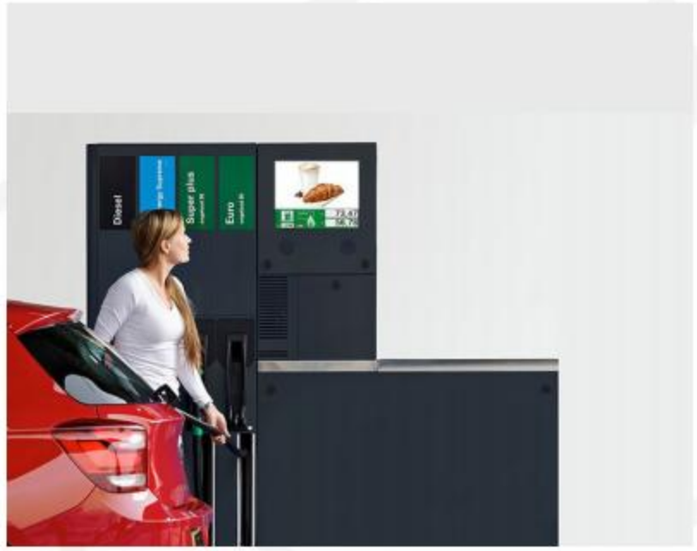
PUMP FUEL DISPENSERS



Liquid fuel dispensers for large users

Quantium Q510

- up to 5 hydraulics and 10 nozzles
- flow speed 40/80/130 l/min
- options with TNG solutions
- options with AdBlue solutions
- multimedia feature – vapor recovery optional feature – payment integrated solution

The "Tokheim Quantium" fuel dispenser series is the proud result of years of hard work and detail information analysis by our engineering teams around the world. The Quantium has been manufactured to be installed fast and safely, last longer, require less service and dispense more accurately. It is packed with the innovative and reliable components that add genuine benefit to your business.

The successful work of any gas station requires top quality equipment. The maintenance service of "Delta Petrol", part of the "Tokheim Qualified Servis" group, delivered and installed the equipment of such quality at numerous gas stations in Bosnia and Herzegovina. Trained staff carries out the successful and good quality installation and maintenance. This staff had a series of trainings in Austria, Germany and their own laboratory, and were issued "Tokheim" certificates. The company has occasional trainings which are aimed at continuous upgrade of knowledge in our field of business.

"Tokheim" is the leading manufacturer of equipment for dispensing, monitoring and control of fuel used and installed at gas stations. In addition to the manufacturing program, "Tokheim"

is also renowned for its own maintenance service, certified under the name "**Tokheim Qualified Service**", which maintains over 3500 gas stations in numerous countries around the world. "Tokheim" equipment is distinctive for its high-end quality, reliable functionality, contemporary design and affordable prices for fuel dispenser of the Quantium series. These are the main reasons why these dispensers can be found at 70% of new gas stations in Bosnia and Herzegovina.

In its product range, "Tokheim" offers five main Quantium models which are classified based on the purpose and customer's need. All products are standard certified by competent authorities of the state. Prior to installation, every dispenser is subjected to individual testing by the Ex-Commission of BiH, with the aim of certification process of anti-explosion protected devices.

Companies which deal in or want to deal in the distribution of oil and oil derivatives, or own internal gas stations intended for their own vehicle fleet, have to know what to expect and what kind of effect they want to achieve by purchasing and installing fuel dispensing equipment, with the aim of choosing the right configuration.

Fuel dispenser for retailers and special purposes.

Quantium Q110

- up to 1 hydraulic inlet and 2 nozzles – flow speed 40/80/130 l/min – vapor recovery feature – harsh temperature and weather preparation feature – the perfect choice for an internal gas station

Fuel dispenser for retailers and special purposes.

Quantium Q210

- up to 2 hydraulic inlets and 2 nozzles – flow speed 40/80/130 l/min – vapor recovery feature – harsh temperature and weather preparation feature – the perfect choice for an internal gas station

The main criteria for selecting fuel dispensing equipment is the need itself, i.e. whether it is an internal or public gas station. Based on this distinction the selection of the fuel dispenser is determined. It is necessary to emphasize that every series, according to the number of products and the desired number of nozzles, always comes with the standard components, which are explained to greater detail in the specifications. The rotational EPZ pump is used for standard flow speed up to 80 l/min, while the PAS V130 model is used for flow speed over 130 l/min. Regardless of the model you choose (from Q110 to Q510), hydraulic components and guarantee conditions remain the same. The main difference between models is exclusively the design, the number of products and nozzles. The Q110 to Q310 series are usually recommended for installation at internal gas stations and can have up to two different products and two nozzles. Therefore, if you possess an internal gas station, without the need for specific design, but functionality and compactness, Q110, Q210 or Q310 are always recommended. Naturally, the selling price is lower, acceptable for the buyer without technical differences, which could reflect on the work or functionality, since, as was stated before, the hydraulic components are a defined standard built in every model. The Q510 series dispensers are exclusively intended for the installation at public gas stations, retail facilities, where one dispenser can have up to 5 products, combined with LPG or AdBlue.

LPG DISPENSERS

Liquefied petroleum gas dispenser

- flow speed 40 l/min

- multimedia feature

- payment integrated solutions

- a large filter to better clean the product without affecting the flow rate

- TNG valves features

A large number of gas station owners in Bosnia and Herzegovina has understood the importance of selling liquefied petroleum gas (LPG), and initiated the reconstruction, i.e. the upgrade of their stations with the aim of completing their offer for the customers who want an environmentally clean and less expensive fuel. The Liquefied petroleum gas dispenser (Further on LPG) is only to be operated by the trained gas station employees in a regulated procedure. Warning signs have to be placed in a visible spot by the LPG dispenser. It is necessary to conduct everyday inspections on the dispensers – ascertain the intactness of the device, including the hoses and the nozzles. The inspections are conducted by employees who were theoretically and practically trained. In case of any defects, the LPG device has to be stopped and the maintenance service has to be notified. The maintenance of LPG dispensers is only to be carried out by trained servicers, with written approval for execution of works. Only certified (original) spare parts can be built into the LPG dispensers. The calibration of meters, regulated measuring and maintenance should be conducted in specific time periods regulated by law.

The Quantium LPG series was designed to satisfy all your needs for delivering LPG fuel to your gas station. The design of different LPG models was chosen in order to complete the entire Quantium fuel dispenser family, thus creating a uniform appearance of Your station. All Tokheim

LPG dispensers are SIRA certified, are up to ATEX standards, and meet all the requirements for design according to European standards for LPG dispensers. LPG dispensers have the MID factory verification.

"Tokheim" continuously improves its standard LPG nozzles/hoses by reducing the "dead volume", gas loss, enabling safe operation and increasing the guarantee period. Both the single-sided and the double-sided models are easily adjusted to the POS system of the station for payment.

ADBLUE MEASURING SYSTEMS

Around the world legislation governing the different emissions levels are being implemented. In Europe, the emission standards are defined in a series of European Union directives staging the progressive introduction of increasingly stringent standards. Carbon monoxide (CO) and particulate matter (PM) emission levels for heavy duty trucks are being regulated in the Euro IV and Euro V standards. The most commonly used solution to comply is using a technology called Selective Catalytic Reduction (SCR). This technology involves the destruction of NOx through reaction with ammonia (urea), resulting in harmless water and nitrogen.

The urea solution required by the SCR system is called AdBlue®. It is stored in a separate tank on the truck and injected into the exhaust system. To guarantee correct operation the AdBlue® quality is specified in an ISO standard (ISO 22241). Furthermore AdBlue® is highly corrosive and freezes at -11°C.

To comply with ISO 22241 and not contaminate the AdBlue®, most components in the liquid line were modified. This was done using standard components as to not affect form and fit (service benefit). All components are labeled 'AdBlue® component' to prevent confusion when changing parts in the field. The complete system went through extensive testing and the Tokheim solution is the only system in industry where no contamination occurs even when the equipment is not used for 24 hours.

Advantages of the Tokheim AdBlue® dispenser:

- A solution for the most demanding needs,
- Minimum reconstruction on the facility, which mostly allows for installation adjacent to the existing diesel dispenser,
- Single-sided and double-sided configuration,
- 4m hose reach,
- The AdBlue® 'combo' design can be mounted to the most common Q500-series diesel dispenser configurations bringing a wide range of possibilities for station lay-out, all models are payment-ready,
- Heating at -25°C,
- Various alarms to prevent freezing,
- The heating option is supplied with user friendly and fool proof sliding door to prevent the loss of heat and the freezing effects that could result from it.

As part of the Quantium series "Tokheim" offers special AdBlue® solutions in the Container series with the following features:

- Quick and flexible fix,
- 4.000 l capacity (10,000 l on request),

- All solutions are 'plug and play',
- Tank level indication,
- Modular design using the standard AdBlue® dispenser bringing all its benefits
- Single sided and double sided configuration,
- Heating at -25°C,
- Overfill protection,
- Leak sensor,
- Various telemetry systems.

PRO FLEET DIALOG FUEL MANAGEMENT SYSTEM

As a result of perennial experience in manufacturing measuring systems for fuel dispensers, "Tokheim" recognized the potential and developed their own fuel management system called PROFLEET DIALOG.

This was primarily recognized by companies dealing in transport, transport of goods; companies which own or plan to construct their internal gas stations to serve their own needs with the aim of better logistics support, especially regarding larger vehicle fleets.

Gas station automatization is a common trend in Europe, but only at its beginning in our county. Nonetheless, long-term vision at the development of business requires investment in equipment which gives the management of a company the input data, as well as the control over fuel consumption. This facilitates the process of making adequate decisions important for the strategic management regarding the development of a company. Oil prices today present the most important element, and transporting companies are aware of the issues they face when procuring and distributing goods. Therefore, they have to be extremely mindful of costs and the possibility of decreasing them, wherever possible. "Tokheim ProFleet" provides a dedicated set of services to the commercial fleet industries. We have a range of products and a team of local and global specialists in place that can work in partnership with you to deliver the best all round solution for managing your fuel.

"Tokheim ProFleet" products and services include:

- Fuel Management Systems: DiaLOG,
- Dispensers: Commercial and AdBlue® Dispensers,
- Automatic Vehicle Identification: SmartFuel for Tokheim ProFleet,
- Project Management: Development, design and construction,
- Support Services: Local support from a global network.

Fuel management system dispensers are the ideal smart products which facilitate the fueling process through their functionality and possibility.

The classification and choice of adequate equipment is conditioned by numerous factors. In order to fully justify Your investment and receive the equipment that meets Your requirements, our expert staff is at your disposal to offer answers and expert support.

The fuel management system dispenser can be delivered in several different combinations

1. Standalone version,
2. Integrated into one of the Quantium series models,
3. Connected to measuring systems by other manufacturers,
4. Skid series,
5. Container series.


DiaLOG


DiaLOG


VUUR, OPEN VLAM
EN ROKEN VERBODEN


TOKHEIM
Fioul
Gazole

AUTOMATIC TANK GAUGES

GILBARCO VEEDER-ROOT · OPW A DOVER COMPANY · Hectronic · TOKHEIM ProGauge

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ATG system represents automatic measurement of the level of liquid, i.e. the electronic measuring system which precisely and continuously measures and registers height, temperature and presence of water, controls the issued and admitted volumes, the stock in tanks. Before its installation, the system has to pass the testing, type approval and verification procedures and have a certificate on the type approval issued by the Institute for Metrology of Bosnia and Herzegovina, a verification certificate issued by the appointed laboratory and verification mark by the appointed laboratory and the Federal Institute for Metrology. The Bylaw on the Manner of Registering and Controlling the Circulation of Oil Derivatives is currently in force via built-in equipment at gas stations in the Federation of Bosnia and Herzegovina.

"Delta Petrol d.o.o. Kakanj", as a professional maintenance service, is an authorized ATG servicer by the Federal Ministry of Trade for leading global ATG equipment manufacturers: OPW GLOBAL, Gilbarco Veeder Root and Hectronic. We have been the general distributor of the listed manufacturers for the area of Bosnia and Herzegovina for many years, and accordingly, to testify to this, there are over 400 installed systems by these manufacturers linked with the information system of the Federal Ministry of Trade. the listed ATG systems have proven to be excellent, precise and reliable in practice, and gas stations are going through an era of automatization with the equipment we are offering you.

The ATG systems for which we are authorized servicers consist of:

- A measuring instrument (probe) submerged into the tank liquid using its built-in sensor to continuously measure the height of the liquid, the temperature of the liquid and the presence of the water, and control the issued and admitted volumes and stock in the tanks.
- Electronic controller (console), which gather data from the probe and uses a software to process the data on the volume in the tank, the volume of the water and the type of fuel in the tank, according to the tank volume calibration tables and the inserted relevant data for the fuel type. Then it is stored in real-time on a memory unit so that the data is available for all users. The stored data from the console are presented on the console display or the linked computer unit. .

Data on the listed ATG systems cannot be erased manually, i.e. it is a read-only memory unit, where the data is erased by the LIFO method (Last-In-First-Out).

The accuracy of the listed systems depends on the tank volume tables, and the gas station tanks have to be calibrated using the volumetric method by the appointed laboratory.

ATG systems have an integrated serial modem for data transmission purposes, i.e. for the communication with the control body. All ATG systems passed the testing procedure for integrating the ATG communication protocol with the integral information system in the Federal Ministry of Trade. In the last two years, we were able to link over 260 ATG systems to the information system of the Federal Ministry of Trade.

ATG systems which meet legislation requirements, are verified by placing official marks on the probe and console parts in order not to influence the accuracy of the gauge. The data inserted via the measuring console are protected from unauthorized manipulation by a password, and they have to be read and stored at every verification. The physical protection of the console is included. The mark is valid for one (1) year. For the listed equipment, there is a certificate on type test issued by the State Institute for Metrology of BiH.

The employees of the company "Delta Petrol d.o.o. Kakanj" are trained by the manufacturers for the VEEDER ROOT, HECTRONIC and OPW gauge systems. Extensive experience in installation, service and maintenance of the listed equipment, alongside direct contact with the manufacturer is the guarantee for quality technical support.

HECTRONIC AUTOMATIC TANK GAUGE SYSTEM

The type of gauge is OPTILEVEL, which consists of capacitive HLSxxx probe, power supply unit and ex barrier and interface converter, electronic gauges (OPTILVEL 104M, EPSI, LON). There is an option for an adequate software program for level monitoring via computer.

One electronic gauge can operate 8 probes by using the system software. The local monitoring system through the use of the system software program operates 8 probes (tanks), and the remote monitoring system using the system software can operate 32 probes. The OPTILEVEL automatic level monitoring gauge is intended for measuring the level of liquid fuels, liquefied gas and other liquids (AdBlue). The capacitive measuring probe is fixed onto the tank in a sleeve with a screw bolt. All parts are made out of materials resistant to effect of oil derivatives, acids, alkali, oil and other liquids. All the electronics of the gauge is made as a separate unit which is placed in a separate case not in touch with the atmosphere of the tank. The electronics is comprised of digitally printed circuits. The power supply unit with ex barrier and interface converter is protected against explosion. The automatic level measuring gauge operates in the way that the basic information on the level of the fluid is received as an electric impulse which is transmitted to the displaying device. The measured values are transmitted by the communication interface RS-232, by the adequately selected data transmission protocol.

Inserting data from the tank volume and level tables, issued by the competent authority, is carried out via a personal computer equipped with a special software by the gauge manufacturer. The automatic level measuring gauge and the tank volume and level tables, and other relevant data (reference temperature of fuel or other liquids, volumetric expansion coefficient due to temperature changes) comprise an electronic measuring system used to determine the admitted, issued or contained volume of the liquid in the tank. The electronic system measures and controls all the parameters according to the Bylaw on the Manner of Registering and Controlling the Circulation of Oil Derivatives, via the built-in equipment at gas stations in the Federation of Bosnia and Herzegovina. All the fata from the electronic measuring station can be transmitted to a personal computer via a communication interface, after the installation of the adequate software by the gauge manufacturer. In addition, the electronic measuring system has warning devices which ring the alarm at any occurrence of underground water, leakage, overfill or the lowest and highest allowed level of fuel in the tank. By measuring the density and dielectricity, OPTILEVEL perfected its technological offer, which makes all the changes in fuel quality easily detectable. Communication and data transmission according to the Bylaw between the controller and the controlling body (the Federal Ministry of Trade) is realized via a special device called DELTA STATION CONTROL.

The probe measures:

- Volume of the liquid: measuring as of 23 mm from lower edge of gauge to 3500 mm (max.6000 mm) with a 0.1 mm resolution;
- Temperature of the liquid: measuring as of -40°C to +50°C with a 0.1°C resolution;
- Water presence from the bottom of the tank to 250 mm. Water measurement resolution of 1 mm;
- Measuring method: capacitive (several segments);
- Temperature of the medium: from -25°C to +100°C;
- Temperature of the environment: from -25°C to +60°C;
- IP degree of protection: Gauge IP68;
- Service-friendly;
- Very easy to install; no additional installation tools, no electronics in the tank. All the electronics in the probe head can be easily exchanged (upgrade). the probe can be repaired;
- Desired lengths from 0.5 m to 6 m (custom lengths available);
- Repeatability: ±1 mm;
- The scale of the measured liquid density: from 500 kg/m³ to 999 kg/m³.

OPW SITESENTINEL NANO CONSOLE

Cost-effective inventory and compliance monitoring

The simple Nano provides accurate, real-time inventory data using a user-friendly interface, which makes it the perfect compliance solution for tanks and double-wall lines.

OPW's SiteSentinel® Nano® Console provides simplified, cost-effective inventory and compliance monitoring for retail and commercial fuel sites. With an intuitive touchscreen interface, user-friendly data display settings and sensor support, the Nano is an easy-to-use, right-sized tank-monitoring console for small and mid-size fuel sites.

OPW
FUEL MANAGEMENT SYSTEMS
A DOVER COMPANY

OPW's SiteSentinel® Nano®

Application:

- Provides accurate, real-time inventory data and reporting for commercial and retail fuel sites,
- Monitors up to 12 probes or 24 smart sensors or a combination of both,
- Sitesentinel intellisense multi-drop technology reduces installation costs by minimizing the wiring and labor needed for quick site install,
- Web-based interface enables remote training.

Intuitive	Cost-effective	User-friendly	Convenient
The gauge's color touchscreen provides easy access to inventory, compliance, delivery, warnings and alarms.	With streamlined compliance monitoring and cost-saving multi-drop technology, the Nano delivers the performance sites need at a cost-effective price point.	The Nano's user-friendly software offers a calendar view and a "Favorites" list for quick recall of the most-used filters.	Online access enables off-site training as well as remote monitoring of critical inventory and compliance information.

Console characteristics:

- Calendar view shows both tank and sensor alerts, including deliveries, compliance, alarms and warnings that can be filtered by event and/or tank or sensor,
- A "Favorites" list enables quick recall of the most-used filter settings,
- Monitors up to 4 probes (up to 12 per gauge) or 12 sensors (up to 24 per gauge) per barrier position, or a combination of both,
- Displays gross- or net-corrected tank volume, ullage, product volume and water, product level and water level, and product temperature for individual tanks,
- Able to schedule reports to automatically run daily, weekly, monthly or annually,

- Programmable Automatic Leak Detection performs daily, weekly, and monthly static leak tests,
- Local or remote PC connection,
- Optional Tank Overfill Alarm,
- Networking screen allows user to select either a Static connection or DHCP,
- With the ability to have 4 optional OM4 Output Modules that each offer 4 relays, functionality is expanded to a total of 16 relays - including 2 on board relays,
- Reports include Current Inventory, Delivery History, Events in Progress, Event History, Leak Test,
- *Autodetect* feature shows the number of devices connected to each of the internal barrier positions after initial set-up – even if wiring configurations change,
- Includes address book of contacts for easy reporting configuration via email and SMS,
- Configurable to meet localized settings (Date/time formats an English/metric units),
- Communicates with most industry standard third-party POS protocols

Advantages:

- Provides streamlined leak monitoring for sites with double-wall tanks, lines,
- Mixed multi-drop technology allows for probes and sensors to be connected to one wire, significantly reducing installation costs,
- An intuitive full-color touchscreen interface provides a simple user experience,
- Alarm notifications issued via email, SMS for instant and convenient notification of system events,
- Console is configured through an HTML web interface. No added hardware or proprietary software is needed for remote connections,
- Web-based interface enables remote system management and training

Specifications

- Dimensions: 8.3 in H x 12.8 in W x 2.4 in D (21 cm H x 32.5 cm W x 6 cm D),
- Power: 120/240 VAC +/- 10%, 50/60 Hz, 30 W,
- Operating Temperature Range: 32°F to 122°F (0°C to 50°C),
- Display: 7.1 inches (18 cm) color LCD,
- Graphical user interface,
- Printer: External USB,
- Alarm Notifications: Email, SMS,
- Standard Alarms: Buzzer, Light and Acknowledge and optional external alert,
- Tank alert (internal relay),
- Network Connectivity: DHCP/static addressable RJ-45 Ethernet ports, supports corporate and local LANs.

Communication Ports:

- one (1) RS-232, one (1) RS485 and one (1) RS-422 communication port,
- one (1) Ethernet port,
- two (2) USB ports,
- two (2) internal inputs,
- two (2) internal outputs.

System Alarms and Events:

In-Tank Alarms:

- High, low temperature,

- Reconciliation theft,
- Fail RTD/Thermistor,
- Delivery start/finish,
- In-Tank Leak Test Failure,
- In-Tank Test Warning,
- Product Level,
- Water Level,
- Probe Failure.

Sensor Alarms:

Sensor alarms will provide hydrocarbon and water alerts (dependent on type of sensor connected)

OPW's mixed multi-drop technology allows probes and sensors to be run on one wire back to a tank gauge. This leads to substantial savings on installation labor and wire costs. With mixed multi-drop, the SiteSentinel® Nano® can hold up to 12 probes or 24 sensors in any number of combinations. Possible combinations are driven by a point system: one probe = three points; one sensor = one point. Each of the Nano's four barrier positions can hold a total of 12 points, which can be obtained by 4 probes, or 12 sensors or a combination of probes and sensors.

TOKHEIM PROGAUGE

Tokheim ProGauge series dedicated to tank gauges and wet stock management solutions was launched at the beginning of 2014, when Tokheim acquired the specialized company Start Italiana. The company Start Italiana was successfully integrated into the Tokheim Group, and a wide product range was developed in a short period of time, making the Tokheim ProGauge the leader on the tank gauges and systems market. Tokheim ProGauge offers to the market products of exclusive quality and reliability for affordable prices. In June, 2016, OPW GLOBAL took over Tokheim Progauge and became the ultimate leader in the oil sector.

	**XMT probe** EXd explosion proof protection – for fuels, TNG and AdBlue – measuring accuracy min 0.5mm - IP68 case protection - RS485 advanced wire communication – static leakage control
	**XMT-SI** EXi explosion proof protection - for fuels, TNG and AdBlue - measuring accuracy min 0.5mm - IP68 case protection - RS485 advanced wire communication – static leakage control
	**XMT-SI-RF** EXi explosion proof protection - for fuels, TNG and AdBlue - measuring accuracy min 0.5mm - IP68 case protection – wireless communication - static leakage control
	**Maglink LX console** – manages up to 32 probes - internet connection, RS232 - touchscreen display – SD card data storage
	**Maglink 8 console** – manages up to 8 probes - RS232, RS485 - touchscreen display - SD card data storage
	**Maglink 16 console** – manages up to 16 probes - RS232, RS485 - 6 soft function keys and LCD display - SD card data storage

VEEDER ROOT ATG SYSTEMS

VEEDER ROOT is the largest global manufacturer of automatic tank gauge systems, with over 500,000 probe installations in tanks around the world.

To monitor the level of fuel in a tank you need the following equipment:

- A probe for each tank,
- A float for monitoring the water level and/or density in the tank,
- A float for monitoring fuel levels in the tank,
- An adequate console,
- IT cable for connecting the probes to the console.

Key features:

- Measuring the oil levels in the tank,
- Measuring the oil temperature in the tank,
- Measuring the density of the oil in the tank,
- Automatic correction of fuel quantity to reference temperature,
- Detecting and measuring water levels in the tank,
- Automatic detection and report on fuel delivery,
- An alarm system triggered in the following situations: raised water levels in the tank, tank overfill, insufficient fuel levels in the tank, density out of range,
- Printing reports such as: current fuel levels in the tanks, report on fuel delivery, etc.

A probe has to be installed in each tank. The probe is delivered and fixed in a kit containing: temperature sensors, a float for monitoring the water level and/or density in the tank, a float for monitoring fuel levels in the tank, float sealer, brass boot, plastic boot, cable for linking the IT cable.

The purpose of the probe is measuring wet stock in above ground and underground storage

tanks (UST), when precise and reliable value readings. The probe is a measuring device created and used in Ex areas. Simply put, the level of the product is determined according to the time needed for the electronic impulse to cover the distance from the top of the tank to the float for the product and back. The volume of the product is then calculated based on the known level of the product and the known dimensions of the tank.

The probes are attached to adequate TLS consoles. The choice of the console is made based on technical and other requirements. The most widely installed consoles are: TLS 300, TLS 350 PLUS, TLS 350R, TLS 2, TLS 4 and TLS4B.

The console, i.e. the electronic controller is the component part of the system for automatic measuring and monitoring of the above-mentioned parameters. The probes are connected to the console using adequate cables. The console continuously and in real-time gathers data from the probes, processes and stores them. The microprocessor of the console automatically converts the level of the product to volume (quantity in liters), thus volumetric data can be stored and analyzed.

Every warning and level alarm is followed by yellow or red blinkers on the console and an audio signal. The system automatically stores in its memory a set number of notifications on alarms and warnings from the previous period, which can be reviewed afterwards.

A very important feature of the system is automatic detection of fuel delivery and the storing of the detection in the console. In addition, the system automatically detects and stores other parameters such as: communication breakdown with the probe (for every individual probe), together with the date and time of the communication breakdown, as well as the date and time of the once-again established communication. It then detects and stores the data on the level of water and fuel and temperature in given periods (shifts), etc.

TLS 2 ATG SYSTEM

GVR TLS2 AMN provides an innovative automatic tank gauging systems and loss detection systems with the aim to automate the gas station, environmental control and risk management across the network.

The TLS2 console ATGs, in connection with the Mag Plus probes, are gauges which read the level of the fuel, water, temperature and optional density in the tank. The data is transferred via the probe to the console where the measured value can be read. These systems are used for automatic tank gauging in above ground and underground cylindrical tanks. The gauge measures the temperature of the fuel compensating the measured level. It displays the measured volume

data depending on the fluid level, rising and lowering along the probe. Real density measuring is enabled – density is not calculated out of other parameters, but is measured directly. The measuring accuracy for density is ±1kg/m³. The density measuring resolution is 0.1 kg/m³. Automatically programed "Density Out of Range" alarm. TLS console displays optionally density in kg/m³, mass in kg and starts the alarm in the density is out of range.

The measuring console TLS2 is intended for up to 6 probes or sensors. The console is linked to the probes and sensors by cable. A microprocessor with FLASH-EPROM memory in built in the console. It processes data from the probes. The system processes only one probe at a time, and the data processing lasts approx. 0.1 second. There are two RS232 communication interfaces on the console with different computer systems and one parallel communication port.

The configuration is carried out manually by entering the necessary data or by a PC via a special program. The data to be entered are on the connected probes, tank calibration charts and fuel data.

The following readings can be seen on the console: date and time, levels of fuel and water, temperature, volumes V_t and $V_{t15°C}$, empty space volume, overfill and minimum quantity alarms, failure during operation alarm. Certain data cannot be read from the console without additional programs, which have to be installed on the PC and linked to the console, and which is optional. The console also detects filling, and has stored data for a certain number of past fillings.

The fuel level mistake tolerance is ±4 mm. The density measurement accuracy is ± 2kg/m³.

Manage your fuel and increase your efficiency using the TLS system.

The Veeder-Root TLS-2 is all you need to manage fuel throughout your network, track inventory and delivery information, and increase your efficiency.

The system automatically recognizes fuel delivery to the tank and automatically stores the time and date of the start and end of delivery, starting and finishing levels and temperatures, i.e. volume. This means that you do not have to set up anything at the console during fuel delivery. The data on a certain number of fuel deliveries remain stored in the console and can be printed. The Veeder-Root TLS-2 is all you need to manage fuel throughout your network, track inventory and delivery information, and increase your efficiency.

The console's bright touch screen features a symbol-driven menu that makes it easy for anyone to use and understand. Text on menus and reports may be displayed in English, Spanish, Portuguese, French, and Chinese. The compact unit mounts conveniently in a small space, yet includes all the features you'll need.

The TLS-2 is also compatible with VeederRoot's Inform™ remote communication software. With Inform, you will know inventory levels in every tank at every site throughout your network, and be able to check deliveries and improve planning of the delivery schedule.

If hooked up to an external modem, the TLS-2 can be set-up to warn you of an alarm condition, or you can collect inventory information whenever you want it. The available output relay can be tied to an external alarm to provide additional protection against overfills and spills.

Technical specifications:

- Six tank monitoring capability,
- Graphics touch screen display,
- Two serial communication ports (rs-232 / rs-485),
- One parallel printing port,
- Output relay to connect to external alarm,
- Audible and visual alarm through front panel bi-color LED (red and green),
- Real time clock,
- Dimensions: height 16.8 cm x width 19.3 cm x depth 10.2 cm,
- Compatible with all Veeder-Root magnetostrictive probes,
- Centralized data management with the aim of optimizing the work efficiency of your business,
- Check and adjust fuel deliveries in mass/kg,
- Fuel delivery – make sure you get what you paid for,
- Programmed density alarms for levels below and above fuel specifications,
- Time-saving for gas station employees compared to manual density check.

TLS3XX ATG SYSTEM

Automatic tank gauges (ATG) with the TLS300/TLS350X console and MAG PLUS probes are gauges which used for fuel, water level and tank temperature readings. The information is transmitted from the probe to the console (monitor), where the reading of the measured value is available. They are used for automatic tank gauging in above ground and underground storage tanks. The gauge measures fuel temperature compensating the measured level. It shows the measured volume data depending on the tank strapping chart and the compensated volume data

at 15°C. The system can optionally also measure tank leakage at 0.76 l/hour (optional 0.38 l/h) or in continuous mode if the CSLD software is built in. The gauge measures the level of the fluid using the float, which rises or lowers in the probe depending on the level of the fluid. The system consists of an LCD display, alpha-numerical keyboard with(out) a built-in printer. A standard built-in printer enables fast and quiet printing.

The installed software gathers data on fueling, wet stocks – the content of the tank, deliveries and calculates the totals for each shift, day or set period in a separate report according to requirements. In the settings mode, different limits and warnings and alarms can be inserted: water levels, delivery needed, overfill possibility, sudden fuel loss. Outer electric circuits can be triggered through the relay, e.g. remote warning signals, pumps, etc.

The measuring console TLS-300 is intended for up to 8 probes, while the TLS350X supports up to 16 probes. The console is linked to the probes and sensors by cable. A microprocessor with FLASH-EPROM memory in built in the console. It processes data from the probes.

The system processes only one probe at a time, and the data processing lasts approx. 0.1 second. There are two RS232 communication interfaces on the console with different computer systems. The configuration is carried out manually by inputting necessary data via the keyboard on the console or a special program on a PC. The data to be entered are on the connected probes, tank calibration charts and type of fuel. The precise programming of the data is crucial for proper system functioning.

Information such as the specific height-volume point or thermal coefficient (thermal expansion coefficient that matches the change in fluid volume due to temperature changes), have to be precise for the system to function properly. The height-volume coefficient comes from the interpolation of water tank calibration charts (VEEDER ROOT), calculating tank geometry charts (not recommended for VEEDER ROOT precision), and by observing real level changes when adding or subtracting known volumes (possible with more advanced VEEDER ROOT systems).

The following readings can be seen on the console: date and time, levels of fuel and water, temperature, volumes V_t and $V_{t15°C}$, empty space volume, overfill and minimum quantity alarms, failure during operation alarm. Certain data cannot be read from the console without additional programs, which have to be installed on the PC and linked to the console. The console also detects filling, and has stored data for a certain number of past fillings.

This system has the functions "Autocalibration" and "Reconciliation". If these functions are used, the system has to be connected to the pump controller. The fuel level measurement tolerance is ± 4 mm.

Key system features:

- The TLS300 system monitors up to 8 tanks, and the TLS350 system monitors up to 16 tanks,
- Highly efficient and extremely precise technology for monitoring gas stations and managing the environmental aspect,
- Continuous inventory monitoring,
- RS-232 Communication Interface with Auxiliary Port provides two 25-pin D-connectors for data transmission to computers or point-of-sale terminals,
- Standard built-in printer for reports of data on wet stock, leakage detection, alarms and console configuration,
- The system is CENELEC approved, and in Bosnia and Herzegovina we have the type approval for the TLS300 and TL350 systems (TLS300/350 console + MAG PLUS probe), as well as the Ex certificate for the probe alone since the console is not a device under explosion proof,
- There is a possibility of programing the alarm for some of the following situations: low product level, maximum product level, high water level, delivery needed, overfill. If an alarm is triggered, there will be a warning and audible signal. Every warning and level alarm is followed by yellow or red blinkers on the console and an audio signal. The system automatically stores in its memory a set number of notifications on alarms and warnings from the previous period, which can be reviewed afterwards. All warning and alarm limits are set up during installation. These limits can be adjusted on the demand of the system user,
- Two built-in output relays are alarm outputs triggered by overfill and for the external audio and visual warning,
- Automatic reporting following fuel delivery. The time and date before and after the delivery are on the report, just as the fuel amount, water content, temperature before and after the delivery,
- Possible connection to the site-controller via the RS232 port or upgrading to the IFSF,
- Operating temperature range: 0°C - 45°C,
- Storage temperature range: 10°C - 45°C,
- The consoles support MAG PLUS probes without density,

- All measurement values are stored in the console memory,
- Every data reading from the probe contains data on the quantity, possible water presence,
- Data is stored into log files on the console, by the LIFO (Last In First Out) principle and they cannot be accessed or erased,
- Using the DELTA STATION CONTROL and a telephone landline, the TLS300/TLS350 systems can communicate and send data according to the Bylaw on Monitoring Oil Derivatives in the Federation of BiH,
- The software in the console processes the data from the sensor, and the data is transmitted via the DELTA STATION CONTROL and a telephone landline to the central IT system at the Federal Ministry of Trade,
- The TLS-350R ATG optimizes automatic tank gauging since it has the ability to manage inventory automatically using the Business Inventory Reconciliation. This fully integrated system automatically collects separate data on wet stock in the tank and delivery, calculates amounts at the end of every shift, day or period and creates a comprehensive report,
- TSL-350 uses AccuChart, Veeder-Root's patented tank calibration algorithm to minimize errors due to dynamics, such as tank tilt, deflection and end shape, to create an optimal tank chart for each tank in the system. The automatic calibration process, which usually lasts one month, is conducted through the typical operating levels as fuel is dispensed. Once enough valid data is analyzed, the calibration is finished. The updated calibration charts can be obtained from the TLS-350 through an RS-232 interface using a computer.
- The TLS is not an explosion proof design and as such it is not to be installed at the Ex zone place,
- It is recommended to perform manual level measuring in the tank during every admission as well as temperature measuring (before and after pouring into the tank).

MAG PLUS PROBE

The Mag Plus Probe is designed for both aboveground (AST) and underground (UST) storage tank applications that require extremely accurate and reliable inventory readings. The key features are:

- Measuring fuel levels in the tank,
- Measuring the fuel temperature in the tank,
- Optional fuel density measurement,
- Automatic temperature compensation,
- Water level detection and measuring,
- Automatic detection and reporting on fuel admission,
- Automatically triggered alarm system in the following cases: raised water levels in the tank, overfill, insufficient fuel levels in the tank, delivery needed, density out of range,
- Printing various reports such as: current fuel status in the tanks, fuel admission report, etc.

A probe has to be installed in each tank. This is a gauging device designed and manufactured for usage in Ex zones. The probe is delivered and fixed in a kit containing: temperature sensors, a float for monitoring the water level and/or density in the tank, a float for monitoring fuel levels in the tank, float sealer, brass boot, plastic boot, cable for linking the IT cable.

Simply put, the level of the product is determined according to the time needed for the electronic impulse to cover the distance from the top of the tank to the float for the product and back. The volume of the product is then calculated based on the known level of the product and the known dimensions of the tank.

Real density measuring is enabled – density is not calculated out of other parameters, but is measured directly. GVR patented density measuring using the principle of magnetic rejection for a direct fuel density calculation. Density is measured at the bottom of the tank, above the level of water in the tank (density floats are above the surface of the water level). This is an ideal manner for measuring since it is directly in the line. TLS console displays optionally density in kg/m³, mass in kg and starts the alarm in the density is out of range.

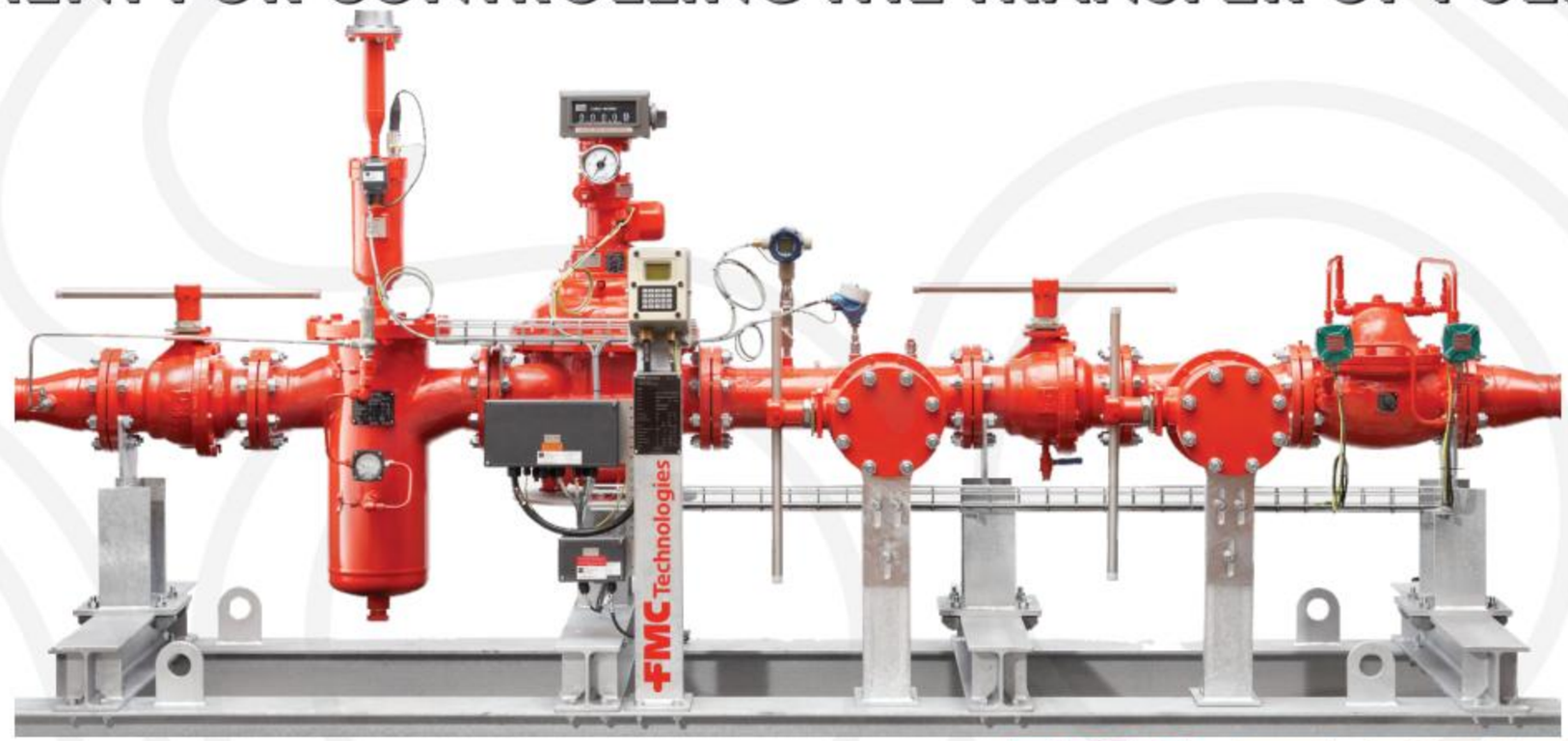
Key features and specifications:

- Volume of the fluid: measuring area from 120 mm to 3660 mm with 0.1 mm resolution,
- Temperature of the fluid: measuring from -40°C to +60°C with 0.1°C resolution,
- Water presence from the bottom of the tank to 19 mm. Water measurement resolution of

0.1 mm,

- Temperature performance: -40°c do +60°c,
- Can be used for gasoline, diesel and a wide variety of approved fluids,
- Can be used for extremely accurate in-tank leak testing,
- High class accuracy of measuring fuel and water levels,
- Optional density/mass measuring. Density probe is based on the existing MAG+ design with the added density float, fixed with the water float,
- Density of the fluid: different types of gasoline demand density measurement limits from 700-800 kg/m³. For different types of diesel, the limits are 800-900 kg/m³. Density measurement accuracy is ± 1kg/m³. Density measurement resolution is 0.1 kg/m³. Automatically programmed "density out of range" alarm. Low sensibility point for measuring density.

EQUIPMENT FOR CONTROLLING THE TRANSFER OF FUEL



FMC Technologies

DICKOW PUMPEN

www.delta-petrol.com

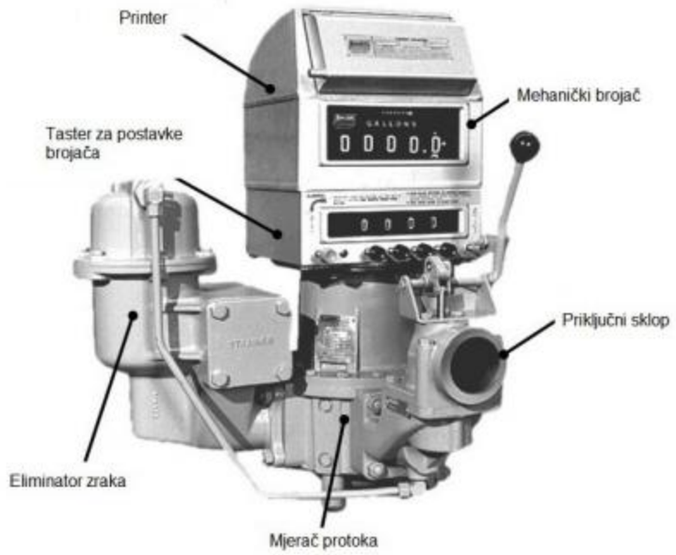
"Delta Petrol d.o.o. Kakanj" is a representative of the FMC Technologies Measurement Solutions is the market leader in the design, manufacture and supply of measurement products for the worldwide oil and gas industries. Through a deep understanding of the industry, unmatched product and system knowledge and the highest standards for performance, FMC Technologies Measurement Solutions puts the most daunting measurement challenges within reach. With over 2,000 installed metering systems in over 100 countries worldwide, FMC Technologies has unparalleled expertise in designing and constructing diverse liquid and gas systems that meet the needs of its customers.

FMC Technologies Measurement Solutions employs engineers and project management staff who are experts, many with decades of experience in the measurement industry, and offer complete support at every phase of the project's development.

www.delta-petrol.com

FMC Technologies Measurement Solutions emphasizes:

- First dispensing meter system for ships in the world,
- Over 8,000 dispensing meter systems around the world,
- First LPG dispenser meter system,
- Global network for technical and maintenance support,
- Project management,
- Manufacture quality control,
- Equipment installation monitoring.



As part of its sales program, "Delta Petrol d.o.o. Kakanj" as a certified distributer of *FMC Technologies Measurement Solutions*, offers the entire array of their product range such as:

- Terminal meter system SMITH METER,
- SENING MULTIFLOW tank truck measurement system for the transport of oil and oil derivatives,
- SMITH METER mobile meters for oil and oil derivatives.

DICKOW HIGH PRESSURE-PUMPS

As a part of its sales program, the company "Delta Petrol d.o.o. Kakanj" offers reliable high-pressure pumps by the renowned manufacturer DICKOW PUMP COMPANY Inc. with their one-hundred-year experience in manufacturing pumps.

Owing to their high performance and reliability, Dickow pumps have been applied primarily in oil terminals, and due to a large number of patents, they have supplied numerous large chemical companies.

One-hundred-year experience as a pump manufacturer, secured maintenance everywhere in the world, and our experienced staff provide guarantee and security that you cannot make a mistake when purchasing a Dickow product.

As part of the meter systems we deliver to terminals, DICKOW pumps are our first choice.

POS SYSTEM– DELTAPOS

DOMS

www.delta-petrol.com

Computerized system for the sale of fuel and the remaining product range at gas stations

Bearing in mind the need for automatization of gas stations in BiH, "Delta Petrold.o.o. Kakanj"developed its own computerized system for the sale of fuel and remaining product range under the name DELTAPOS:

The benefits of the DELTAPOS sales system:

- The computerized "DELTAPOS" system was completely developed in "Delta Petrold.o.o. Kakanj". Therefore, the maintenance of the system does not depend on other companies.
- The system was developed based on extensive experienceand is aligned with enforced legislation,
- A large number of possibilities and adjustment to the customer,
- Affordable price.

The complete system contains:

- Pump controller,
- PCcomputer,
- Software package.

THE CONTROLLER is a hardware device which enables the communication between pump sets and computers, encompassing the portfolio of multiple manufacturers and standardized models, using specifically selected modules.

These are some of them**:**

1. ZSR-pumps SCHWELM, SCHLUMBERGER, TOKHEIM, as well as pumps using the computers by manufacturers such as TUBS,
2. SCHEIDT&BACHMANN pumps,
3. NUOVO PIGNONE pumps,

4. KIENZLE pumps,
5. WAYNE DRESSER pumps,
6. SALZKOTTEN pumps,
7. IFSF protocol pumps (Protocol accepted as a new communication standard, supported by most manufacturers),
8. Old mechanical sets can be attached if an electronic unit is built into the pump set.

INTERFACE OPTION – possible connection to other software solutions!

"Delta Petrol" developed the "**Interface**" for its existing and potential clients who already have a financial accounting program, or want to have one of their own choosing. "**Interface**" enables data transfer from the fuel measuring systems and downloading them by the existing program. Upon download, data is processed in the existing software.

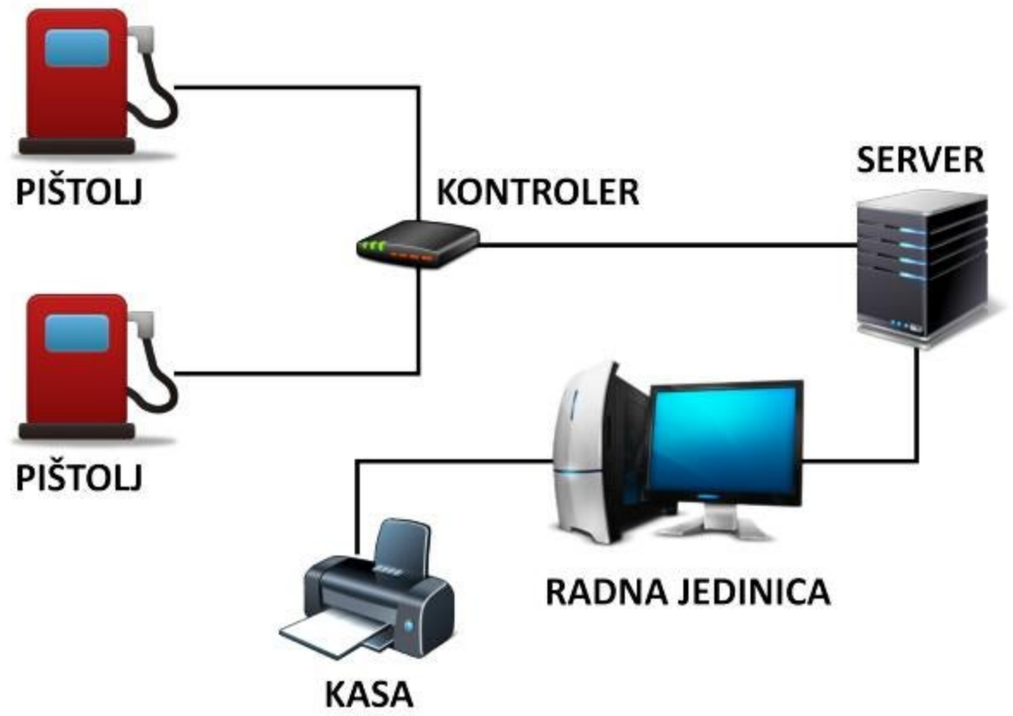
Most companies in BiH already has an active implemented solution which is mostly local. Our "interface" option is special owing to the fact that it does not determine the software solution of our potential client in order to perform the automatization of the gas station.

Our "interface" option allows our clients to perform the automatization of their gas station while keeping the software solution they have actively been using. We eliminated the issues occurring due to failure or maintenance, and if a problem does occur, the responsibilities between our interface and the client's software solution are clear. If a problem occurs, it is clear who is responsible for which part, and the experience proved that most issues can be solved via the Internet.

The multiple benefit of our application is evident. By selecting our "interface" option, the client does not have additional costs for the procurement of a new solution, training or training costs, adjustment process or maintenance costs.

The complete system contains the following:

1. Fuel dispenser;
2. Site controller;
3. Interface;
4. "Retail" application.



There are several fuel dispensers with several nozzles at a gas station. One dispenser can have up to 10 nozzles. The controller is the device which, on the one side, communicates with dispensers, in a manner that is specific for each manufacturer, and on the other side, it communicates with the computer system in a manner that is adjusted for such communication (RS232 or TCP/IP).

"Interface" is a software application which communicates to the controller and over it with dispensers. It checks the presence of the dispensers on the communication channel, sends prices to every nozzle, approves every individual delivery, creates files (reports) on every delivery and

occasionally makes reports on electronic totalizers for the nozzles. Every delivery has its own number which is matched to the file name. This number is used for review. The number of files sent depends on the number of deliveries on different nozzles. Upon the completion of fuel delivery, the device – controller sends a record to two locations on the disk. In addition to transmitting the data, the controller contains information on the nozzle and the matched type of fuel and price.

We use the **Interface** to connect the controller to the application "Retail". The controller sends two types of data:

1. Data on individual delivery – at the end of every delivery
2. Data in cumulative delivery – at request and at the start/end of every shift

Data on individual delivery is generated by the controller in the form of a file with a pre-defined format.

The Retail Application

Key features of the application are:

- Fuel sale,
- The sale of the remaining product range at the gas station
- Several retail applications can be installed at one gas station if necessary, combined with a controller to monitor and control dispensers and the corresponding charge,
- Enables automatic or manual delivery approval, immediate interruption of delivery and the continuation, blocking and stopping all dispensers and each dispenser individually, and manual or automatic receipt print,
- It is in compliance with the Law on VAT and offers reports required by law, and additional reports (current, daily and periodical reports on sale per receipt, products or dispenser totals) and the possibility of finding and printing any receipt issued using this application,
- At the beginning and end of every day, it keeps records of totalizers for each nozzle and fuel sale and compares it to sale, and provides reports (current, daily and periodical) on the state of the totalizer,

- It keeps internal client control for goods on receipt, and the control of limits for individual clients,
- Enables reports to be sent to a remote location and data to be synchronized with locally installed or accounting program at a distant location,
- Communication with accounting is possible in the local computer network, via a modem or the Internet.

DOMS PSS5000 CONTROLLER

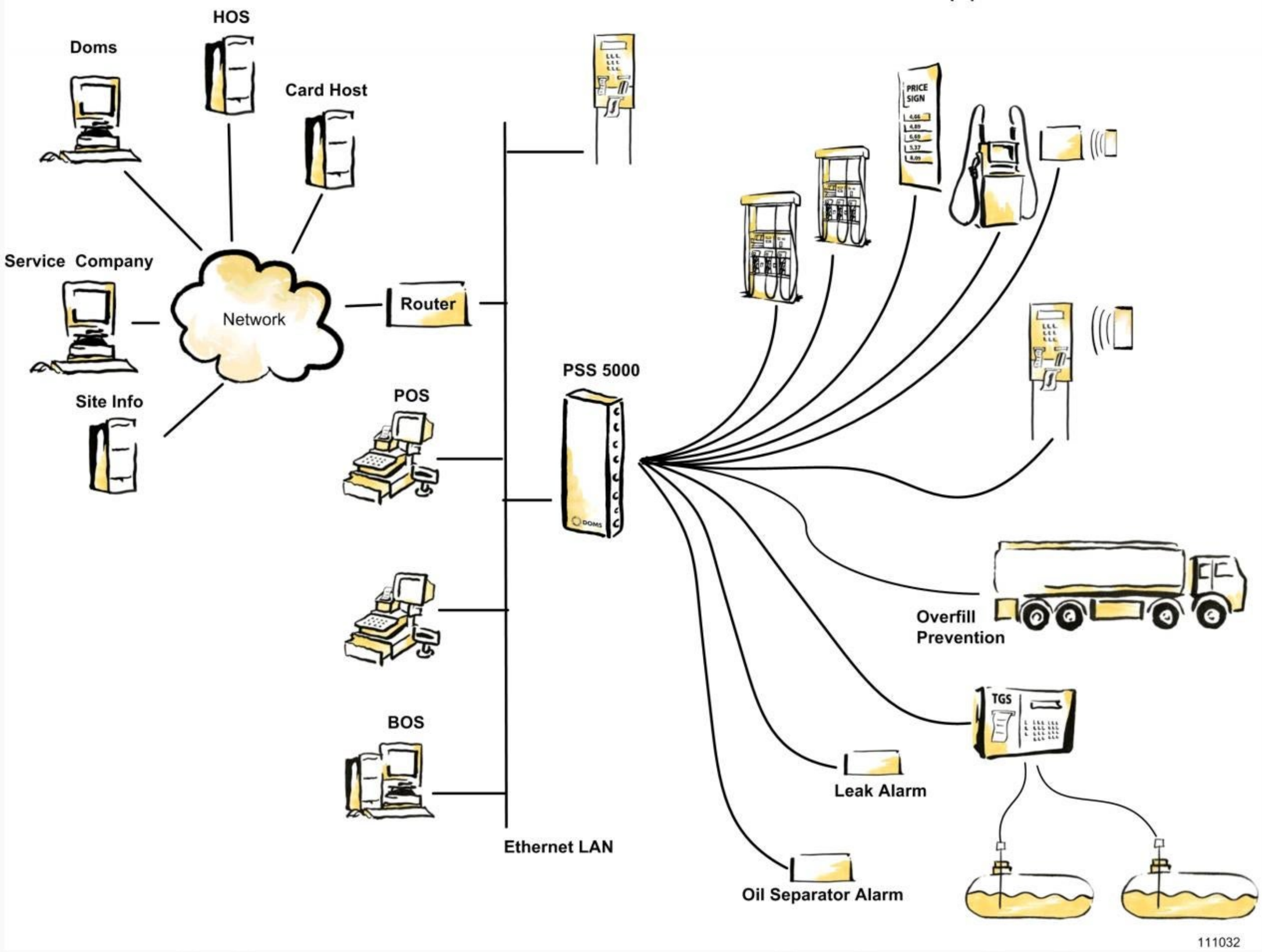
Following the trend of offering our clients only the best quality products, "Delta Petrol"d.o.o. Kakanjis proud to be the authorized, certified and trained distributer of the most complete global manufacturer of controllers for automatization under the name DOMS PSS5000. The DOMS controller enables communication and connection of different equipment and the system, which are necessary for successful operation of a modern gas station we know today.

hese features set the DOMS controller apart from others:

Fits most forecourt equipment	Reliable	Remote connection
• Enables oil companies to choose an appropriate base device, • Fast deployment of features maximizes investment return, • Enables oil companies to choose an appropriate POS/ BOS system.	• Proven the best in its class, • Lower maintenance costs, • Increases sale.	• • Minimum maintenance cost

Add-ons for automatization and efficient management of your gas station:

- Fast deployment of needed features maximises the business return on investment
- Reduces cost for maintenance and maximises sales,
- Minimizes service costs,
- No need for additional system (HW/SW) to run the central service,
- Faster development, less cost, easier to maintain,
- Interface for most equipment,
- Embedded (no moving parts),
- TCP/IP based host interface,
- Covers almost any forecourt scenario,
- High resistance to electrical interference,
- Open interface for POS suppliers,
- Built-in web-server.
- .


HOS
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Network
Router
Site Info
POS
PSS 5000
PRICE SIGN
BOS
Ethernet LAN
Overfill Prevention
TGS
Leak Alarm
Oil Separator Alarm
111032

HIGH QUALITY POLYETHYLENE PIPE SYSTEM

PETROL PIPE SYSTEM
KPS

www.delta-petrol.com

OPW GLOBAL KPS PETROL PIPE SYSTEM

"Delta Petrol d.o.o. Kakanj" is the authorized and certified distributer of KPS Petrol Pipe System™ which represents a comprehensive range of products manufactured by Kungsörs Plast AB, a Swedish company with more than 25 years of experience in manufacturing polyethylene pipes and fittings for the petroleum industry. KPS is represented worldwide by a network of partners, providing a full-range back up service, with "Delta Petrol" as a partner in Bosnia and Herzegovina.

The KPS Petrol Pipe System™ is a state-of-the-art, total solution for the handling of liquid fuel in underground polyethylene pipework systems, with features that address environmental, health and safety, life-span and economical concerns. The KPS product range is expanding and developing continuously to adapt and conform to the ever more stringent demands of the market. By using state-of-the-art technology, the company offers highly competitive, long-term solutions with designs that have been developed to eliminate all leakage and electrostatic hazards.

KPS Petrol Pipe System™ includes:

- Pipes,
- Welding sockets,
- Bends, tees and reductions,
- Transition fittings plastic to steel and steel fittings,
- Electrical conduits,
- Entry seals,
- Dispenser chambers and covers,
- Fill box and vent stack equipment
- Overfill prevention and leak detection,
- Installation tools and welding equipment,
- Test equipment.

Secondary Contained Pipes

Our secondary contained pipes have been developed to provide extra environmental safety. By applying an outer, secondary pipe over the inner primary pipe, an interstitial space is created. A leak detection system can then be used to monitor the interstitial space for leaks.

Conductive pipes

KPS conductive pipes have been specifically developed to address the risks of electrostatic hazards, a problem that oil and fuel companies are becoming increasingly aware of. The KPS conductive piping is our biggest and fastest growing product segment, as an increasing number of our customers appreciate the importance of eliminating risks related to static electricity.

Static Electricity

Conductive objects can have different electrical potential. When two conductive objects have a difference in potential and are close enough to each other there can be a discharge between these objects in the form of a spark. At the filling station where fuel vapors may be present such a spark can ignite an explosive atmosphere. To prevent discharges from occurring, objects at the filling station should be kept at the same potential. This is achieved by making sure conductive objects are electrically connected to each other. When potential equalization has been correctly applied to all objects at the filling station, the risk of sparks from electrostatic discharges from the installation is minimized. One problem is the use of non-conductive plastic pipes that cannot be electrically bonded and earthed due to the lack of electrical conductivity. The non-conductive pipes are also a source of static electricity. When petrol flows through a non-conductive pipe static electricity is created due to the friction between the petrol and the pipe wall. The amount of static electricity created depends on the flow rate of the fuel.

The flow of oil derivatives has been perfected by preventing the accumulation of electrostatic charges and leak detection. KPS is specialized for manufacturing all types of pipes, with a 30-year warranty.

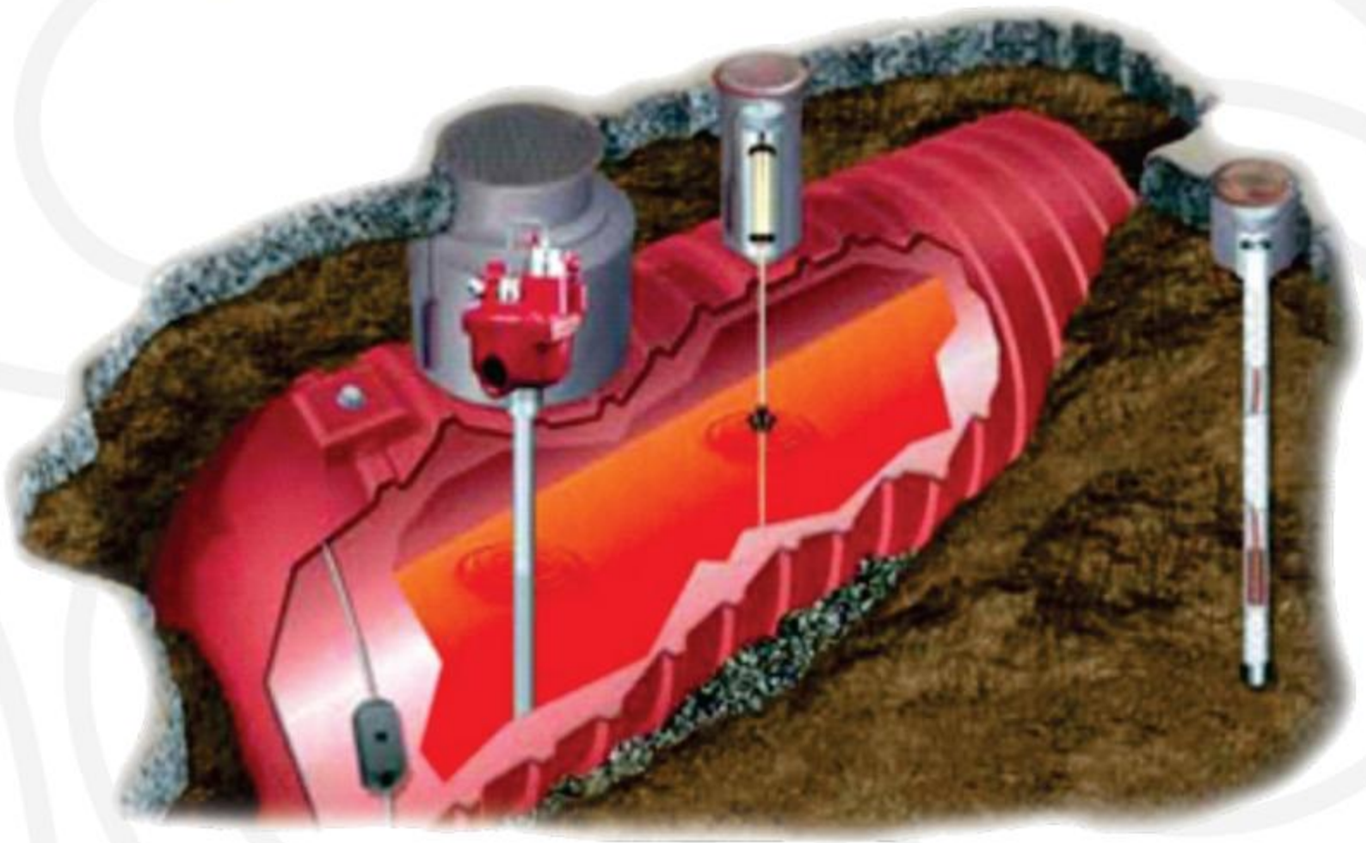
NUPIGECO SMARTFLEX

SMARTFLEX installation technology is based on one of the most commonly used processes in the polyethylene industry – electrofusion. The installation is performed by qualified installers who are obliged to follow all the instructions by the manufacturer as well as local regulations, to avoid injuries. Installers have to go through certified SMARTFLEX training before being issued a certificate to perform installation. The certificate is valid for three years. Delta Petrol staff is certified for this type of installation.

The polyethylene pipes are manufactured in several layers from non-conductive materials. The inner layer represents a barrier which enhances the non-conductivity of the pipe, while the outer layer hold mechanical firmness. With the aim of providing additional mechanical protection, these pipes can be manufactured with an additional secondary protective layer. The pipes are intended for underground installation in the following cases:

- Fuel transport,
- Underground tank filling from cisterns,
- Vapor recovery,
- Levelling pressure in underground storage tanks.

SUBMERSIBLE FUEL AND LPG PUMPS



GILBARCO
VEEDER-ROOT

www.delta-petrol.com

We are proud distributors of the RED JACKET manufacturer of submersible fuel and LPG pumps. For over 40 years the name Red Jacket has become synonymous in the petroleum industry with a range of high-quality, high-performance products. Red Jacket has the largest installed base of submersible pumps in the industry.

Improved flow isn't just about the size of your pumps. Understanding how your site works, and the impact of other equipment on flow rates, is of crucial importance. We have a full range of products to control flow and reach maximum output limits at the pump. Flow control systems include controllers, demand based staging, and flow-limiting technologies that optimize fuel flow rates while meeting maximum flow rate regulations. Flow control increases fuel throughput and profitability by providing consistent maximum flow at all nozzles. High volume sites pose special opportunities for improved flow rates. Upgrading the size of your pumps can have a substantial benefit at high volume sites. A simple upgrade from a 1 1 /2 HP to a 2 HP pump can increase flow by over 22% when 8 nozzles are operating. Over the course of a 3-hour-peak period that can translate to an additional 381 gallons of fuel pumped. Fixed speed pump control is a simple technology, with a history of reliable performance and system uptime. Fixed speed pump control is cost effective. The initial cost of fixed speed equipment is lower than variable speed options, as is the total cost of ownership. Variable speed pumps are designed to measure demand and control the speed of the pump, allowing it to spin faster as demand requires.

Flow control comparison:

	RJ 2HP VARIABLE SPEED	RJ 2HP FIXED SPEED
Flow Rate		
Maximum Flow Rate	95 GPM	91 GPM
Manifold System Max Flow Rate	172 GPM	168 GPM
Optimum Nozzle Flow Rate		
Flow Control Requires a Flow Limitation at the Nozzle	Moguće	Da
Dispenser Flow Control	Najbolja	Najbolja
Mechanical Flow Limiter	Opcionalno	Opcionalno
Total Cost of Ownership		
Equipment Purchase Cost	Veći	Manji
Installation Cost	Veći	Manji
Maintenance Costs	Veći	Manji
Power Efficiency	Jednaka	Jednaka
Power Use at Max Flow Rate	2598 W	2587 W

***Red Jacket submersible fuel pumps offer*:**

- Fixed and variable speed pumps,
- Lowest pressure drop across the packer manifold optimizes flow with any sized motor
- Service spill elimination,

- Prevents false alarms and downtime,
- Environmental compliance without fuel flow restrictions,
- Wide range of fuel compatibility,
- Quick, simple and safe yoke assembly,
- Easy to service.

If you're looking for a safe, efficient system for pumping LPG we offer the best LPG pump in the industry. The features of the LPG submersible pump are:

- High performance for a cleaner environment,
- High differential pressure capability for guaranteed flow performance with various LPG mixtures,
- Certified design explosion-proof submersible electric motor,
- Multi-stage centrifugal pumping system for reduced power consumption,
- Lower maintenance costs, longer life,
- Split pump/motor design for easy installation and maintenance.

Red Jacket submersible LPG pump, EC certificate type: LCIE 03 ATEX 6271X

Model	Flow at 7 bar	Flow – Maximum efficiency	Flow at 4 bar	Motor				Pump	Length (mm)	Weight (kg)
				Vac	Hz	Hp	KW			
LPG application										
1	Premier	70 l/min	70 l/min na 6.8 bar	100 l/min	50	3	2.2	21	1506	39
2	Premier Mid Flow	100 l/min	130 l/min na 5.8 bar	170 l/min	50	3	2.2	17	1506	39
HiFlow (industrial) application with minimum flow of 25 l/ min										
1	Premier HiFlow	150 l/min	130 l/min na 8.1 bar	190 l/min	50	5	3.7	24	1896	48

TRANSFER MEASURING SYSTEMS AND EQUIPMENT

PIUSI was established in 1953 in Suzzara, in the province of Mantua (Italy). They started as a mechanical engineering workshop serving the agricultural industry. The company soon made a name for itself as a manufacturer of strong and easy-to-use products suitable for a range of "different uses" (più-usi).

PIUSI S.p.a provides professional, easy-to-use and top-performance solutions for transferring "dispensing" and measuring fuels, lubricants and liquids. PIUSI pumps, flow meters, dispensing instruments and accessories (filters, nozzles, etc.) are used and in demand at global level in a whole range of different sectors, from transport to construction to agriculture, the automotive industry, the ship-building industry, with special focus on the production of UREA supply products (AdBlue®, DEF, ARLA).

Quality is recognised by the market and by international bodies which certify the reliability of production processes (UNI EN ISO 9001:2008) and environmental friendliness (UNI EN ISO 14001:2004).

We can offer you the complete range of products, especially quality transfer measuring systems for fuel and AdBlue.

TRANSFER MEASURING SYSTEMS

Electric pump DRUM and ST is a unique and reliable unit, intended for dispensing diesel, motor oil and vegetable oil.

It was designed for quick and simple fixing on a barrel or cistern using a 2'' coupling.

We offer 12V, 24V and 230V pumps, capacity: 40-80 lit/min. DRUM and ST units are delivered with different equipment depending on the request of the customer.

DISPENSERS

Dispensers are designed and manufactured for dispensing diesel or vegetable oil. They are simple to install and offer users with access quick and precise dispensing.

Equipment options:

- Self-priming rotary wing pumps with integrated by-pass valve and absorption filters, capacity 56-90 lit/min;
- 12V, 24V, 230V motors with IP55 protection;
- Mechanical and digital flow meters;
- 4 to 10-meter-long hose;
- Magnetic keys or cards available for user identification;
- Electronic dispensing control.

Bipump units

Bipump units are working units with double pumps with the capacity of 85 l/min, intended for working in the field, with 12 V or 24 V options.

AdBlue®

AdBlue® is clear water solution of urea, containing 32.5% pure urea and 67.5% deionized water according to the ISO 22241 standard.

AdBlue® is directly injected into the exhaust system of the vehicle and through SCR (selective catalytic reduction) it reduces harmful gas emission to the level prescribed by Euro 4, Euro 5 and Euro 6 standards.

Complete storage equipment, as well as the supply pump system, have to be provided specifically for AdBlue®. In order to avoid contamination and ensure product quality, AdBlue® is stored at temperatures between 0°C and +25°C, which secures a lifetime of at least 1.5 years.

As an authorized distributer of GREENCHEM, SDT GROUP DOO can deliver AdBlue® to your address by tanktruck or IBCs of 1000l.

AdBlue systems were created as a result of analyzing AdBlue dispensing issues.

They were designed to be fixed on new IBCs and were manufactured from a material resistant to these solutions. We offer systems for horizontal or vertical fixing on Schuetz, Mauser or Air1 tanks.

Features:

Flow rate 40 l/min;

Maximum operational pressure 5 bar;

Liquid rising level 2 meters;

Accuracy +/- 1%.

Specifications:

Self-priming chrome pump 230 V;

INOX turbine flow meter;

4m hose;

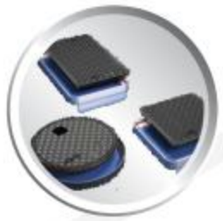
Automatic nozzle;

1.5 m suction hose with filter and irreversible valve;

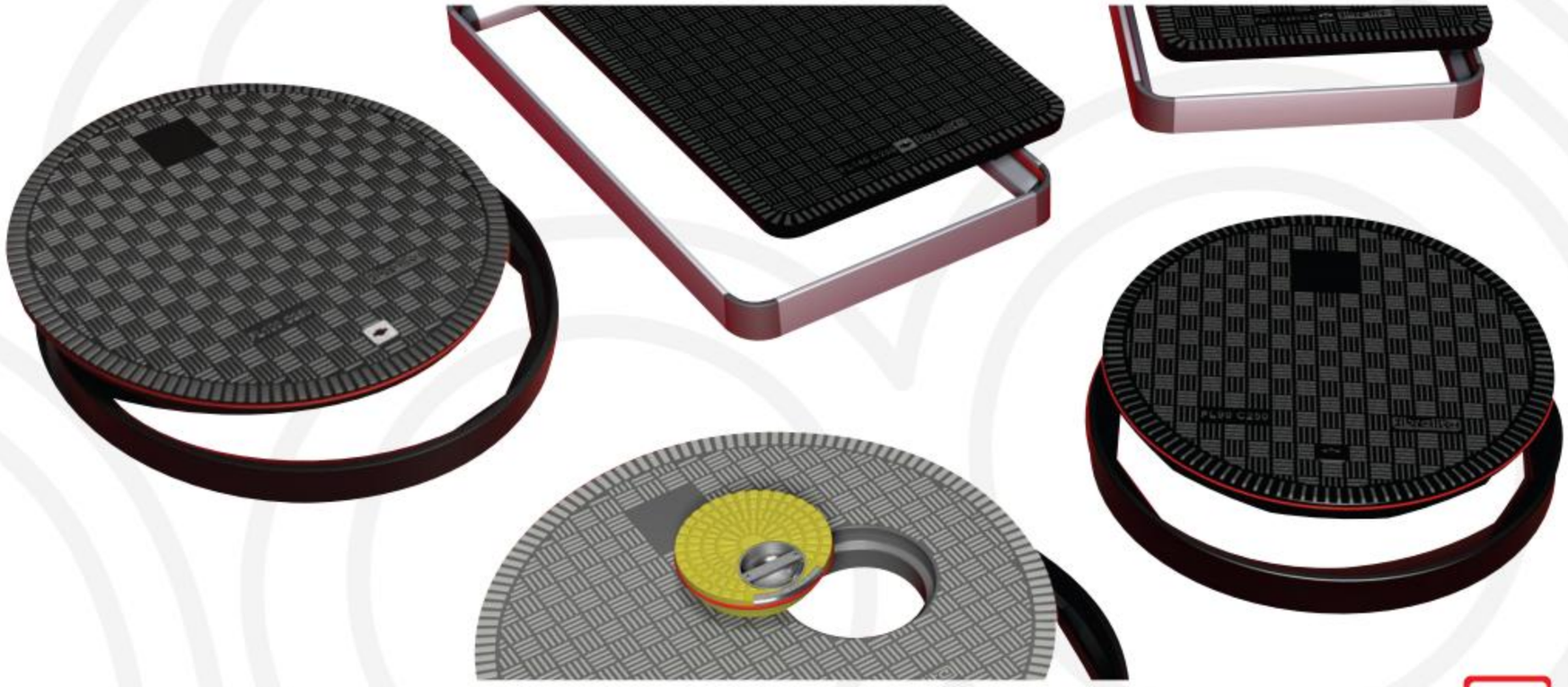
CDS quick coupling; carrying stainless steel plate.

Piusibox is a pump generator unit for dispensing diesel at 12 V and 24 V and with the capacity of 45 l/min. It is suitable for working in the field without other power sources.

The complete generator is in a modern design box, enabling easy transport and protecting the unit from damage, dust etc.



COMPOSITE MANHOLE COVERS



FIBRELITE

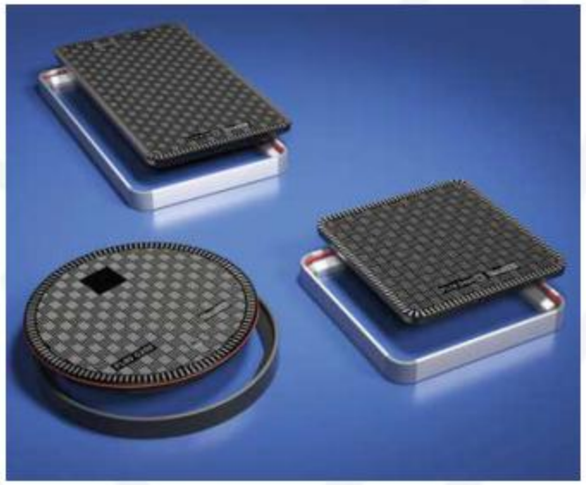
As part of our sales program we offer you a wide array of composite manhole covers by the renowned manufacturer Fibrelite Composites Ltd. Composite manhole covers are designed for gas stations, fuel dispensing areas, with the frame design for "frequent" access. In addition, the covers are also used in other branches of industry, such as the chemical, metal etc.

The list of clients using Fibrelite composite covers grows every day. The products meet all current standards, and factory procedures are in compliance with the BS EN ISO9001.2000 standard. All covers were designed for load over 25 tons. The applied engineering approach was very successful for engineers, operators and owners around the world. There are over 150,000 composite covers installed around the world by large oil companies, private companies, etc. Composite covers are moved and replaced easily by the staff without risk of injury. The covers were tested and proved to be safe for usage. You will buy these covers once during the lifetime of your gas station.

Fibrelite **is the leading global manufacturer of lightweight composite covers which are anti-slip, anti-static, non-corrosive and water-tight.**

Benefits:

- Very light-weight, monolith non-corrosive structure,
- Simple and secure handling,
- Complete water-tight – no fumes, gas or liquids,
- Lifting aid eliminates back injury and crushed fingers
- Wide range of sizes,
- Covers according to current standards,
- Non-metal, non-conductive cover,
- Excellent heat insulator,
- Resistant to damage by underground gases or chemicals,
- Anti-slip surface,
- Perfect access to the lines, pipes,
- A wide range of resistant UV stabile colors.



LEAK DETECTION SYSTEMS FOR TANKS AND PIPES

THOMAS
A Gardner Denver Product

www.delta-petrol.com

ASF uses the principle of maintaining constant nitrogen pressure within a double-walled tank or pipe system. The monitoring space permitted to under p=0.5bar with inert nitrogen gas. Visual and audible alarms are triggered by a pressure drop as a result of leaks in the tank walls, above or below the liquid level.

Field of application for the Leak Detector Type D9:

- Underground and aboveground double-walled tanks with a monitoring space permitted to a pressure up to 0.6 bar,
- With an appropriate manifold system, up to 6 underground tanks can be monitored with one leak detector - the overall monitoring space volume may not exceed 8 m³,
- Tanks without leak detection fluid in the monitoring space,
- The detector must be assembled within dry, frost-protected area, or outside into a protective enclosure. It is not allowed to install the leak detector in an ex-zone!
- Operating pressure in the interstitial space < 490 mbar. Stored liquids with flash point <55°C. The leak detector works on the pressure principle.Visual and audible alarms are triggered by a pressure drop as a result of leaks in the tank walls, above or below the liquid level. Ambient air is drawn by the pump through an integrated air dryer and pumped with a max. relative humidity of 10% into the monitoring space. Small system leakages are balanced by the pump automatically. An integrated pressure valve on the pump protects the tank against damage.

Field of application for the Leak Detector Type D25:

Double-walled underground pipes with an appropriate monitoring space and max. operating pressure of 16bar. Operated without stationary nitrogen bottle; with an appropriate manifold system, up to 8 underground pipes can be monitored with one leak detector, the overall monitoring space volume may not exceed 10 m³. Stored liquids with flash point <55°C. The detector must be assembled within dry, frost-protected area, or outside into a protective enclosure. It is not allowed to install the leak detector in an ex-zone.

The leak detector works on the pressure principle. Visual and audible alarms are triggered by a pressure drop as a result of leaks in the pipe. Nitrogen is led from an external bottle to the leak detector and into the monitoring space, up to the adjusted monitoring pressure. Afterwards, the external bottle will be disconnected from the leak detector. Maximum operating pressure of the pipe is 16bar. Maximum allowed monitoring pressure is 21bar. The alarm ON can be adjusted at least 1 bar over the operating pressure of the pipe,without any refills necessary, if the piping work is done carefully.

KROHNE FLOW AND LEVEL MEASUREMENT

KROHNE

"Delta Petrol d.o.o. Kakanj" is a distributer for the company Krohne, the leading global manufacturer of flowmeters, and supplier of equipment for the processing industry. Products and services by Krohne are intended for the oil, chemical, petrochemical, food, electric and mining industries.

The aim of Krohne is to always meet or surpass the needs and expectations of every customer by:

- Manufacturing innovative, reliable, high-quality products and services
- Employing qualified and motivated people
- Listening and responding to our customers' needs
- Maintaining long-term relationships with our business partners.

When it comes to process measurement, the level of expertise is unique, not just in standard applications but also for those challenges that demand customized solutions. Krohne does not only offer a wide range of measuring instruments, but is also a pioneer in constructing most measuring solutions.

Clients around the world benefit from the innovations by Krohne:

- Coriolis mass meters for liquids and gas, high temperatures and high pressure,
- Krohne offers a combination of high-tech and simple user interface in its electromagnetic flowmeters, intended for all industries. It is no wonder that the Physikalisch-Technische Bundesanstalt (PTB) in Braunschweig, Germany, relies on electromagnetic flowmeters from KROHNE in their calibration systems.
- Vortex measuring devices,
- Flowmeters for wastewater, partially filled pipelines with integrated capacitive level measurement,
- Level meters using the radar principle, bypass method and float,
- Other equipment.

ELAFLEX HAMBURG

ELAFLEX

www.delta-petrol.com

With the aim of providing out clients the best quality in products and service, "Delta Petrol d.o.o. Kakanj" has cooperated with the renowned German company "Elaflex Hamburg" for the past 20 years.

ELAFLEX is a leading international specialist for refueling equipment and safe connections for the transfer of dangerous goods and sensitive fluids in the oil and processing industry.

Their hoses, fittings, couplings, expansion joints and nozzles have been setting standards, since 1923 Elaflex provide quality engineered, durable products.

We offer their original products, whose quality earned them the place of your first choice in the equipment segment.

Petrol stations

Regarding maintenance and service of gas stations, we select:

- Nozzles for dispensing fuel, LPG and AdBlue,
- Petrol and process industry hoses,
- Elaflex spare parts: hoses, connectors, aluminum pipes for nozzles, ZVA nozzles, rubber cover for hoses, plastic covers for nozzles, oils seal springs.

As part of professionally equipped workshop and large capacity storage for spare parts, the trained staff of "Delta Petrol" with their extensive experience is able to service malfunctioning fuel dispensing nozzles.

Application (on the next page)

Petrol station equipment

Aircraft refueling

LPG equipment

Rail tankers

Chemical industry

Ships (bunkering, loading and unloading)

Tank truck equipment (loading and unloading)

Rubber expansion joints

Military equipment

As part of the Elaflex program we have selected:

	**ZVA Slimline 2/ ZVA Slimline 200 GR** – automatic nozzle with or without vapor recovery
	**ZVA 25 Nozzle**
	**ZVA 32 Nozzle**
	**ZVA 500 Nozzle**
	**TNG ZVG1 Nozzle**
	**AdBlue Nozzle**
	**Dispenser hoses for all products in the oil and process industry**

	**Rubber expansion joints**
	**Fittings and couplings**
	**Spare parts for maintenance and service of fuel dispensing nozzles**
	**Connectors and seals**
	**Nozzle covers and other equipment for servicing fuel dispensing nozzles**

SYSTEMS FOR HIGH FLOW RATE TRANSFER

LIQUID CONTROLS

S.A.M.P.I.

www.delta-petrol.com

With the aim of completing its offer on the oil market and offer comprehensive quality solutions for the diverse needs of our clients, "Delta Petrol d.o.o. Kakanj" realizes excellent cooperation with the manufacturer of top-of-the-range meters LIQUID CONTROLS SAMPI.

The target group are markets and customers that, as part of their regular activities, demand the usage of high-quality pumps and meters, with flows reaching 700 l/min.

jLIQUID CONTROLS SAMPI can offer a wide range of systems for different applications. The standard applications covered by LIQUID CONTROLS SAMPI product range:

- Internal gas stations, with high quantities of fuel dispensed in a short period of time,
- Dispensers for tank trucks,
- Mines,
- Dispensers for ships in a marina,
- Dispensers for public transport vehicles,
- Dispensers for military vehicles,
- Dispensers for aircrafts.

Regarding very demanding systems, it is always necessary to clearly define the technical demand and the need of the customer and offer a solution. We are at your disposal.


STAMPATORE DI CARTELLINI
LITRES
0 4 0 0 4
Reset counter to zero before each delivery
DO NOT RESET WHILE COUNTING
4 2 1 1 7
S.A.M.P.I.
MADE IN ITALY

LED LIGHTING

DETAS DLEDS

With the aim of widening its services and offering the most in the area of gas station construction, in 2012, "Delta Petrol d.o.o. Kakanj" became a distributer of the renowned Italian company Detas, globally known manufacturer of LED lighting with the headquarters and manufacturing facilities in Italy.

In 1896, Detas was founded, manufacturing and fixing first electrical products, such as bulbs and cables. As years passed, Detas used its experience for growth in other branches of electronics, such as power supply, switches, voltage protection devices, safety road signs and commercial and industrial LED lights.

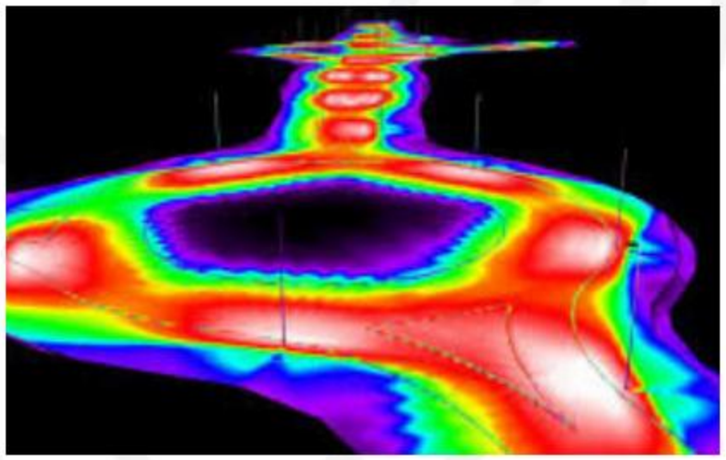
Their most popular brands of products are:

DETAS – original department which is the world leading brand in electric equipment for industrial automatization

DPOWER – brand founded in 1998, manufacturing and selling LED street signs, safety devices for dangerous and fatal points on roadways and beacons and flashers for priority vehicles. All D-Power are certified under strict EU standards. This brand is widely accepted around Europe and the Middle East.

DLEDS – brand founded in 2008, with top-of-the-range LED street lights, garage lights, lights for parking lots, canopies and industry. DLEDS is certified under all world standards, from ENEC for Europe to TÜV for North America (completely accepted by OSHA, meeting all requirements in the USA, such as UL).

From the beginning with the LED lighting project, the company has worked hard to create a network of reliable partners who follow similar principles. By choosing Detas LED lighting, you do not only opt for lighting but complete service of design, economic assessment and advice.



The project consists of several stages:

- Preliminary assessment of potential and basic analysis,
- Survey of the current situation on the field,

- Designing a new situation with LED lights, minding EN 13201-1/2 street lighting standards,
- Technological and economic investment analysis,
- Advice on financing the project,
- Working with designers and contractors during the project.

Detas LED lights save 60-70% energy when compared to outdated lights. Additional savings are realized through innovative manners of automatization during low traffic. Standard five-year-guarantee with extension ensures minimum maintenance.

DETAS offers a wide range of LED lighting which can be applied in the following categories:

STREETS

- Highways,

- Local roads,
- Tunnels,
- Parking lots,
- Promenades and parks,
- Pedestrian crossings,
- Crossroads and roundabouts.

Highways

When designing outdoor lighting, legal standards and requirements have to be met. Considering the high speed of vehicles, high traffic and other parameters, street lighting has to meet the strictest standards. The technical requirements that have to be met are illumination, longitudinal and transverse uniformity, limited glare, environment lighting. The allowed color is up to 4 500K. Due to the experience of the DLEDS design team, and a wide range of power and patented optics, it is possible to replace the existing light sources 250W - 400W with DETAS LED lights 90 – 180W with an ENEC certificate, which leads to saving energy up to 70%.

Recommended lights>

Stratos P-G

LED light suitable for streets, crossroads and parking lots; Philips Lumileds LED diode, Philips Xitanium LED driver constant electricity, power surge and overcurrent protection, light temperature 3000K/4000K/5500K; high index of color rendering CRI>80; select from a number of patented optics, lifetime >90000 h; cast aluminum housing, SUPERCAST patented anti-corrosive alloy; tempered 5 mm glass; IP66 degree of protection, electrical insulation class I and II; power surge protection >6kV, option >10 kV; overcurrent protection 4AT 5x20 250V; available as 400 VAC, 24VDC; upgrade possibility with a wireless module, CLO – constant light output, weight 10.4/16.5 kg.

Akron

LED light suitable for streets, crossroads and parking lots; Philips Lumileds LED diode, Philips Xitanium LED driver constant electricity, power surge and overcurrent protection, light temperature 3000K/4100K/5500K; high index of color rendering CRI>75; select from a number of patented optics, lifetime >90000 h; cast aluminum housing, SUPERCAST patented anti-corrosive alloy; tempered 5 mm glass; IP65 degree of protection, electrical insulation class I and II; power surge protection >6kV, option >10 kV; overcurrent protection 4AT 5x20 250V; available as 400 VAC; power factor >0.97; upgrade possibility with a wireless module, CLO – constant light output, weight 8.6 kg.

INDUSTRY

- Gas stations,
- Halls with high selves,
- Low bay fixtures,
- High bay fixtures,
- Sports lighting,
- Garage lighting.

Gas stations

The space around a gas station can be divided into several zones: the forecourt zone, the parking zone and the entry/exit zone. Each of these zones needs different lighting. For canopy lighting over the dispenser, approximate brightness is 150 lx at the floor level with a PF 0.40. Good color rendering and limited glare is also important.

DETAS designed ATLAS, with a lifetime > 90000h, in compliance with the ATEX Directive 94/9/EC for group II, category 3, zone 2, which are appropriate for installation in potentially explosive surrounding. Depending on the configuration of the canopy, the following optics is available 1A, 13S, 3S while several are still being prepared.

In addition to industrial lighting DETAS manufactures lighting for access roads and parking lots for gas stations (e.g. Stratos N, Stratos P), as well as the interior of the facility (Kea, Kora, Praxis etc.).

By installing LED lighting, there will be energy savings with negligible maintenance cost.

Recommended lights:

Atlas PE

Outdoor industrial light for fixing into canopies, Philips Lumileds LED diode, Philips Xitanium LED driver constant power, power surge and overcurrent protection, light temperature 5500K, high index of color rendering CRI>75; select from a number of patented optics, lifetime >90000 h; aluminum cast housing, anti-corrosive according to ISO9227, tempered 5 mm glass, IP65 degree of protection, electrical insulation class I and II; upgrade possibility with a wireless module, CLO – constant light output, weight 4.8 kg.

Atlas 14

Outdoor industrial light for fixing into canopies, LED driver constant power, light temperature 5500K; high index of color rendering RA>70; select from a number of patented optics; lifetime >70000 h; aluminum housing; dimension as requested; IP65 degree of protection, electrical insulation class I; weight 2.8 kg;

Stratos N

Compact street LED light; can be used in streets, parking lots, sidewalks; Philips Lumileds LED diode, Philips Xitanium LED driver constant electricity, power surge and overcurrent protection, light temperature 3000K/4000K/5500K; high index of color rendering CRI>80; select from a number of patented optics, lifetime >100000 h; cast aluminum housing, SUPERCAST patented anti-corrosive alloy; tempered 5 mm glass; IP66 degree of protection, electrical insulation class I and II; power surge protection >6kV, option >10 kV; overcurrent protection 4AT 5x20 250V; available as 400 VAC, 24VDC; upgrade possibility with a wireless module, CLO – constant light output, weight 5.2 kg; in compliance with: EN60598-1, EN60598-2-3, EN61547, EN62031, EN55015, EN61000-3-2, EN61000-3-3; ENEC certificate; (lighting features are subject to change).

Maya 3-4-6-7

Compact LED flood lights available in 4 different sizes with a wide range of power from 10 W

to 88 W; Philips Lumileds LED diode, Philips Xitanium LED driver constant electricity, power surge and overcurrent protection, light temperature 4100K/5500K; high index of color rendering CRI>70; select from a number of patented optics, lifetime >100000 h; cast aluminum housing; kaljeno zaštitno tempered 5 mm glass, IP65 degree of protection, electrical insulation class II/I; power factor >0.95.

INDIIR LIGHTING

- Offices,
- Shopping centers,
- Schools and kindergartens,
- Houses and apartments.

Houses and apartments

The lighting in houses and apartments depends on the investor's wish for functionality and decorative design. Although the selection for lighting in these spaces is free, certain minimum requirements have to be met. DETAS indoor lighting with ENEC certificate applied in such spaces are StripLED, EKOS, TuboLED, different fixtures such as KEA, COBA, RISA, TAB, ANDORA, LED panel Praxis and the entire product range that suits the investor. Single power units are used, e.g. 7W, along with Italian design, both the decorative value as well as energy efficiency are fulfilled.

***Some recommended lights*:**

Kora

Downlight with an external low voltage output driver, for decorative and functional lighting, beams 40°-60°-140°; adjustable beams; light temperature: warm white 2800K–3200K, neutral white 4000K-4500K, cold white: 6000K-6500K, lifetime >60000 h; index of color rendering CRI>70-80; input voltage 100-250 VAC; LED driver with constant power; possibility of emergency module upgrade; IP20 degree of protection; insulation class II; power factor >0.9, operating temperature from -40 to +60 °C, aluminum casing: white; weight: 0.12kg/0.14kg/0.35kg.

Kea LLC, Q, Plafone

Recessed downlight with an external driver, beam 150°; light temperature: warm white 2800K–3200K, neutral white 4000K-4500K, lifetime >50000 h; index of color rendering CRI >75; input voltage 100-250 VAC; LED driver with constant power; possibility of emergency module upgrade; IP40 degree of protection; insulation class II; power factor >0.9, operating temperature from -10 to + 55 °C, aluminum casing; white color; weight 0.3kg/0.4kg/0.7kg;

Coba, Coba UD

Recessed downlight with an external driver, beam 120°; light temperature: warm white 2800K – 3200K, neutral white 4000K–4500K, lifetime >50000 h; color rendering index CRI>75; input voltage 100-250 VAC; LED driver with constant power; possibility of emergency module upgrade; IP40 degree of protection; insulation class II; power factor >0.9, operating temperature from -10 to + 55 °C, aluminum casing; white color; weight 0.4kg/0.5kg/0.7kg/0.8kg

COBA UD - moveable light source

OUTDOOR LIGHTING

- Billboards,
- Promenades,
- Courtyards,
- Villas,
- Facades,
- Swimming pools.

Billboards

The lighting of large notice boards has to be adjusted to the situation depending on whether the billboard is in the city center or in open space without lights. The notice board has to be equally illuminated, while limiting the glare. A high color rendering index is needed and the illumination

of surrounding area has to be avoided. The lighting may not interfere with the drivers on the road.

DETAS recommended lights: Trilogy N, power 59 W, and Maya lights, with a choice in optics 13S or 8A suitable for these solutions, offer maximum usage of the beam. IP66 degree of protection, aluminum casing resistant to corrosion and other external influences for a long lifetime.

Flat

General purpose floodlight for outdoor use; available in several models, power from 10 W to 200 W; Moveable handle for fixing; 1x COB; LED driver with constant power; symmetric optics; light temperature: cold white: 5100K; high color rendering index CRI >80; lifetime >50000 h; input voltage: 100-277 VAC; IP65 degree of protection; insulation class I; operating temperature from -25 to + 55°C, aluminum housing, tempered 4mm glass; In compliance with: EN60598-1, EN60598-2-1, EN61547, EN62031, EN55015, EN61000-3-2, EN61000-3-3.

Trilogy N

LED light bar used as wallwasher, for pedestrian crossings, canopies or warehouse shelving; Philips Lumileds LED diode, Philips Xitanium LED driver constant electricity, power surge and overcurrent protection, light temperature 3000K/4100K/5500K; high index of color rendering CRI >75; select from a number of patented optics, lifetime >70000 h; aluminum body; tempered 4 mm glass, IP65 degree of protection, electrical insulation class I; upgrade possibility with a wireless module, CLO – constant light output, weight 3.5 kg; available length 300/600/1000 mm; In compliance with: EN 60598-1, EN60598-2-1, EN60598-2-3, EN61547, EN62031, EN55015, EN61000-3-2, EN61000-3-3.

NOTE: The presented lights are only a small portion of the wide product range offered by DETAS. For more information on the product range, visit their web pages: http://www.dleds.com/, http:// www.detas.hr.

Why opt for LED lighting?

Opting for LED lighting means taking advantage of revolutionary technology which leads to significant energy savings, long lifetime of products and reduced current costs. LED lighting does not damage the illuminated objects (no UV or IR emissions), and it has an exponential color

rendering index, maximizing the colors. LED light sources do not contain dangerous materials which contributes to global sustainability. The technology has improved so much today that LED lighting can become the alternative in any area of application, creating unique and innovative solutions for your lighting needs.

CHARACTERISTICS OF LED LIGHTING:

Lower energy consumption

LED lights have at least 60% lower energy consumption than other technology lighting. The efficiency of LED lights is far greater than any other technology, considering the diodes and power source. IR emission is minimal. Very favorable power factor 0.95-0.99. Example: LED 8W light emits more light than a 75W filament lights bulb.

Long lifetime

The lifetime of LED lighting is longer than 50000 hours. LED diodes can last over 100000 hours, but the power source is where you can notice issues after 50,000 hours.

Better quality light

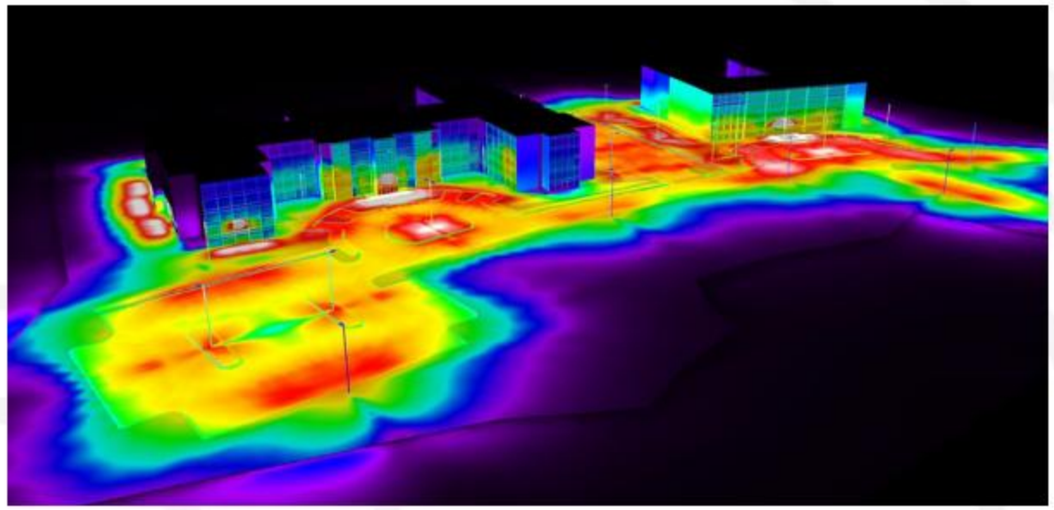
Light emitted from LED diodes does not contain the IR or UV specter which is harmful for eyes and skin. There is no noticeable flickering which tires the eyes, which is a common trait for most existing light technology. LED lights come in several different variants:

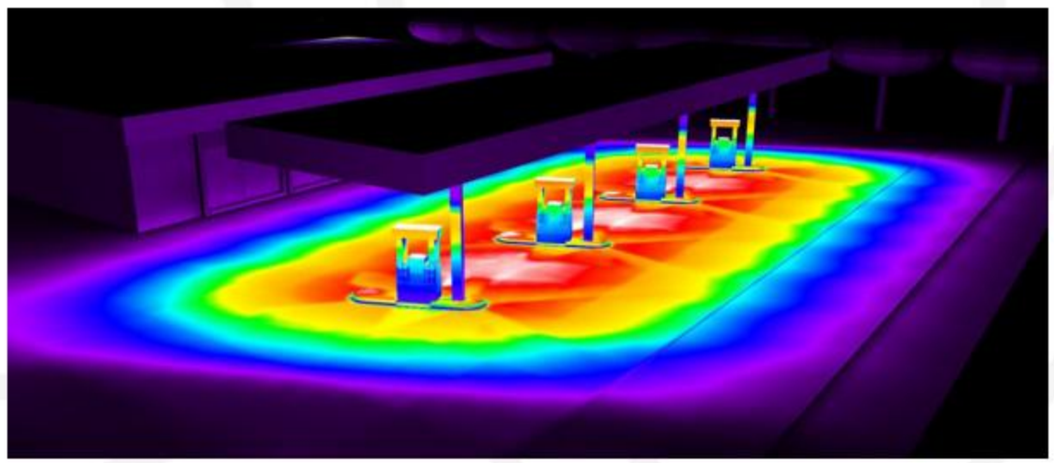
- Cold white - warmth 6,000 K,
- Natural white - warmth 4,000 K,
- Warm white - warmth 3,000 K.

These nuances vary in wave lengths and frequencies. Every type of white color has its own common usage. Cold white is common in business facilities to maximize illumination, while warm and natural white are mostly used in places we want to make visually attractive.

Environmentally acceptable

LED lighting is a technology which uses at least 50% less energy than any other lighting technology, and the materials used for manufacturing the lights are environmentally safe. Light pollution for outdoor LED lighting is minimal. CO2 emission is 50% lower than with other lighting types.






LUKOIL
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WIDER PRODUCT RANGE

www.delta-petrol.com

In a wide product range we offer you:

Spare parts for TOKHEIM dispensers: WWC Mainboard, WWC display, filters, hoses, nozzles, EPZ pumps, oil seals, other mechanical and electronic components for Tokheim devices, spare parts for all brands and types of dispensers at a gas station, measuring rods.

The rods are made out of aluminum with a measuring scale and serve for the control of fuel levels in tanks, thermometers in casings and without for controlling the fuel temperature in the tank with the aim of temperature compensation, aerometer for oil and gasoline, glass and plastic graduated tubes.

Avance™ - fuel dispensing nozzle

As part of its sales program, Delta Petrol offers the delivery, assembly and service of fuel dispensing nozzles by OPW GLOBAL USA. The features of these nozzles are:

Appealing Design

Avance™ nozzles have a modern design that set them apart and give your stations a more contemporary and attractive look - and their performance is equally outstanding.

Easy Operation

From the moment the nozzle is lifted off the dispenser you will feel how well it balances the weight of the hose. The soft open/soft close design minimizes the effort involved in operating the nozzle. This is especially appreciated in countries where latch-open devices are not allowed. Precise and easy manipulation of fuel flow also simplifies precise topping off.

Cleaner

Avance™ nozzles drip very little and do not get diesel greasy or stain the ground. Consumers do not have to use gloves or wipe their hands after refueling and your stations stay clean and tidy longer.

Modern Design

Avance™ is designed to be aesthetically appealing and to match the modern design of newer dispensers, canopies and station buildings. The top scuff guard and top cover can be customized in color to match your brand colors or to color code different fuels.

Integrated Message Center for Advertising

Avance's Message Center provides a large and highly visible area for promotion and advertising that can be integrated in your overall marketing campaigns. On average, consumers spend 3-5 minutes filling their car – allowing for plenty of time to see and process your message.

The Avance™ Message Center is your proprietary advertising space to use for your own advertising or sell to others. Inserting new ads in the message center is extremely easy. Templates for the creation of new message center artwork can be downloaded from the OPW website.

Wider product range - specifications	
	Portable tire inflator AIRQUICK, manufacturer EWO
	Compression gauges for inflating tires, hoses

	Attachments for different profile tires
	Air nozzle
	Gasoline finder paste
	Water finder paste
	OPW vent valve

	Manometrs of all profiles
	Vent valve

	Overfill valves
	Flamce stoppers
	Flame stoppers
	Suction strainers

	Nuts
	Angle check valve

SERVICES

CALIBRATION LABORATORY

CLEANING IN THE OIL AND PROCESS INDUSTRY

TV INSPECTION SYSTEM

FUEL TRANSPORT

MACHINE - TECHNOLOGICAL INSTALLATIONS

SERVICE AND MAINTENANCE

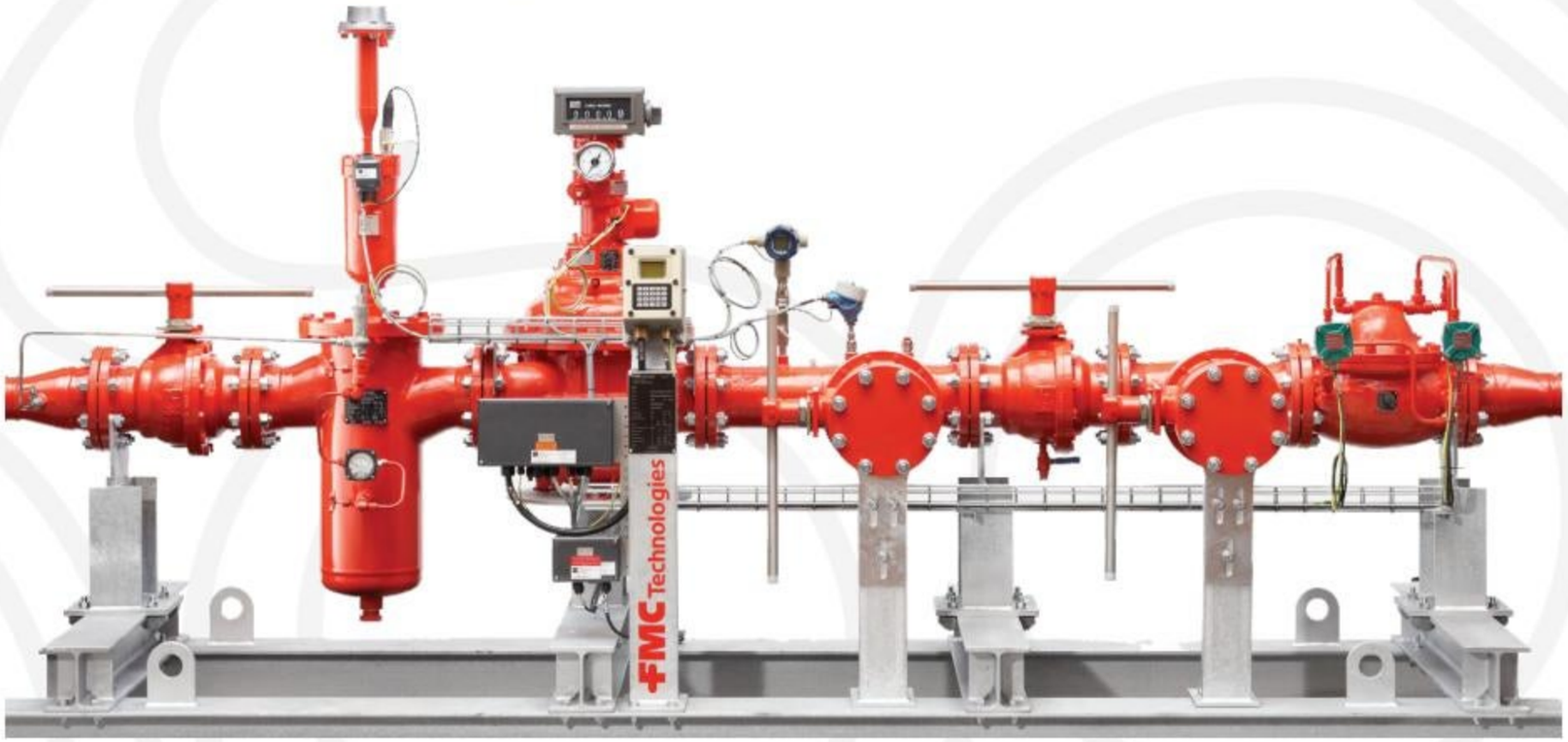
PERIODIC INSPECTION

TESTING SAFETY VALVES

VAŠ POUZDAN PARTNER U NAFTNOJ INDUSTRIJI

DELTA PETROL KAKANJ D.O.O.

CALIBRATION LABORATORY



"Delta Petrol d.o.o. Kakanj" is a specialized company for conducting activities on the verification and calibration of flow meters used for oil derivatives in the oil industry.

We have become a recognizable company for calibrating flow meters, due to our pioneer intellectual work in this field in our country, as well as the quality of service which is why our customers always return to us.

Vast experience, modern equipment, trained staff and persistence to standards in flow meter calibration, are the guarantee that your equipment will be calibrated in the proper manner, to the referent standards, in a time frame of your choosing.

On 15 January 2003, we were officially presented with the accreditation which verifies that our Laboratory for Calibrating Flow Meters for Oil Derivatives meets all the requirements for the BAS EN ISO/IEC 17025 standard, regarding the qualifications for calibrating flow meters, including water, as well as meters for volume.

Our greatest value as the unique calibration station in BiH are our customers and our trained staff who are dedicated to offering high quality service.

In order to meet our goals, we are dedicated to:

- Continuous quest for knowledge which will enable us to understand the needs of our customers, and thus fulfill all your needs regarding meter calibration,
- The belief that we are the company which offers solutions, relying on our own resources or our numerous partners from leading global companies, whose distributors we are,
- Continuous investment in technology itself ensuring the best solutions for our clients.

Experienced engineering and sales team is at your disposal at all times to offer you the best flow meter for your needs. We are offering a concrete and lucrative calibration service for your needs, and a large number of satisfied clients stands witness to our dedication.

Advantages of our laboratory

- Vast experience in flow meter calibration,
- High precision and accuracy in calibration,
- Unique calibration equipment in BiH and the region,
- Traceability and recovery of the calibration to internationally recognized standards,
- Flexible calibration service to recognizable international standards,
- Flexible calibration service and very fast response time from the initial order to the carried-out service,
- Certified and verifiable calibration report,
- Dedication and technical competence of the calibration station staff,
- Calibration/verification of flow meters in the oil, chemical, food, process industry,
- Notification on the date of the next verification.

We carry out:

- the calibration of underground and above ground storage tanks,
- the calibration of stabile flow meters,
- the calibration of mobile flow meters,
- the verification of volume meters in dispensers.

We are conducting regular review of all procedures and documentation within the ISO 17025 quality system. We are distributors for FMC equipment, leading companies in the area of measurement and the Krohne company as well.

Following every calibration, we issue certificates and tank strapping charts to our customers, which guarantee the measurement traceability of the meter alongside establishing and maintaining quality system and laboratory accreditation.

CALIBRATION OF UNDERGROUND AND ABOVEGROUND STORAGE TANKS

In order to meet high demands for quality and correct fuel stock control in tanks, during distribution, admission and storage of fuel, "Delta Petrol" d.o.o. Kakanj with its modern measurement equipment and trained staff carries out the calibration of underground and aboveground tanks.

We carry out tank calibration using the following methods:

- *Incremental method of tank calibration,*
- *Geometric method of tank calibration.*

Tanks have to be calibrated by law every six years, although some clients require this service more often due to unstable ground or shifting of the tank. Since the owners of gas stations are required to install automatic fuel level probes in their tanks, and to send automatic data from the system over a phone line, and the web service in the form of an XML report, according to the new Bylaw on Probes, it is required that tanks be calibrated using the incremental method, since it is the only way that the system can report correct fuel stock. Tank are easily deformed or positioned in the wrong way during initial installation or for geological reasons, which makes tank strapping charts incorrect. This is the reason for a repeated tank calibration.

Our system is in compliance with all national and international standards, and the only aim is to improve Your business transactions at the gas station.

What sets us apart from others:

- Cutting-edge technology and equipment for calibration, expert and trained staff,
- Producing high accuracy volume charts,
- Very efficient and fast calibration, with previous preparation
- Specially implemented and developed software for the production of volume charts,
- Precise and detailed tank calibration in oil, chemical and process industry, large and small cubic storage, for liquid and gas oil derivatives,
- Calibration of tanks of different shape, size and design.

Calibration includes a detailed description of the curvature of the vertical wall of the tank and the

shape, a detailed description of the profile of the bottom and the tank manhole, with the production of corresponding charts.

Calibrating tanks using the incremental method (wet, water calibration), using volume meters with water as the calibration liquid

The modern line for calibrating tanks is the one with an electronic measuring unit and computer software for automatic calibration result processing and the production of calibration tank charts.

This method is suitable for calibrating tanks which are irregular in shape, which have a partition, small tanks, and regarding accuracy, this method is better than all the other calibration methods.

We carry out the calibration of:

- Vertical tanks,
- Horizontal tanks,
- Spherical tanks,
- Cylindrical tanks,
- Double-walled tanks,
- Tanks with immovable roofs,
- Tanks with floating roofs,
- Conical tanks,
- LPG tanks.

When calibrating LPG tanks (spherical and membrane design), it is important to consider the unique characteristics when setting correct tank dimensions, analyzing thermal effects of materials used for manufacturing the tank, and adjusting or correcting with the aim of correct conversion of levels into volume of liquid.

Calibrating tanks using the geometric method

As basis for tank calibration using this method, one can use the drawings of the standard tank (standard cylindrical tanks). The calibration is carried out using geometric measuring of the shape and dimensions with appropriate measuring equipment and measuring bar. This method is suitable for the calibration of standard cylindrical tanks. The method does not register real deformation and irregularities in the shape of the tank, but only calculates them approximately using math. Accordingly, regarding liquids, this method cannot compare to the incremental method.

CALIBRATING MOBILE FLOW METERS

Mobile volumeter is a movable measuring group intended for the gravitational admission of fuel from tank trucks at gas stations. The complete measuring system consists of control glass, filter, air separator, meter with calibrator, counter, printer, output valve and trolley.

Calibrating a mobile volumeter on a desk of the lab using the wing meters ST-40 and F4.S1. includes the following operations:

- Admission, check, control and diagnosing the state of the meter,
- Washing and cleaning,
- Dismantling the meter (if necessary and on agreement),
- Checking and cleaning the parts: filters, separators, rotor blades, oval gear transmitters, valves, casing, bearing, counters, transmitters and printers on the dial and gap control (if necessary and on agreement),
- Change rubber seals if necessary,
- Greasing the gear mechanisms (toothed gears),
- Assembling the meter,
- Pressure check of the meter,
- Calibrating the meter (liquid control and settings, bringing down measurement error to legally accepted tolerance levels),
- Fixing official tags and lead seals on appropriate spots on the meter,

- Final control and delivery to the customer (at the location of the laboratory),
- Producing the verification certificate.

For your needs, in addition to calibration, we carry out the procedure of procuring the meter, manufacturing the trolley for the meter, fixing the controlling glass bearer and the glass, connection couplings on the meter and protecting hats.

CALIBRATING STABILE FLOW METERS

Calibrating meters on tank trucks

For a number of years, we have conducted the calibration of flow meters for oil derivatives using the measurement standard system MES-3000 in places where the meters are installed (mobile meters used during unloading of tank trucks, meters on tank trucks for the transport of oil derivatives, meters on oil terminals and installations for manipulation where a standard meter can be installed together with the meter being calibrated).

The method is applied for the calibration of flow meters for oil derivatives with immediate volume measurement in the flow range from 160 to 1600 [l/min] and ambience temperature from 5 [°C] to 30 [°C].

The mentioned calibration method is in line with the ISO 91-1 standard, OIML R 117-1:2007 (E) Recommendation, BAS EN ISO 17025:2006 standard, and the Rulebook on metrological conditions for flow meters for various liquids, with immediate volume measurement (Official Gazette of SFRY, no. 11/85), Rulebook on metrological conditions for flow meters for various liquids, which are in the measurement unit (Official Gazette of SFRY, no. 9/85), and the Metrological manual for the verification of flow meters using the standard flow meter.

At least two measurements have to be conducted on the flow of every working liquid (OIML R 117), in order to establish the recovery and stability of the measurement on that flow. The results of the measurement (two or more) on the same flow, have to be identical or approximately the same. The first measurement is the diagnosis of the current state of the meter, i.e. it gives information on the accuracy the meter had upon entering the Laboratory. This error is recorded in the Working Report. Upon ascertaining the complete value of the working meter error (E), the meter is being set up according to the instructions of the manufacturer. If the value of the total error of the working

meter is within the limits of acceptable error according to OIML R 117 Edition 1995 (E), the branding of the meter can be done. Based on the report on the flow meter calibration, the Laboratory issues a certificate on the verification or certificate on the flow meter calibration.

Verification is conducted only on meters which have gone through the procedure of type approval with the official tag of the Institute for Metrology BiH. Meters without compliance grades, tags or certificates of compliance (type approval) with metrological regulations must not be used.

Calibrating terminal counters

For fixed flow meters, installed at terminals and other installations we use a specially constructed vehicle (BANANA) with standard volumes (2000, 5000 and 20,000 liters). This vehicle was manufactured by the renowned F.M.C. "SMITH-METER" and is one of its kind in BiH.

Calibrating flow meters using standard containers with the volume of 5,000 and 2,000 liters is applied for flow meters of oil derivatives and flow meters with water as the working fluid. It is important to use the corresponding chart for volume expansion for the corresponding working fluid due to temperature.

The volumetric method is used (OIML R120:1996 (E) §3.6), i.e. the method of discharging the working standard (OIML R120:1996 (E) §3.6.1) in the flow range of up to 5,000 [l/min] and ambience temperature from 5 [°C] to 30 [°C]. The calculated total measurement error of the working meter (E) is recorded in the Working Report. There have to be at least two measurements (OIML R117-1:2007 (E)) on every flow of the working fluid in order to ascertain recovery and measurement stability on the flow. The results of the measurement (two or more) on the same flow have to be identical or approximately the same.

Calibrating the standard containers

Calibrating flow meters with the family of "standard volume" with the traceability of "KLASE-A" (standard containers) with the capacity of 200, 500 and 2000 liters. The containers are fixed in the calibration laboratory, and were manufactured in compliance with the recommendations of the International Organization of Legal Metrology OIML R120:1996 (E) §5 clause 10.

The method is applied for calibrating flow meters for oil derivatives and flow meters using water as the working fluid. While calibrating using the standard container of 2,000 l, 510 l and 205 l the volumetric method is applied (OIML R120:1996 (E) §3.6), i.e. the method of the working fluid

flowing through the working meter (by filling the standard container) (OIML R120:1996 (E) § 3.6.1), in the range of work flows of up to 2,000 [l/min], 510 [l/min] and 205 [l/min] and ambience temperature from 5 [°C] to 30 [°C]. It is important to use the corresponding chart for volume expansion for the corresponding working fluid due to temperature.

CALIBRATING / VERIFYING / GAUGING VOLUMETERS OF FUEL AND LPG DISPENSERS

The calibration / verification / gauging of fuel and LPG dispensers is carried out annually. We can help you in legally checking your dispensers for your own and the satisfaction of your customers, since that is a continuous chain which has to work.

The fuel dispenser has to measure the dispensed fuel continuously, archive the data and display the amount of liquid passing through the measuring device. Calibration is the process in which the measuring instrument is checked and set up according to prescribed correctness.

We conduct the verification and calibration of the volumeter on dispensers using the standard volume charts mounted on the mobile trolley, manufactured according to the standards of the International Organization of Legal Metrology, certified by the Institute for Metrology BiH, with the traceability to international standard measures.

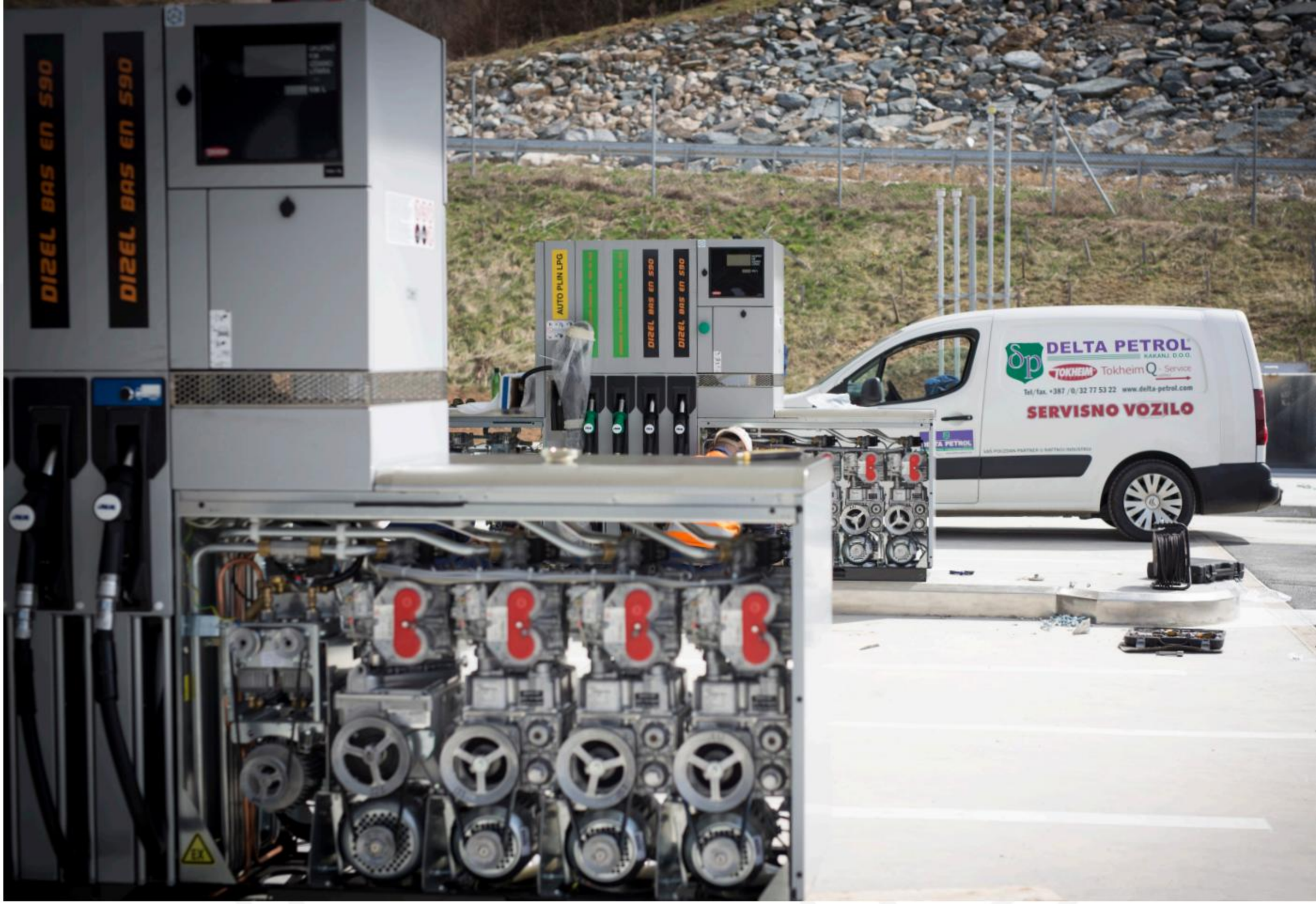
We also carry out the calibration of gas dispensers with the special container for checking the volume of the dispensed gas.

The advantages of our calibration services of dispenser of liquid fuel and gas are:

- Securing the legal liquid and precision of the dispensed amount for the owner and the end-user,
- Knowing the technical specifics of all types of volumeter on all types of dispensers,
- Expert and trained staff with extensive experience,
- Recalibration in the case of complaint,
- Notification on the end of the calibration period for your volumeter in order to avoid legal consequences.

Laser scanning (calibration/verification) of horizontal and vertical tanks

Fast and accurate production of volume charts is of crucial importance for the efficiency and minimum operational failures of tanks at gas stations and oil terminals. "Delta Petrol d.o.o. Kakanj" is active in introducing the 3D laser scanning tank calibration method. This method is done by using 3D laser scanning, which enables the recording of several millions of points inside the tank in a very short period of time. The volume charts are produced via specialized software from a rendered 3D model of the interior of the scanned tank. Using such cutting-edge measurement techniques alongside longtime experience of calibration operators in the oil industry, we can guarantee precise measurement, saving time, cost cutting and environmentally friendly methods of measurement.


DIZEL BAS EN 590
DIZEL BAS EN 590
AUTO PLIN LPG
DIZEL BAS EN 590
DIZEL BAS EN 590
DELTA PETROL
KAKANJ D.O.O.
TOKHEIM
Tokheim Q - Service
Tel./fax. +387 /0/ 32 77 53 22 www.delta-petrol.com
SERVISNO VOZILO

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CLEANING IN THE OIL AND PROCESS INDUSTRY

www.delta-petrol.com

"Delta Petrol d.o.o. Kakanj" can pride itself with having a unique vehicle fleet of specialized vehicles of the latest generation, intended for cleaning operations in the oil and processing industry. We possess four vehicles with a pressure pump and WOMA pump, of up to 200 bars pressure, used for machine and mechanical cleaning of underground and above ground tanks. The construction of the vehicle ensures the simultaneous washing and cleaning of the tank, extraction of silt and sediment deposited in the chambers of the vehicle, with a capacity of up to 11 m3. Considering high environmental requirements, this equipment excludes the possibility of water, air or soil contamination during the cleaning operations of tanks soiled by oil derivatives, oils and other chemical toxic materials.

We carry out the following operations using specialized vehicles and additional equipment:

- Cleaning underground and above ground tanks used for the storage of oil derivatives and gas,
- Cleaning and washing out oil separators and waste water separators and transport to separation and incineration,
- Cleaning and washing soiled surfaces and roads (soil, mud, silt etc.),
- Cleaning and washing out sewers and removing clogs in the network,
- Special canal and collector cleansing using special equipment with over ten types of specially purposed moles,
- Buyout, transport and deposit of obsolete machine motor oil and other oils with no PCB content,
- Decontamination of oil and oil derivatives contaminated soil,
- Recycling emulsion oils and oil additives from the metal industry.

Since August 2006, we have possessed the ISO 14001:2004 Certificate, confirming the management system audit and confirming the compliance with the standard requests ISO 14001:2004, and our resolve for systematic and quality work, as well as the environmental awareness of employees.

The stated Certificate refers to mechanical and machine cleaning of underground and above

ground tanks and separators for oil and oil derivatives, waste oil treatment and the treatment of oiled water using the separation procedures, calibration of oil derivative meters and calibration of underground and above ground tanks, and the gas station.

When working with hazardous materials, it is necessary to comply to strict legal standards, and we possess the Environmental Permission for operations of hazardous waste cleaning and treatment by the Federal Ministry of Environment and Tourism, the Cantonal Permission for managing hazardous waste, Water Permission by the Agency for Water Ways of the Sava River and appropriate equipment for conducting these activities (according to ADR Ex standards), as well as professional staff who had undergone trainings in fire protection and handling inflammable materials, but also staff with extensive work experience.

CLEANING OF UNDERGROUND AND ABOVE GROUND TANKS

Soiled tanks should be cleaned and washed after a certain period (5 years recommended, 10 years obligatory) because of the quality of the fuel you offer to your customers and the precision of automatic fuel level measurement system. The first sign that your tank needs cleaning is noticed at the dispenser which slows down the flow which is why your customer may complain over long waiting times to fuel their cars, and the reason is soiled filters due to soiled tanks. Most owners think they will solve the problems by replacing the filter, which is just a temporary solution, and with new fuel, there is new contamination which leads to dirty filters. Continuous slow flow of fuel leads to a greater wear and tear of the parts of the dispenser, dissatisfied clients, lower sale of fuel and other products at the gas station.

"Delta Petrol d.o.o. Kakanj" offers machine and mechanical cleaning and washing of the tanks which is carried out by a specialized vehicle, using a jet of liquid under high pressure thus cleaning your tank from all possible dirt that had built up over time. Following the cleaning process, clean fuel is poured into the tank.

This is the fastest, safest and most effective way to make sure your tanks and dispensers are reliable.

The owner is responsible for emptying the tank before the cleansing, and if you are not able to do so, we will compete that task for you.

The process of cleaning and washing the tank includes the following steps:

- Dismantling the manhole and piping installation in the tank before cleaning and washing,
- Establishing (measuring) the amount of silt and sediment in the tanks to be written off and disposed of. A committee is formed at hand to decide on the amount,
- Extracting the remaining amount of silt and sediment,
- Natural/mandatory ventilation of the tank,
- Machine and mechanical washing and cleaning of the tank using a specialized vehicle, using a high-pressurized jet of liquid,
- Preparing a report on the activities with the amount of silt and sediment by the committee at hand,
- Transport of silt and sediment to a landfill to be destroyed.

CLEANING OIL SEPARATORS

"Delta Petrol d.o.o. Kakanj" also offers the legally mandatory cleansing of oil separators, and the legally mandatory annual contract for cleaning and maintenance of separators.

Separators become plugged with oil, grease, oiled water over time and it is necessary, once a year, and sometimes even more often, to clean and keep the separators clean, in accordance with environmental conditions.

It is mandatory to clean the separators, especially if the drains are weak, if there is one or more centimeters of oil at the surface of the water and several centimeters of mud (sediment) at the bottom of the separator.

Following the preparatory activities of opening the separator, the cleaning activities start, i.e. the phase of content suction out of the separator. The pump, using a submerged hose, pumps out the mixture of oil and water (emulsion) from the separator and sucks it through a rough filter, located before the dynamic oil separator – on a special vehicle. The cleansed mixture is further on pumped into the dynamic separator, with horizontal collision plates of a phase remover.

The mixture of water and oil which is in laminar flow, goes through horizontal wavy oleofin plates, where oil is separated in the upper zone of the separator container due to density difference of the fluids. Simultaneously, in the lower part of the container, water is extracted. The separated particles of oil are lighter than water, buoyance shifts it towards the top of the separator container into the so-called container for gathering oil. The water leaving the separator has an oil residue content of 10 mg/l i.e. 10 PPM of free unstable emulsion oil. The legal obligation for release into waterways is 20 PPM, which speaks volumes of the quality of recycled volume of the separator.

An electronic monitor (special measuring equipment) is used for controlling the clean water leaving the separator, which measures the oil residue content in water. This measurement device can regulate the work of the separator, i.e. set the level of impurity up to which the dynamic separator will extract unclean content from the emulsion under legal limits.

Upon finishing the washing out, vacuuming and recycling is carried out. When the cleaning is complete, the cleaned object must be without any oily marks or any other impurities regarding the age of the object. Which means that, e.g. you cannot obtain perfect cleanliness in concrete separators, since it is impossible to attain, as is the case with plastic separators where you need lower pressure to wash out the residue.

The collected (recycled) waste from the chambers of tank trucks is transported to the station for hazardous waste treatment at the facility of "Delta Petrol".

You will be delivered the report on cleaning the separator, with detailed data on recycled, stored and treated quantities of hazardous waste (oil).

CLEANING AND WASHING OUT PIPELINES

From the program of cleaning in the oil and processing industry, we select the cleaning and washing out of pipelines on all industrial facilities and buildings. This procedure uses clean water to wash out the pipelines and blow through the complete installation using air.

In addition to cleaning and washing out the pipelines, we also clean the pipelines from larger stones, using special methods. The final phase, if the client wishes it, is to test the pipeline either hydraulically (using water) or pneumatically (using air). Following the pressure testing of the pipeline, its soundness and impermeability is confirmed as well as the armature at the selected part. ll necessary reports are issued on the above-mentioned procedures.

CLEANING FACILITIES

Our company has profiled itself over time into a specialized company for cleaning industrial facilities in accordance with current EU environmental principles and standards. We also carry out the cleaning of pipelines, sewage systems in facilities, and facilities soiled with hazardous or non-hazardous waste.

In addition, we also clean steel works, transformer stations, rolling mills, coke plants, spirals and other parts in facilities for the production and handling of metal.

When it comes to thermal power plants, hydro power plants and other thermal energetic facilities, the company has been very successful recently in cleaning pools of decarbonized water, reactors, coagulators, pools of silt and dirty water, separators, canals etc.

In addition, we also offer the services of cleaning in the oil industry on all objects from gas stations to storage facilities (terminals). Following the cleaning process, we treat the waste in accordance with EU legal regulations and standards.

Extensive experience, numerous successfully completed tasks, the most modern equipment, respecting regulations are all a guarantee for you to put the cleaning of your facilities into our hands, so that we can contribute to the protection of the environment together.

WASTE TREATMENT

Otpad predstavlja sve materije ili predmete koje vlasnik odlaže, namjerava odložiti ili traži da buWaste includes all the matter and objects that the owner dispose of, intends to dispose of or is trying to dispose of in accordance with one of the waste categories. Waste is divided into hazardous and non-hazardous waste. Hazardous waste is regulated and has one or more characteristics which harm people's health and the environment by its origin, content or concentration. Non-hazardous waste does not have the characteristics of hazardous waste, it includes: glass and plastic bottles, paper, plastic, iron, textile etc.

There is a hierarchy of procedures to be followed: preventive action to waste creation by introducing greener technologies, gather, sort and recycle waste, used it for energy and store it.

"Delta Petrol d.o.o. Kakanj" recognized the significance of legal management of hazardous and non-hazardous waste management, and acquired all necessary permissions for conducting

such activities, starting with environmental permissions at the Cantonal and Federal levels, waterway permission and the ISO 14001:2004 Certificate. In addition to the above-mentioned permissions, we also have a contract with a company that handles the final waste treatment, and regulated export and cross border transport of hazardous waste through EU countries

Activities and services conducted within our modern station for collecting, disposal and treatment of used oil, grease and oiled waste include the following:

- Collecting waste and transport,
- Temporary storage,
- Waste material treatment,
- Transport to final treatment area,
- Waste treatment.

Hazardous waste is stored in closed area, while non-hazardous waste is stored in the open, partially covered area. Collecting and transport is carried out in accordance with prescribed procedures with trained staff, and the transport is carried out by a transport vehicle meeting all the requirements under ADR, paying attention not to mix the waste and to keep the tags legible.

Waste material treatment includes the elimination of moisture and water through the process of ultrafiltration using special equipment and additives. This process is conducted for the purpose of enhancing the thermal power and lowering the ignition point, which contributes to the lower price of final treatment in EU countries. This also has an impact on the lower price of hazardous waste treatment for our customers, which is why we regularly carry out this procedure to keep the prices acceptable.

Cross border transport is carried out using the most sophisticated equipment and conditions for transporting hazardous waste with accompanying documents and permissions for EU countries. We use certified incinerators for the treatment of hazardous waste on the recommendation by the Federal Ministry of the Environment and Tourism and the recommendations of valid EU standards

We also carry out the disposal of:

- Chlorine free hydraulic oils,
- Used motor, transformer and hydraulic oil,
- Emulsions,
- Residues of fuel oil, diesel, gasoline,
- Soil contaminated by oil products,
- Different types of batteries.


DELTA PETROL

ACTION IN CASE OF ENVIRONMENTAL DISASTERS

The Decision by the Federal Ministry of Agriculture, Water Resources and Forestry authorizes the company "Delta Petrol d.o.o. Kakanj" as the only company in the Federation of BiH to act in case of environmental disasters.

This Decision authorizes us to conduct activities and measures on removing or preventing water pollution in the case of extraordinary pollution or danger from sudden water pollution.

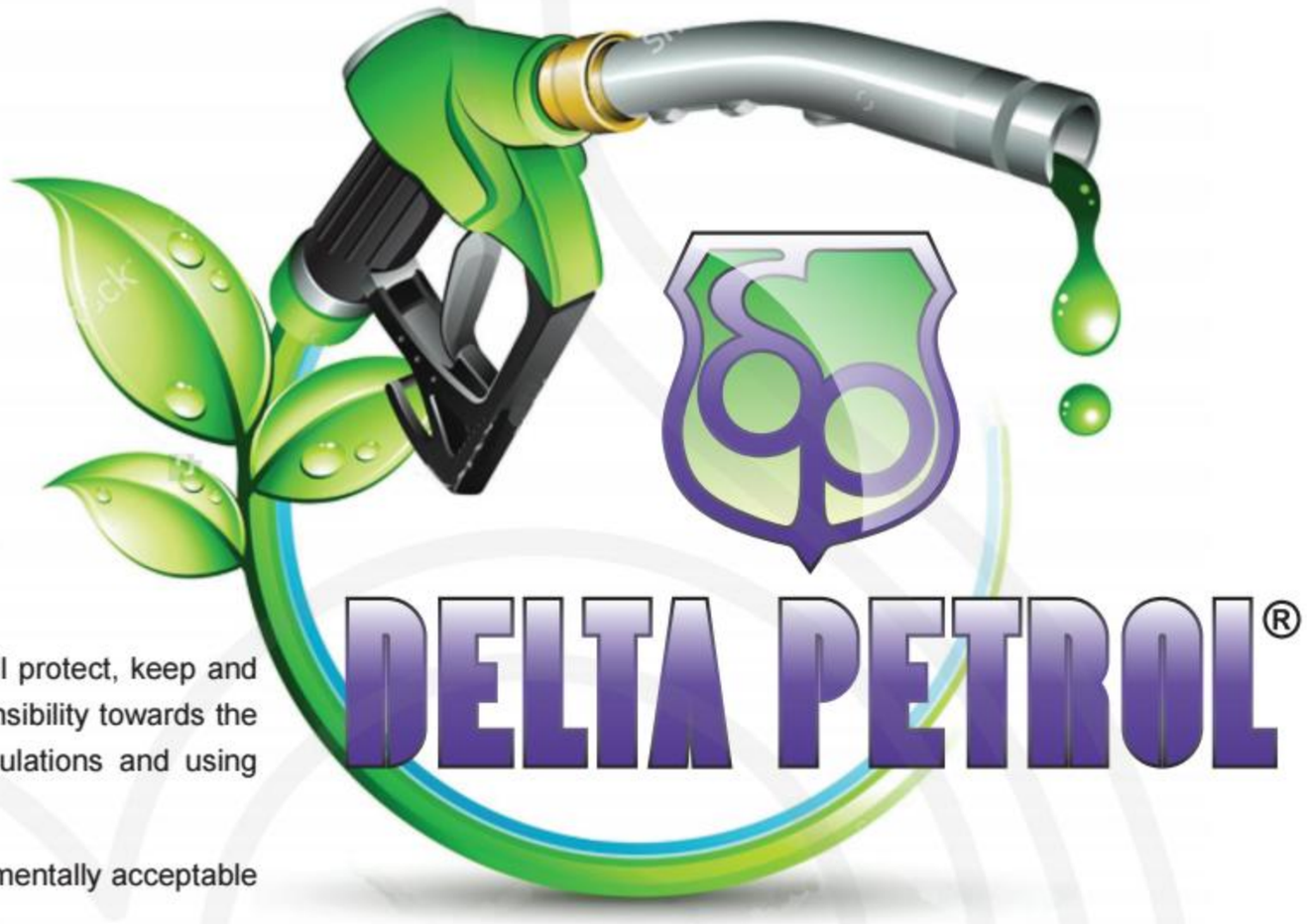
In the previous period, we recorded several interventions with turned-over tank trucks for the transport of liquid fuels, one intervention of fuel pour out into the Grabovičko Lake in Jablanica and one intervention in the case of a ruptured above ground tank for storing fuel oil.

Despite unplanned and unpredictable interventions, inaccessible locations we come across, we do our job well and in a professional manner. .

Owing to the experienced staff and specialized equipment, we manage to reach our aim in acting in case of disaster situations:

- Contain the hazardous waste,
- Collect and dispose of hazardous way in the best environmentally accepted way.

ENVIRONMENTAL POLICY



"Delta Petrol d.o.o. Kakanj" runs business processes in a way that will protect, keep and improve our environment and eliminate the negative effects on it. The responsibility towards the environment is expressed through respecting environmental laws and regulations and using resources in a cost-effective manner.

Our suppliers are part of the system and are obliged to deliver environmentally acceptable raw materials and products.

Through a controlled manner of managing solid, liquid and gas waste, we reduce disposal and releasing waste which is harmful to the environment.

We consider environmental aspects of our processes on a regular basis, evaluating our impact on the environment and setting new goals with the aim of constant improvement.

We believe that the concept of environmental responsibility we develop, encourages constant improvements through our system of environmental management.

Our commitment to the protection and preservation of the environment compels the entire company, since the implementation of the system of environmental management unites the responsibility of all employees.

www.delta-petrol.com

CLEANING TUNNEL WALLS, DRAINAGE AND THE INTERIOR OF TUNNELS

For "Delta Petrol d.o.o. Kakanj" the next step ahead of everyone else was specializing in the cleaning of the interior walls of tunnels and drainage pipes in tunnels. We have specialized and automatic equipment for cleaning the interior walls of tunnels, using high-pressurized water jets and environmentally friendly detergents.

One of our successful cleaning stories was the cleaning of the tunnels on the high way Zenica - Tarčin. "Delta Petrol" managed to set a record in cleaning approx. 35,000 meters of walls in the tunnels on the highway Zenica – Tarčin, with the selfless dedication of workers and the usage of a specialized vehicle.

In addition to this job, over 70,000 meters of pipes were cleaned, as well as asphalt surfaces, signs and traffic lines.

This endeavor was only possible with the synchronous usage of multiple specialized and multifunctional tank trucks and specialized equipment for different types of cleaning.


MTS
E42-0-607

SPECIALIZED VEHICLE SUCTION EXCAVATOR - DINO

In its range of specialized vehicles, "Delta Petrol d.o.o. Kakanj" also possesses the Suction Excavator – a unique multi-functional working vehicle of universal abilities and applications in all industry sectors. One can say with certainty that this is the first vehicle of its type in the Balkans. The Suction Excavator has a constant suction power of 34,000m3/h – 35,000 Pa.

Purpose:

- Suction and cleaning of dry, wet and liquid material,
- Cleaning loose and sand canals and part without danger of damaging installation underground networks (gas, water, electricity, communication cables etc.),
- Cleaning industrial facilities from deposited dust, ash or loose materials from sand to rocks approx. 200 mm in diameter,
- Cleaning restauration, reconstruction and demolition up to 200 mm,
- Industrial cleaning of pipeline networks,
- Cleaning while reconstructing and servicing road and railway infrastructure,
- Collecting hazardous material during environmental disasters.

Benefits:

- Multifunctional and limitless combinations and adaptability to all industry sectors;
- Independent work without any need for additional equipment or resources;
- Minimal noise in isolated space giving it the advantage of working in the densely-populated city centers and industry areas with special limitations;
- Container volume of 8 m3 with direct hydraulic load onto another vehicle allowing for continuous work 24/7;

- Suction hose with the diameter of 250 mm (25 cm), with rotating additions and additions for breaking up/loosening up using compressed air;
- Incredible suction power and work power of 0.5 bar at the distance of 100 m, at depths over 20 m, at full hose diameter of 250 mm;
- Constant suction flow of incredible 34,000 m3/h;
- Remote control and radio control of all functions of the Suction Excavator, only one person necessary for operating it;
- Self-cleaning system of internal filters with almost no work interruptions;
- No spillage, dust or emissions of other waste material into the environment;
- Combined with other equipment in the industry and a wide array of additional equipment working on compressed air.

Mode of work:

Specialized vehicle Suction Excavator-DINO, patented product (licensed patent), by the German company MTS Mobile Tiefbau Saugsysteme GmbH, Germersheim.

According to the image, the vehicle functions in a very simple way, and the driving force is the patented cyclone fan with mega power. The cyclone fan creates constant pressure of 0.5 bas with air suction of 38,000 m3/h in the container with the capacity of 8 m3, using suction canals and the vacuum hose.

The suction mixture is separated into the depositing chamber due to gravity and forced current, and smaller gravel is filtered into the depositor. The system possesses auto-cooling and auto-cleaning of filters, does not require water or electricity and enables constant work (24/7) until the complete loading of the container with the capacity of 8 m3. Hydraulic unloading last several minutes and the Suction Excavator is ready for work again.

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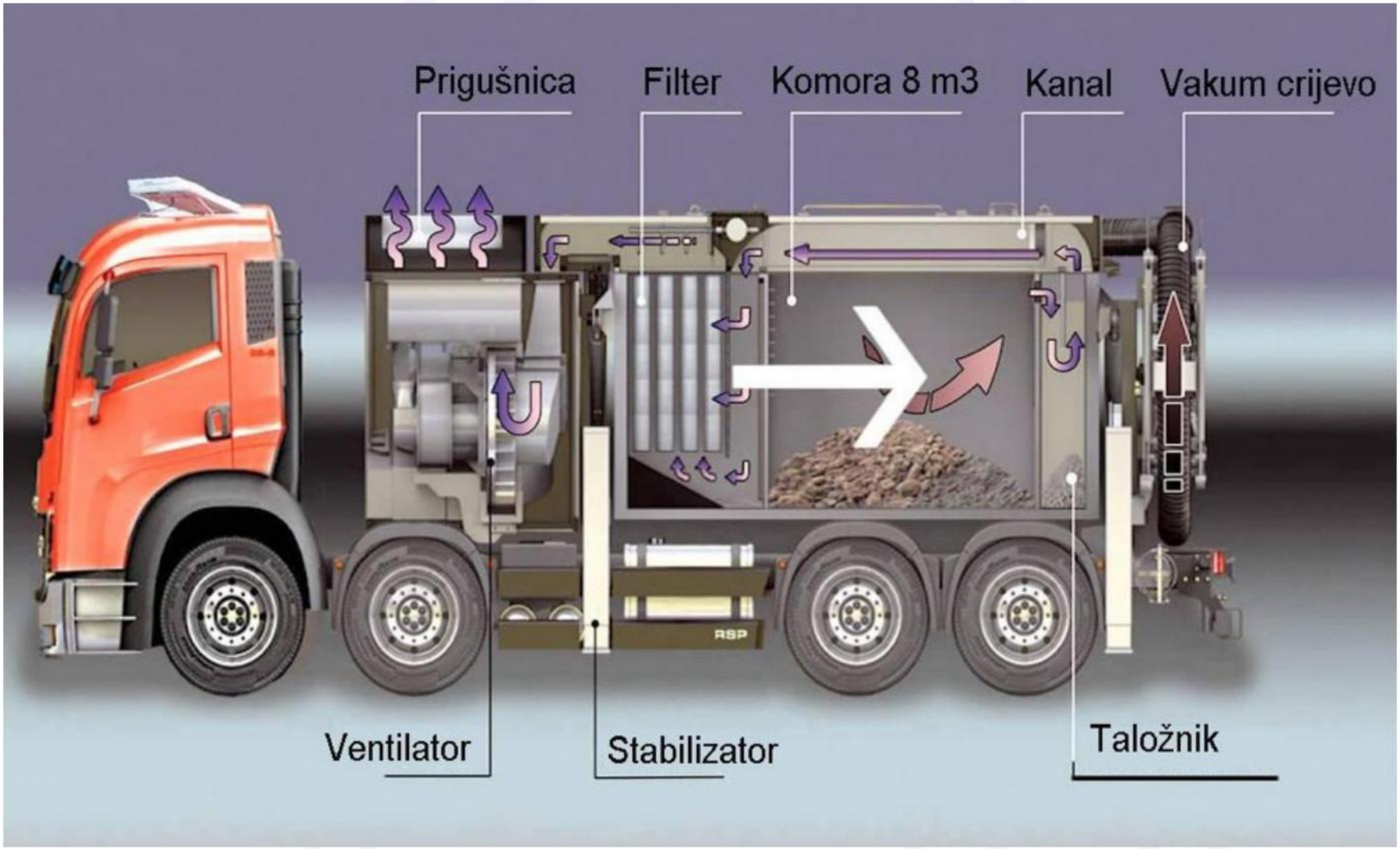
Prigušnica
Filter
Komora 8 m3
Kanal
Vakum crijevo
Ventilator
Stabilizator
Taložnik
RSP

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SPECIALIZED VEHICLE FOR RECYCLING OIL SEPARATORS – THE OIL MASTER

Purpose of the specialized vehicle:

- Recycling oiled water using dynamic separation method, which separates oil from the oiled water on the spot with the result of processed recycled clean water with oil residue content up to 10 mg/l, i.e. 10 PPM,
- Washing and cleaning underground and above ground tanks in the oil industry,
- Collection, transport and treatment of waste oils,
- Industrial pipeline cleaning. High-pressurized cleaning up to 150 bar and using auxiliary equipment;
- Interventions with environmental disasters.

Technical characteristics of the Oil Master:

- Total tank volume of the vehicle: 12,500 liters;
- Volume of the chamber for oiled water, silt and sediment: 6,600 – 9,500 liters;
- Volume of the chamber for clean water: 600 – 3,500 liters;
- Volume of the oil chamber: 1,200 liters;
- Volume of the oil separator: 1,170 liters;
- Working capacity of the oil separator: 10 m3/h;
- High pressure pump up to 150 bar;
- Vacuum pump;
- Excenter screw pump with a filter for separating larger impurities.

Automatic monitoring of the quality of the recycled water:

- DECMA monitoring of the oil-water ration, measuring area of 0-30 PPM.

A short description of the procedure of washing and cleaning the tank or separator:

Konstrukcijom vozila, osigurano je istovremeno pranje i čišćenje rezervoara i izvlačenje mulja The construction of the vehicle ensures the simultaneous washing and cleaning of the tank and extracting silt and sediment which is temporary deposited in the tank chamber of the vehicle with a capacity of 9,500 liters. The suction is carried out through a vacuum system, and the cleaning through a high-pressure pump of up to 100 bar.

The stated technical characteristics of the vehicle enable fast, good and efficient cleaning of a large number of tanks and the transport of silt and sediment for final treatment.

Taking into account high environmental requests for cleaning and washing the tanks soiled with oil derivatives, oils and other chemical toxic materials, this equipment rules out the possibility of polluting water, air or green areas.

A short functional description of the processing of oiled water using the separation procedure for extracting oil from oiled water

Ekscentrična puž pumpa usisava mješavinu ulja i vode iz cisterne ili separatora i pumpa je kroz The excenter screw pump sucks in the mixture of oil and water from the tank or separator and pumps it through a rough filter for impurities, located in front of the oil separator. The mixture is then pumped into the separator with horizontal collision plates of the phase remover.

The mixture of water and oil is in laminar flow, going through the horizontal wavy oleofil plates, with oil separating in the upper part of the container due to the density difference between fluids. Simultaneously, in the lower part of the container, water is extracted. The smallest oil drops are extracted in the plates of the phase remover, on the principle of the collision effect.

The laminar flow and collision effect make the extraction of oil particles above 20 microns possible. The extracted oil particles are lighter than water and by force of buoyancy they shift to the top of the separator container in the so-called container for collecting oil. The water leaving the

separator has only 10 mg/l, i.e. 10 PPM of oil residue content. There are electrodes for oil status in the container for collecting oil, and when the maximum level is reached, a valve automatically opens and oil is released into a chamber for oil built in the construction of the tank of the vehicle. An oil monitor is used to control the water released from the separator. Under normal circumstances, the capacity of the system is 10 m3/h.

TV PIPE INSPECTION

www.delta-petrol.com

THE PURPOSE AND POSSIBILITIES OF A PIPE TV INSPECTION SYSTEM

In order to get the proverbial larger picture of the condition inside the pipe, it is necessary to conduct TV inspection. This is widely accepted as the best method for establishing the condition of the pipes.

Since Delta Petrol always strives for advancement and establishing the image of a modern and contemporary company with regard to technological equipment, the acquisition of the top of the range equipment in the area of TV pipe inspection is beyond a doubt.

TV inspection vehicle is intended for the inspection of pipes and sewage – for purpose of regular control and incidental situations in which leaks are suspected, with the aim of preventing environmental consequences.

TV pipe inspection is used to ascertain the general situation in order to rationally approach possible repairs. If there is no need for repairs, critical locations for additional pipe maintenance can be selected.

Data acquired through TV inspection gives further information on the status of the pipe walls, the location of connections and branches, obstacles in pipes, e.g. tree roots etc. Data gathered in such manner enables partial repairs, i.e. repairs in critical areas, which can save large amounts of money for the owner.

The procurement of a special TV inspection vehicle enables a better-quality inspection in line with relevant European standards, and enables the best inspection result for end-users.

The advantages of inspection vehicle compared to mobile TV inspection devices are that the status in the pipe can be monitored on the spot, and a larger area can be inspected in a shorter period of time. Data processing is also enabled on the spot, as is the transmission of data to the investor – the copies of recordings and images made during the inspection.

The current equipment for TV pipe inspection is highly sophisticate with numerous possibilities, starting with the lens that can be rotated in all directions and thus record every detail in the pipes, to the laser guided distance measuring.

Cameras record video and pictures in high resolution, they are equipped with bright lights in order to illuminate the interior of the pipe, and are airtight so that the liquids do not get into them. All the equipment used inside the pipe is explosion-proof.

Technical specifications of the TV pipe inspection equipment

IBAK ARGUS 4 EXX camera with a rotating head

- EX protection zone 1 / 2
- T.KL. T3 (DIN EN 50014)
- Inspection range DN 200 and up
- Remote control
- Upright picture
- Zoom-optical
- Focus function
- Integrated laser for measuring length and width
- Ex- version with thermometer

IBAK SIRIUS 1 EXX camera with a rotating head

- EX protection zone 1 / 2
- T.KL. T3 (DIN EN 50014)
- Inspection range DN 100 and up

- Remote control
- Upright picture
- Focus function
- Integrated laser for measuring length and width
- Ex- version with thermometer

IBAK HSP 40/60 manual coiler

- Inspection range DN 50 and up
- ORION camera
- Max. cable length 60 m
- Ex versiona

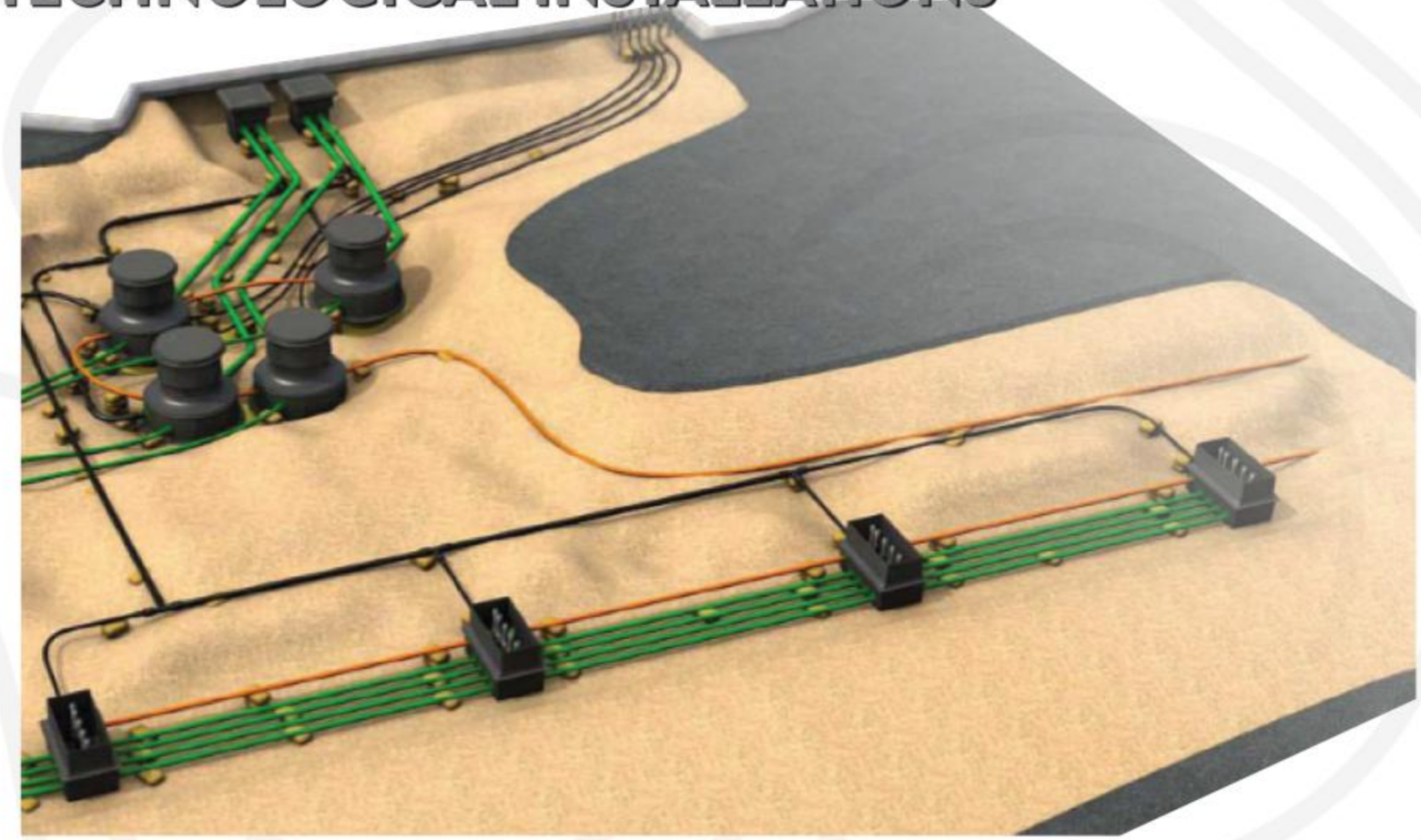
FUEL TRANSPORT

The company "Delta Petrol d.o.o. Kakanj" has been present on the market of Bosnia and Herzegovina for years as a specialized enterprise for the transport of oil and oil derivatives, and it is also authorized for international cargo transport. We currently operate with the following 3 units for the transport of "white" derivatives (gasoline, diesel, heating oil):

- 2 tank trucks, capacity up to 35,000 liters
- 1 tank truck, capacity up to 6,000 liters

Our fuel transport trucks are of the latest generation, equipped with ECO engines, stressing the responsible attitude towards the environment in relation to the EU environmental protection standards. In the area of transport, "Delta Petrol d.o.o. Kakanj" meets all international standards of safety regarding the transport of oil and oil derivatives. The tank trucks are also equipped with the systems for ecological loading and unloading of oil and oil derivatives, cutting-edge flow meters, necessary hoses and unloading crossings etc.

MACHINE – TECHNOLOGICAL INSTALLATIONS



The company "DELTA PETROL d.o.o. Kakanj" has a specialized department for the manufacture of machine-technological installations for liquid fuels and gas at gas stations and terminals in the oil industry.

This department has experienced profiled workers with specialized trades, locksmiths, welders, machine technicians, with an extensive experience in building gas stations, a large number of reconstructed gas stations and terminals.

All our employees have completed a large number of trainings with the manufacturers of equipment, primarily regarding the installation of pipes at gas stations, thus gaining the necessary foundation knowledge for proper equipment installation. Welders who work on welding the pipelines have been accredited by the manufacturers and competent institutions.

All employees have been trained to properly handle devices and fire extinguishing equipment and other safety measures during the construction or reconstruction of the liquid or gas fuel tanks.

Our range of services includes:

- Performing machine-technological installations for liquid fuels at gas stations, terminals, internal stations,
- Performing installations for liquid petroleum gas (LPG) and heating,
- Installing the best quality equipment by renowned world manufacturers, whose distributors we are.

Our company is at your disposal during the construction of an eye-catching, functional and safe gas station, including the following services:

- Assistance during design and planning of machine-technological installations for liquid fuels and gas,
- Project manager for the construction of the station by the turnkey approach,
- Assistance in acquiring necessary approvals, certificates and documents before and after construction.

LIQUID FUEL INSTALLATIONS

In the previous period, our company has been active in the carrying out the complete machine-technological installations on over hundred gas stations in Bosnia and Herzegovina and the region, in reconstructing over thirty gas station, reconstructing or constructing internal gas stations, boiler rooms, terminal pipelines.

The company carries out the operations of assembly and installation for liquid fuel and gas at gas stations:

- Pipes and armatures in fuel tanks,
- Laying liquid fuel tanks and carrying out installations,
- Assembly of measurement devices for dispensing fuel,
- Production of all types of manholes,
- Production and assembly of all types of manhole covers,
- Assembly of impermeability controllers.

In addition, we also offer the following services:

- Installation of tanks (underground and above ground) and equipment for tanks,
- Manufacturing specific installation parts,
- Hydrostatic and pneumatic pressure check of the tank and pipeline,
- Upgrade and reconstruction of the existing installation with the aim of modernizing one's station,
- Preparing the tanks for the installation of automatic fuel level gauges (probes),
- Building terminals for transferring fuel oil,
- Technical assistance 24/7.

We offer the services of machine-technological installations for light fuels, liquid petroleum gas and heating:

- Steel single-walled and double-walled pipeline for light fuels,
- Steel single-walled and double-walled pipeline for liquid petroleum gas (LPG)
- Polyethylene single-walled and double-walled pipeline for light fuels, by OPW GLOBAL KPS PETROL PIPE SYSTEM
- Polyethylene single-walled and double-walled pipeline for light fuels and LPG NUPIGECO Smartflex,
- Leak detection equipment in double-walled pipelines.

GAS INSTALLATIONS

Retail sale of LPG used for internal combustion engines is carried out at a gas station. LPG gas stations can be used only if they comply with technical norms and standards. Storage and retail sale of LPG can be carried out only from special business facilities constructed in compliance with current urban construction regulations and regulations on the construction and equipment of facilities for flammable liquids and the storage and transfer of flammable liquids (tanks).

We conduct the following operations in constructing fuel technologies at gas station:

- Pipes and armatures in gas tanks,
- Laying underground and above ground LPG tanks and carrying out LPG installations for commercial and industrial purposes,
- Assembly of measurement devices for dispensing LPG,
- Assembly of probes in gas tanks,
- Setting up the SKID system.

During gas installations, our company offers all its expert assistance, acquiring all approvals by competent inspections, respecting all legal regulations in force in a canton, entity or state.

SERVICE AND MAINTENANCE

DELTA PETROL®

Tokheim Q - Service

As part of the company "Delta Petrol d.o.o. Kakanj" there has been a service team operating for fifteen years, offering all our clients technical support 24/7. The special feature is the created identity of the company as a professional service house, which was among the first of its kind in the region to receive the Tokheim Qualified Service Certificate from the renowned dispenser manufacturer Tokheim GmbH.

The advantages of our service are:

- Experienced staff,
- Quality of service,
- Continuous improvement of service,
- Universal approach,
- Fast response and availability of all spare parts,
- Advatageous geographic position,
- Flexible solutions for gas stations in BiH and further.

We are authorized by the Ex Commission in Bosnia and Herzegovina for the assembly, inspection, maintenance, overhaul and fixture of devices with explosion proof protection and installations in gas stations (dispensers, tanks and measurement stations with probes for measuring levels).

Long-term contracts on ongoing maintenance with numerous clients are the best indicators of our success. Our range of clients includes over 400 privately owned gas stations.

MAINTENANCE SERVICES

We offer the following services:

- Installment and maintenance of liquid and gas dispensers,

- Maintenance of all types of dispensers,
- Installment and maintenance of dispensers for card fueling,
- Calibration of volumeters in dispensers,
- Installment and service of submerged pumps by manufacturers RED JACKET, GILBARCO VEEDER ROOT
- Installment and maintenance of POS equipment (POS registers, DOMS controllers),
- Installment and maintenance of automatic fuel level meters - probes (VEEDER ROOT, HECTRONIC, OPW, TOKHEIM PROGAUGE),
- Installment and maintenance of devices for the control of the interstitial space of a tank (THOMAS RIETCHLE),
- Probes for the control of the interstitial space of a tank
- Lighting maintenance (lights, poles...) at gas stations using a specialized vehicle,
- Maintenance of all types of diesel aggregates and UPS devices,
- Maintenance of other equipment.

We are the leading service team regarding automatic fuel level meters with 266 stations connected to the server of the Federal Ministry of Trade. In the previous period, we have installed over two hundred fuel dispensers. Due to the sensitive system for fuel dispensing, our imperative is proper maintenance of your gas station, without unnecessary alarms and disturbances in operations.

Over 50 gas stations have successfully implemented our own system for the automatization of dispensers with the accounting program. The system is more thoroughly described in a separate chapter.

PROFESSIONAL AND TECHNICAL EQUIPMENT

The service center has at its disposal well trained and educated service specialists for assembly, operating, calibrating and fixing measurement devices and other equipment at gas stations. Specialist professions of our service team include electricians, IT people, machine engineers, mechanics, locksmiths, welders and others. A machine engineer is at the head of the service team.

Our service team possesses adequate knowledge, experience and certificates necessary for good quality and ffective work. We conduct occasional trainings to continuously upgrade the knowledge in the field of our work.

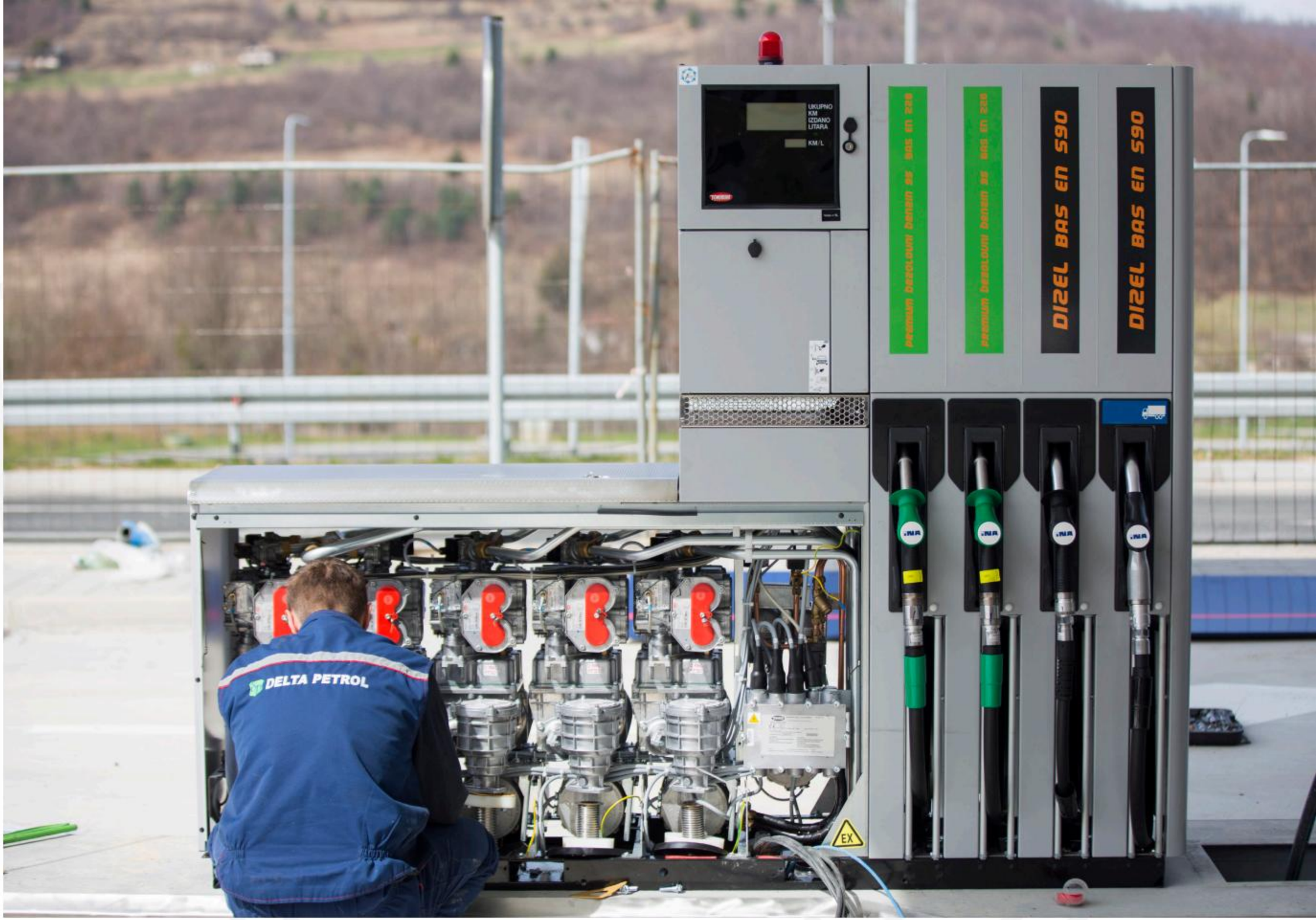
The service team has a service and test workshop for inspection, testing, service and repair of equipment. We offer a complete postsale service, both during the warranty period and afterwards, during regular maintenance. The service team is equipped with a large number of service vehicles and necessary tools, equipment and devices necessary for a good quality service of gas stations. Our company and service team telephone lines are at our clinet's disposal 24/7, and we are ready to respond to possible issues with the aim of fulfilling our clients' requests.

In the case of an intervention, we are ready to reach the location and start solving the problem within 6 (six) hours from the moment the client reported the problem..

CALIBRATING VOLUMETERS OF MEASURING SYSTEMS FOR DISPENSERS

Calibration / verification / gauging of volumeters in liquid and gas fuel dispensers is carried out annually. We can legally check your dispensers to your and your customers' satisfaction, since it is a continuous link and should function to the satisfaction of all actors of the oil market.

You can find further details on this segmet of our services in the sector of the Calibration Laboratory.


UKUPNO
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DIZEL BAS EN 590
DIZEL BAS EN 590
DELTA PETROL
EX

PERIODIC INSPECTION, MEASUREMENT AND TESTING OF ELECTRICAL DEVICES AND INSTALLATIONS

The Company "Delta Petrol d.o.o. Kakanj" based on the "Bylaw on ascertaining the fulfilment of conditions for periodic check-ups, measurements on electro energetic facilities, electric devices, electric installations and issuing documents" (Official Gazette FBiH, no. 18/15), and the Decision by the Federal Ministry of Energy, Mining and Industry no. UP/I-05-17-323/14 as part of its registered activities is also authorized to conduct the following activities:

- Testing the functionality of electro energetic facilities, electric devices and electric installations,
- Testing the protection from simultaneous direct and indirect contact of charged parts,
- Testing the protection from direct contact of charged parts (insulation, cover, obstacles, gateways, protecting devices of differential electricity,
- Testing the protection from indirect contact of charged parts in TN, IT and TT systems (testing loop resistance, measuring short circuit electricity and testing the protecting devices of differential electricity - FI switches, protecting insulation, galvanic separation and equipotential bonding),
- Measuring the resistance in the insulation of electro energetic facilities, electric devices, transformers, generators, motors, cables and installations,
- Measuring the resistance of the operative (working) and protective grounding systems,
- Measuring the resistance of insulating floors and walls,
- Inspecting the lightning rod installations and measuring the resistance of lightning grounding installations,
- Measuring the light intensity,
- Measuring the resistance of galvanic connection on installations for equipotential bonding,
- Inspection, testing and measuring devices for cathode protection,
- Inspection and testing of welding devices,
- Inspection and testing of mobile tools with an electromotor (mixers, drills etc.),

- Testing, assembling, monitoring and maintenance of IP and ex-protected devices,
- Testing the accuracy and functionality of the fire alarm system,
- Measuring electrical dimensions of voltage, electricity, power, energy, frequency, cosφ, magnetic and electric fields, capacity, inductivity, resistance.

Specific testing at gas stations

At gas stations, all electrical installations and devices are maintained and controlled in accordance with regulated deadlines by the authorized institution which issues appropriate reports.

The Company "Delta Petrol d.o.o. Kakanj", has conducted this type of operations on electro energetic facilities and installation for a number of years with expert and trained staff.

Electrical equipment in explosion proof protection can only be maintained by a qualified employee with an appropriate level of knowledge in electrical engineering, who passed the appropriate exam before an "Ex" Committee, and the corresponding measurement reports can only be signed by a competent individual with the education level of Engineer of Electrical Engineering, Department of Electro-Energetics with at least three years of experienced and passed state exam.

The Bylaw on technical norms for electrical installations of low voltage also requires periodic checkups and testing, and the deadlines depend on the type of the electric installation, with the aim of preventing a possible fire breakout. The owner is required by law to keep records on all testing of electrical installations and devices carried out at the gas station.

Testing electrical installations and devices

Included in this testing is also the testing of distribution boxes, measuring loop resistance, testing the protection from indirect contact of charged parts and the FID switch. We carry out the control of the choice and adjustment of protective devices and devices for monitoring, the validity of appropriate switches, the choice of equipment and protective measures according to external influences, distinguishing the neutral and external conductor, the existence of schematics, warning plates and similar information, differentiating electrical circuits, fuses, switches, cramps and other equipment, connecting the conductors, accessibility and available work and maintenance space.

Testing the grounding installations

Testing of grounding installations includes a checkup and measurement of the receiving conduit and clamps, bearers, stripes, cables, lowering conduits, vertical gutters and drains, grounding units, measuring joints, and cable attachments and supply lines for the users, rail for equipotential bonding.

Testing the protection against static electricity

This test measures the resistance of the grounding and checks the conditions for equipotential bonding functioning as a protection against static electricity.

Functionality check and testing explosion proof protected devices (Ex devices)

Testing Ex devices includes the control and visual check of the device in explosion proof protection, including the checks for fuel dispensers, tank truck grounding probes, LPG dispensers, submerged pumps, automatic fuel level probes, Ex case for the probes.

Upon the completion of conducted testing, we issue appropriate documents/reports on the conducted testing to our customers.

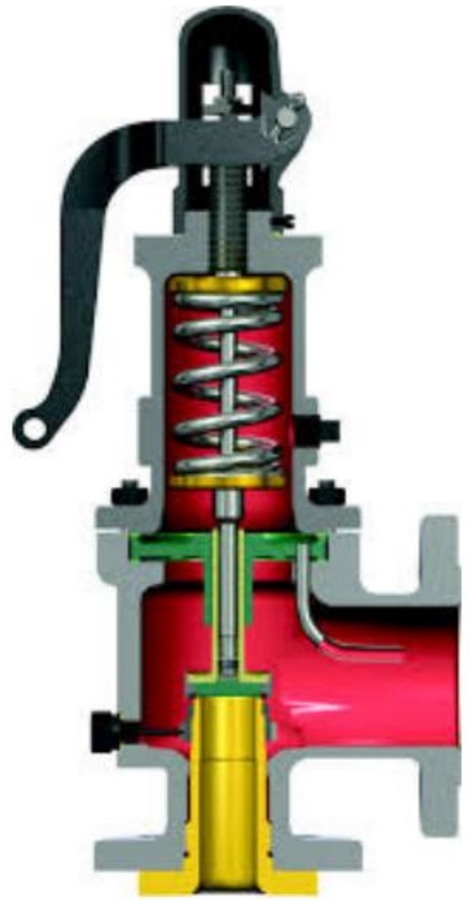
TESTING SAFETY VALVES

In the broad range of services and maintenance of gas stations according to the Decision by the Federal Administration for Inspection Issues Sarajevo, we carry out the testing and calibration of safety valves on LPG installations. Safety valves are included in mandatory periodic control prescribed every 12 months.

We are proud to say that we are in possession of mobile attested and calibrated equipment, and are thus able to conduct the testing and calibration of safety valves at the location of the gas station with minimum operation interference of the LPG dispenser. Upon the finished calibration, a card is fixed on the housing of the valve with the marked characteristics of opening pressure, valve serial number and the official logo of DELTA PETROL as the certified body for testing and calibrating security valves.

Staff conducting the testing have extensive experience in constructing and maintaining LPG equipment and installation, and there is always a person on site who is highly qualified in machine engineering.

The certificate is delivered shortly after the finished testing.



DELTA PETROL

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