ATILIM MAKİNE İmalat San. ve Tic. Ltd. Şti. was founded by Mr. İlhan DENİZLİ and commenced its early activities at the year 1986, in İstanbul, Turkey. It is specialized in producing, marketing, assembling LPG Filling and Storage Facilities, fixtures, machinery, and rendering After-Sale services. In a short time, it obtained a significant share in LPG sector with its high quality and wide range of products.

In order to meet increasing demands both locally and internationally, ATILIM MAKİNA had to expand its machinery and production capacities and facilities. In the year 2015, the company founded a 4-Floors new Factory with a indoor and outdoor total of 7200 m² both production facilities, and even another sister company called “Net Baskül Ltd.” in the year 2001, which enabled it to almost double its production abilities from 1250 m² indoor and 1500 m² outdoor space in 1996. It kept developing its productions lines by using modern up-to-date machinery with the help of its more than 50 blue-collars and 10 administrative staff.

Today, ATILIM MAKİNE managed to fulfill all the requirements of the LPG sector from A to Z. It continues its endless efforts to bring its production quality to a more and more higher quality levels by developing all types of new devices and spare parts required by its mostly valuable local and international customers, for whom, and since its foundation, it produced and assembled LPG Filling Facilities, including many turnkey projects, and countless assembling, repairing, and renovation operations all over the globe. Its products are ranked with the top most admiration both locally and international.

ATILIM MAKİNE exports yearly more than 87% of its total production; while its sister company “Net Baskül Ltd.” produces LPG Filling Scales with high sale ratios for local and international LPG markets. Since its foundation, “Net Baskül Ltd.” managed to export 90% of its production to the international market.

In short, we can say that ATILIM MAKİNE and NET BASKÜL combined together wrote a real true “Success Story!” to be remembered forever!
LPG Filling Plant
LPG Tank Accessories
LPG Transfer
Fire Fighting System
Ex-Proof Electrical Materials
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It is a system which can be used either automatically or manually to refill LPG Cylinders. The Telescopic Conveyor is used to put the cylinders on the conveyor of the system. The Tare Control scale placed on the conveyor conveys the weight of the empty cylinders to the weighing electronic machines. The Input Mechanism pushes the cylinders on the conveyor to be placed over the filling machines on the Carousel. While the Carousel is rotating, the filling machines fill the cylinders and push the cylinder back to the conveyor using the piston placed on it. Cylinders placed on the conveyor go to the Check-Scale. Correctly filled cylinders continue their path. Cylinders filled with extra or less weight go to the Correction Filling Scale. The remaining cylinders on the conveyor continue their way to the Gas Leakage Detector, or to the Water Pool, to check them. In the last stage of the filling process, correctly filled cylinders go to the Branding Machine (Shrinking Machine) to cover their valves by the shrinking sleeves with the company logo print it on it. Cylinder then go to the trailer.
Telescopic conveyors are manufactured to facilitate cylinder transportation to the transfer vehicles. The part that goes inside the vehicle can be produced between 3-11 meters. The telescopic conveyors are produced to be operated either by humans or by motor power according to the desires of the customer. They can be operated by using the control panel placed on it. Operators can easily control the telescopic conveyor into loading and unloading vehicles without any serious effort.

For operator’s safety, telescopic conveyor is operated only when rail button is pressed. Telescopic conveyors can be used for both loading and unloading.

**Technical Properties**

- **Capacity**: 1200 pcs / hour
- **Suitable Cylinder Diameter**: Min - Max: 230 mm - 380 mm
- **Electric Voltage**: 3 x 380 / 400 V AC 50/60 Hz
- **Grounding**: Max < 2.0 Ω
- **Weight**: 4,500 Kg Average.
- **Transport Weight**: 1,000 Kg
- **Engine and Gear Group**: 1.1 kW - 5.5 kW at 1500 rpm
Palletizer for LPG Cylinders

Unloading The Pallet
Pallets are placed on the conveyor by forklifts. The chain conveying unit is operated and discharged to the front of the unit by means of pneumatic sensors to gradually evacuate the cylinder transport conveyor.

Filling The Pallet
The empty pallet is driven by the chain conveyor unit. It comes in front of the filling unit. It is filled by the cylinders conveying from the conveyor gradually by pneumatic sensors.

Technical Properties
Production Capacity: 35 Cylinder (300-330 mm dia.)
Conveyor Group

It is a system ensures that the cylinders are to be filled and transported most efficiently to the other equipment, which will be between the Loading and Unloading points.

90° radius corner conveyor
“Y” type separator conveyor
“V” type centering conveyor

Conveyors can be manufactured either by galvanizing them or by painting them. According to the cylinder model, the conveyor width can be customized to customer requirements. The height of the conveyor can also be produced according to the required height at zero (buried) or any other required height.

Conveyor Chains are manufactured either being casted or from steel. The chains work on ULPOLEN 1000 material inside the conveyor. This increases the durability of the chains and allows for more comfortable working environment.

Conveyor Driving Group
Those are used to drive the conveyor chains. Their body is manufactured from NPU iron steel profile while railings are made from steel pipes. ULPOLEN-1000 is a wear resistant material against friction with the chain belts. They are manufactured in sizes of 3m or else. They consist of return pulleys, pulley-shaft and bearings, conveyor chain, gal chains, chain tension weights, soapsuds pool, motor guard and Ex-Proof motor reducer selected to conform to speed.

Conveyor Chains
Conveyor chains are produced in the most suitable way to carry cylinders.
2 different types of conveyor chains are produced according to different countries and customer requirements.

Steel chain
Steel chains; manufactured of St 52 material by means of cold shaping.
Rupture Resistance: 7,350 Kg

Cast iron chain
Cast iron chains; manufactured from EN-GJS-500-7 quality cat.
Rupture Resistance: 6,500 Kg
Cylinder Input & Output Mechanism

Input Mechanism
Cylinder Input Mechanism offers fast and safe transportation of the cylinders from the chained conveyor to the filling carousel. Input mechanism synchronizes the filling process of the carousel in a fast way. The Automatic Input Mechanism doesn’t load cylinders to the filling machines of which filling process is still not finalized yet. It waits for the next empty cylinder filling machine and loads the cylinder to its suitable filling machine automatically.

Output Mechanism
Output Mechanism is pneumatically equipped and assembled upon requirement on each filling scale. It automatically loads cylinders, which are already filled, from carousel to the chain conveyor. LPG cylinder has important role in increasing cylinder filling capacity. Cylinders, which are not filled yet, are not loaded to the Chain Conveyor.

Output Mechanism Technical Properties
Capacity
Max. 1200 cylinder / hour
Capacity may change according to cylinder size and carousel speed.

Air Installation
Air Hose Connection Size: 8 mm
Working Pressure:
Min. 6 bar - Max. 10 bar
Grounding
Max < 2.0 Ω

Cylinder Input Mechanism Technical Properties
Capacity
Max. 1200 cylinders / hour
Capacity may change according to cylinder size and carousel speed.

Air Installation
Air Hose Connection Size: 8mm
Working Pressure:
Min. 6 bar - Max. 10 bar
Grounding
Max < 2.0 Ω
Weight
150 Kg
Filling Carousel

- It is a revolving system on which cylinder filling machines are fixed over.
- Provides speed and easiness for cylinder filling operations. They are manufactured in a compatible fashion to any LPG cylinder filling machine.
- Driven by an Ex-Proof motor redactor selected accordingly to the required filling capacity and the speed of the chain conveyor.
- There is a pneumatically controlled input mechanism used for loading cylinders to the filling machine between conveyor and carousel.
- To prevent concentration of gas leakage in working environment, accumulated gas should be removed. That’s why a ventilation system is placed under the Carousel so the concentrated gas is removed continuously.

Carousel Filling Capacity
- 12 Sections Carousel Filling Capacity
  600-700 cylinders/hour
- 18 Sections Carousel Filling Capacity
  900-1050 cylinders/hour
- 24 Sections Carousel Filling Capacity
  1200-1400 cylinders/hour
- 30 Sections Carousel Filling Capacity
  1500-1700 cylinders/hour
- 36 Sections Carousel Filling Capacity
  1800-2100 cylinders/hour

Technical Properties

LPG Installation
- LPG Pipe Connection Size: 3"
- Filling Pressure: Max. 20 bar
- Test Pressure: Max. 30 bar

Air Installation
- Air Pipe Connection Size: 3/4"
- Working Pressure: Min. 6 bar - Max. 10 bar

Electricity Line
- Electronic LPG Filling Machines
- Electricity Feeding Power: 12 V DC /AC
- Voltage: 3 Phases
- Frequency: 50/60 Hz
- Grounding: Max < 2.0 Ω
- Carousel Speed: (Changes According to Diameter)
  40 - 90 sec./ turn
Carousel Dimensions

- 9 Section Carousel Dimension
  Diameter: 2700 mm
- 12 Section Carousel Dimension
  Diameter: 3650 mm
- 18 Section Carousel Dimension
  Diameter: 4800 mm
- 24 Section Carousel Dimension
  Diameter: 5800 mm
- 30 Section Carousel Dimension
  Diameter: 6950 mm
- 36 Section Carousel Dimension
  Diameter: 7800 mm
- 42 Section Carousel Dimension
  Diameter: 9400 mm
Electronic cylinder Filling Machine is produced from automatic fillings with carousel. Automatic cylinder input and output mechanism enables fast and easy loading of cylinder to electronic filling machines located on carousel. Centering mechanism located on electronic cylinder filling machine is the biggest assistant for centering of valves of cylinder filling heads. Electronic filling machines are connected to data transfer system (ADTS). All cylinder entering conveyor system pass through tare control mechanism. Collected tare data (ADTS) are sent to Electronic cylinder filling machines on carousel via data transfer system as information about quantity. Electronic cylinder filling machine operates predetermined amount of filling operation after received these data.

**ADME-8200 ELECTRONIC FILLING MACHINE (AUTOMATIC)**

A Electronic Filling Machine to fill Cylinders up to 12-15 Kg

**Technical Specifications**

- Can be used Cylinder input and output systems mechanism
- Aluminum and inox Body and Pan
- Weighing Accuracy: 10 gr
- Filling Accuracy: 10 gr
- Maximum Filling Capacity: 15 Kg
- Machine Weight: 90 Kg
- With a pneumatic and electronic control system
- Can be used only over a Carousel
- Include Automatic Output Mechanism
- Certified by ATEX
- With 2 Years Guarantee
- It can be connected to computer

> Cylinder Diameter 220-360 mm
> Cylinder Type: 12-15 Kg.

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**ADME-8200-MOD 1**

**ADME-8200-MOD 2**
ADME-8200 - MOD 3

ADME 8200 ELECTRONIC FILLING MACHINE (AUTOMATIC)
A Electronic Filling Machine to fill Cylinders up to 12-15 Kg

Technical Specifications
Can be used Cylinder input and output systems mechanism
Aluminum and inox Body and Pan
Weighing Accuracy: 10 gr
Filling Accuracy: 10 gr
Maximum Filling Capacity: 15 Kg
Machine Weight: 80 Kg
- With a pneumatic and electronic control system
- Can be used only over a Carousel
- Include Automatic Output Mechanism
- Certified by ATEX
- With 2 Years Guarantee
- It can be connected to computer

> Cylinder Diameter 220-360 mm
> Cylinder Type: 12-15 Kg.

ADME-8300-MOD 1

ADME 8300 ELECTRONIC FILLING MACHINE (AUTOMATIC)
A Electronic Filling Machine to fill Cylinders up to 25-45 Kg

Technical Specifications
Aluminum and inox Body and Pan
Weighing Accuracy: 10 gr
Filling Accuracy: 10 gr
Maximum Filling Capacity: 45 Kg
Machine Weight: 100 Kg
- With a pneumatic and electronic control system
- Can be used alone
- Certified by ATEX
- With 2 Years Guarantee
- It can be connected to computer

> Cylinder Diameter 220-360 mm
> Cylinder Type: 25-45 Kg.
Ex-net 7 Series The Mechanical Filling Machines

They are filling machines to be used to fill LPG Cylinders manually or automatically. To be used to fill cylinders of capacities ranging between 2 Kg and 50 Kg. They are to be used either over the Carousel, one by one separately, or above the SKID System. They are manufactured either with flat plates or rollers, with aluminum poles, electrostatically painted body, pneumatic control system, and stainless steel arms.

**EXNET-7 MECHANICAL FILLING MACHINE (MANUEL)**

A Mechanical Filling Machine to fill Cylinders up to 2-6 Kg

**Technical Specifications**

- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 50 gr
- Maximum Filling Capacity: 6 Kg
- Machine Weight: 60-65 Kg
- With a pneumatic control system
- Can be used alone or over a Carousel
- Certified by ATEX
- With 2 Years Guarantee

**Ex-net 7-MOD-1**

> Cylinder Diameter 220-300 mm
> Cylinder Type: 2-6 Kg.

**Ex-net 7-MOD-2**

> Cylinder Diameter 220 mm
> Cylinder Type: 2-6 Kg.
EXNET-7 MECHANICAL FILLING MACHINE
(MANUEL)
A Mechanical Filling Machine to fill Cylinders up to 2-6 Kg

Technical Specifications
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 50 gr
- Maximum Filling Capacity: 6 Kg
- Machine Weight: 60-65 Kg
  - With a pneumatic control system
  - Can be used alone or over a Carousel
  - Certified by ATEX
  - With 2 Years Guarantee

> Cylinder Diameter 220-300 mm
> Cylinder Type: 2-6 Kg.

EXNET-7 MECHANICAL FILLING MACHINE
(AUTOMATIC ON CAROUSEL)
A Mechanical Filling Machine to fill Cylinders up to 2-6 Kg

Technical Specifications
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 50 gr
- Maximum Filling Capacity: 6 Kg
- Machine Weight: 72 Kg
  - With a pneumatic control system
  - Can be used only over a Carousel
  - Include Automatic Output Mechanism
  - Certified by ATEX
  - With 2 Years Guarantee

> Cylinder Diameter 220-300 mm
> Cylinder Type: 2-6 Kg.
EXNET-7 MECHANICAL FILLING MACHINE (AUTOMATIC ON CAROUSEL)

A Mechanical Filling Machine to fill Cylinders up to 2-6 Kg

Technical Specifications
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 50 gr
- Maximum Filling Capacity: 6 Kg
- Machine Weight: 72 Kg
  - With a pneumatic control system
  - Can be used only over a Carousel
  - Include Automatic Output Mechanism
  - Certified by ATEX
  - With 2 Years Guarantee

> Cylinder Diameter 220-300 mm
> Cylinder Type: 2-6 Kg.
Ex-net 32 Series The Mechanical Filling Machines

**Ex-net 32 MOD-1**

**EXNET-32 MECHANICAL FILLING MACHINE (MANUEL)**
A Mechanical Filling Machine to fill Cylinders up to 10-15 Kg

**Technical Specifications**
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 100 gr
- Maximum Filling Capacity: 15 Kg
- Machine Weight: 82 Kg
- With a pneumatic control system
- Can be used alone or over a Carousel
- Certified by ATEX
- With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 10-15 Kg.

**Ex-net 32 MOD-2**

**EXNET-32 MECHANICAL FILLING MACHINE (MANUEL)**
A Mechanical Filling Machine to fill Cylinders up to 10-15 Kg

**Technical Specifications**
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 100 gr
- Maximum Filling Capacity: 15 Kg
- Machine Weight: 82 Kg
- With a pneumatic control system
- Can be used alone or over a Carousel
- Certified by ATEX
- With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 10-15 Kg.
EXNET-32 MECHANICAL FILLING MACHINE (MANUEL)
A Mechanical Filling Machine to fill Cylinders up to 10-15 Kg

Technical Specifications
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 100 gr
- Maximum Filling Capacity: 15 Kg
- Machine Weight: 82 Kg
- With a pneumatic control system
- Can be used alone or over a Carousel
- Certified by ATEX
- With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 10-15 Kg.

EXNET-32 MECHANICAL FILLING MACHINE (SEMI-AUTOMATIC)
A Mechanical Filling Machine to fill Cylinders up to 10-15 Kg

Technical Specifications
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 100 gr
- Maximum Filling Capacity: 15 Kg
- Machine Weight: 82 Kg
- With a pneumatic control system
- Can be used only over a Carousel
- Include Automatic Output Mechanism
- Certified by ATEX
- With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 10-15 Kg.
EXNET-32 MECHANICAL FILLING MACHINE (MANUEL)
A Mechanical Filling Machine to fill Cylinders up to 10-15 Kg

Technical Specifications
Aluminum and inox Body and Pan
Weighing Accuracy: 100 gr
Filling Accuracy: 100 gr
Maximum Filling Capacity: 15 Kg
Machine Weight: 85 Kg

- With a pneumatic control system
- Can be used alone or over a Carousel
- Certified by ATEX
- With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 10-15 Kg.
EXNET-32 MECHANICAL FILLING MACHINE (MANUEL)
A Mechanical Filling Machine to fill Cylinders up to 10-15 Kg

Technical Specifications
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 100 gr
- Maximum Filling Capacity: 15 Kg
- Machine Weight: 85 Kg
- With a pneumatic control system
- Can be used alone or over a Carousel
- Certified by ATEX
- With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 10-15 Kg.
EXNET-32 MECHANICAL FILLING MACHINE
(AUTOMATIC)
A Mechanical Filling Machine to fill Cylinders up to 10-15 Kg

Technical Specifications
Aluminum and inox Body and Pan
Weighing Accuracy: 100 gr
Filling Accuracy: 100 gr
Maximum Filling Capacity: 15 Kg
Machine Weight: 82 Kg

- With a pneumatic control system
- Can be used only over a Carousel
- Include Automatic Output Mechanism
- Certified by ATEX
- With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 10-15 Kg.
EXNET-32 MECHANICAL FILLING MACHINE
(AUTOMATIC)
A Mechanical Filling Machine to fill Cylinders up to 10-15 Kg

Technical Specifications
- Aluminum and inox Body and Pan
- Weighing Accuracy: 100 gr
- Filling Accuracy: 100 gr
- Maximum Filling Capacity: 15 Kg
- Machine Weight: 115 Kg
- With a pneumatic control system
- Over a Carousel
- Automatic Outlet Mechanism
- Include Automatic Output Mechanism
- Certified by ATEX
- With 2 Years Guarantee

- Cylinder Diameter 300-370 mm
- Cylinder Type: 10-15 Kg.
**Ex-net 110-45,60 Series The Mechanical Filling Machines**

**Ex-net 110-45 MOD-1**

EXNET-110-45 MECHANICAL FILLING MACHINE (MANUEL)
A Mechanical Filling Machine to fill Cylinders up to 10-50 Kg

**Technical Specifications**
- Aluminum and inox Body and Pan
- Weighing Accuracy: 200 gr
- Filling Accuracy: 200 gr
- Maximum Filling Capacity: 50 Kg
- Machine Weight: 112 Kg
  - With a pneumatic control system
  - Can be used alone
  - Certified by ATEX
  - With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 10-50 Kg.

**Ex-net 60 MOD-2**

EXNET-60 MECHANICAL FILLING MACHINE (MANUEL)
A Mechanical Filling Machine to fill Cylinders up to 12-25 Kg

**Technical Specifications**
- Aluminum and inox Body and Pan
- Weighing Accuracy: 150 gr
- Filling Accuracy: 150 gr
- Maximum Filling Capacity: 25 Kg
- Machine Weight: 112 Kg
  - With a pneumatic control system
  - Can be used alone
  - Certified by ATEX
  - With 2 Years Guarantee

> Cylinder Diameter 300-370 mm
> Cylinder Type: 12-25 Kg.
- Adb Series filling heads are produced according to the different types of cylinder valves.
- They can either be of a manual type or an automatic pneumatic type depending on the needs of the customer.
- Filling tips of the Adb series Filling Heads are made of brass metal and suitable for ex-proof standards.
- Impermeability material suitable for LPG gas provides many long years of services for the Adb series filling heads.
Correction, Check and Final Control Scales

Tare Control Scale
The Electronic Tare Control Scale, which is mounted on a chain conveyor with the help of a special chassis, is used to determine the weights of the cylinders to be filled before they enter the filling machine. Tare weighted cylinders continue their way to the Electronic Filling Machines located on the carousel. According to the information received from the tare control scale, filling of the LPG in the Electronic Filling Machine is done.

Check Scale
It is a special Electronic Check Scale mounted on the chain conveyor by a special chassis. It is used to control the weights of the filled cylinders. Correctly filled cylinders continue their path. If there are cylinders with weights more or less the desired weight, they cause problems. They are to be separated and sent to Correction Scale.

Correction Scale
It is the final control scale. In case any filling deficiencies got found, cylinders are to be split up automatically by the separating piston to the verification weigh bridge roll conveyor. Then the under filled cylinders are refilled by the person operating the station. However, excessively filled cylinders are connected to the Gas Transfer Unit and the extra gas is sucked and pumped out back to the stock tank. After the weight good corrected cylinders go back to the check scale again.

Technical Properties
Cylinder Type: All Types of Cylinder
Production Capacity: 2000-2200 Cylinder/h.
Features
- Automatic and manuel operation.
- Automatic PLC control system.
- Automatic cylinder sort-out system (Final Control Scales).
Automatic leakage detectors are manufactured to be assembled on the Chain Conveyor easily.

Filled cylinders are stopped automatically by a stopper while they are still on the conveyor. The detecting head of the automatic leakage detector positions itself over the cylinder by a centering mechanism. It controls whether the cylinder valve is leaking or not. If it doesn’t, the cylinder continues its path. However, if it does, then the leakage alarm is launched and the cylinder is separated into by pushing it into a specially designed roller conveyor of 2.5 meters nearby the detector till it is dismounted to get repaired and fixed. Therefore, full safety of the filled cylinder is maintained all the time.

Automatic leakage detector has infrared module technology inside it and detects a minimum of 2,500 ppm gas leakage.

1. Suitable to control all kinds of cylinder valves.
2. To dispose the accumulated gas inside the detector after many runs, the leakage detector is equipped with an automatic air circulation system.

**Technical Properties**

- **Sensitivity:** 3,000 ppm
- **Valve Type:** All types of valves
- **Automatic Production Capacity:** 1,200 Cylinder/h.
- **Manual Production Capacity:** 500 Cylinder/h.
- **Weight:** 450 Kg.
- **Certificates:** Atex, CE

**Features**

- Installed on a Chain Conveyor.
- Adjustable Detection Level.
- Combined with PLC Management.
- Real Time Display Measured Leak.
In-Line & Tilting Leak Dedection Pools

The leakage test of the cylinders passing through the water-filled conveyorized pool is done by visual inspection. Leakage from the body or the valve can be detected. The galvanized steel pool is produced in sizes ranges between 6 m and 8 m.

**Technical Properties**
- **Production Capacity:** 1,800 - 2,000 Cylinder/h.
- **Cylinder Types:**
  - 220 - 360 mm. All Type Cylinder.
- **Size:** 6-8 m.

**Features**
- Test Type: Full Body and Valve Leak Control.
- Material: Galvanized Constriction

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**Tilting Leak Dedection Pool**

There are 3 different models with 4, 8, and 12 Cylinders capacities. It has advantages such as small footprint and the ability to control cylinders of different diameters at the same time.

**Technical Properties**
- **Model Size:** 4, 6, 8, 12 Sections.
- **Production Capacity:** 600-1,500 cylinder/h.
  - 4 Section: 500 Cylinders / h.
  - 8 Section: 1,000 Cylinders / h.
  - 12 Section: 1500 Cylinders / h.
- **Cylinder Types:**
  - 220 - 360 mm. All Type Cylinder.
- **Air Pressure:** 6-8 Bar.

**Features**
- Test Type: Full Body and Valve Leak Control.
- Material: Galvanized Constriction

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**In-Line Leak Dedection With Water Bath**
Information coming from the black coach Industrial type works with 380 V electricity. It is 100% safe with an audible alarm system and safety valve at maximum pressure entering the circuit. Automatic Water Supply tank to the system with a pump. Steam is all handed by steel Ready to work in about 16 minutes. Depending on the steam capacity to be used, the resistances can be switched on gradually. Produced according to CE norms.

**Technical Properties**

- **Production Capacity (Automatic):** 1,200-1,500 Cylinder/h.
- **Production Capacity (Manuel):** 600-900 Cylinder/h.
- **Steam Capacity:** 39 Kg/h.
- **Water Capacity:** is 60 lt.
- **Working Pressure:** 4 bars.
- **Resistance Power:** 4 x 7.5 kW

**Features**

- Information coming from the black coach Industrial type works with 380 V electricity.
- It is 100% safe with an audible alarm system and safety valve at maximum pressure entering the circuit.
- Automatic Water Supply tank to the system with a pump.
- Steam is all handed by steel
- Ready to work in about 16 minutes.
- Depending on the steam capacity to be used, the resistances can be switched on gradually.
- Produced according to CE norms.

*Steam is applied to the cylinder with the help of a balancer pulled by a labour.*
Cylinder Washing Brushing Machine

Cylinders, which are passing through a cabin made from stainless steel, are hot and cold washed with two pressure pumps. Non-Stopage passing of the cylinders avoid time waste. Cylinders, which left the wash cabin, are dried with high pressure fans.

Automatic Manual Paint Cabin

Before filling the cylinder it is used to paint it. Manufactured in one or two sided for the household, picnic and industrial type cylinders. Ensures collection of paint waste in the environment; cylinders are painted on the conveyor to ensure saving in time and manpower.

Technical Properties

Production Capacity Automatic Robot: 400-600 cylinder/h.
Production Capacity Manuel: 300-400 cylinder/h.
Cylinder Types: 220 - 360 mm. all type cylinder.
Paint Tank: 1-30 Lt.
Air Pressure: 6-8 Sections.

Features

- Production Type: Automatic Robot and Manuel by hand.
- Material: Galvanized or Painted Constriction.
- Ex-Proof Ventilation
- Ex-Proof Water Pump

Technical Properties

Automatic Robot System: 450 Cylinders/h.
High Pressure Washing: 950 Cylinders/h.
Online 8 Pieces Brush System: 900 Cylinders/h.

Features

- **Cylinders Washing**: The automatic robot brush rotates along aside a fixed cylinder redactor brush with a detergent pump. The detergent is drained and rinsed out.
- **Rinsing**: In the on-line system, the brush is cleaned while the rotating cylinder passes in front of it, and rinsing is performed at the exit.
Used for hydrostatic testing of industrial, household, and camping type of cylinders. Cylinders are compressed with pneumatic pistons. The water is pumped inside the cylinders with electric water pumps up to a maximum of 40 bar pressure. After the test is completed water inside the cylinder is discharged by air pressure. There are two models exist automatic and manual.

**Technical Properties**
- **Cylinder Type:** All types of Cylinder
- **Production Capacity:** 35-70 Cylinder/h.
  - 5 Posts: 35 Cylinder / h.
  - 10 Posts: 70 Cylinder / h.
  - Max. Test Pressure: 45 Bar.

**Features**
- Automatic and manual rotation.
- Automatic PLC control system.
- Automatic pneumatic control system.
- Manual pneumatic control system.
- 5 or 10 testing posts.

**Air Testing and Vacuuming Machine**

**Technical Properties**
- **Cylinder Type:** All types of Cylinder
- **Production Capacity:** 150-400 Cylinder/h.
  - 4 Posts: 150-200 Cylinder / h.
  - 8 Posts: 200-300 Cylinder / h.
  - 10 Posts: 300-400 Cylinder / h.
- **Air Pressure:** 6-8 Bar.
Hydraulic Valve Screwing and Unscrewing Unit is used to replace defective cylinder valves inside cylinder fabrication plants or filling stations.

**On Line Automatic**

![On Line Automatic Image]

**Technical Properties**

- **Production Capacity (On line)**
  - 120-150 Cylinder/h.

- **Production Capacity (Semi Automatic)**
  - 80-100 Cylinder/h.

- **Production Capacity (Manual)**
  - 60-70 Cylinder/h.

**Features**

- Hydraulic power unit and ex-proof motor
- Adjustable switch according to the desired cylinder size
- Adjustable hydraulic torque feature
- Cylinder stopper piston
- Automatic or manual cylinder lock piston
- Suitable for Over-the-Conveyor series production.

**Semi Automatic**

![Semi Automatic Image]
Defective cylinder evacuation unit is used to discharge gas from inside the defective LPG cylinders. Discharged LPG gas is transferred to the LPG stock tank by this unit to be re-used. There is a uniquely suitable filling head for each discharge head.

**Technical Properties**

**Transfer Capacity**
- Model 1: 20lt / min.
- Model 2: 30lt / min.

**Air installation**
- Air Hose Connection Size: 10 mm
- Working Pressure: min. 6-8 bar

**Weight**
- 40-50 Kg.
Mobile Filling Plant

- Applied for 20 and 40 feet containers. ■ Easy and fast way to fill the cylinders. ■ Low-cost and full-capacity filling plant.

**Capacity:** Filling capacity up to 400 cylinders per hour.

**Equipments**
- From 4 and up to 8 cylinder filling machines.
- Electronic leak detector.
- Shrinking machine.
- Default cylinder discharging unit
- Electronic check control
- Chain conveyors and roller conveyors.
- LPG Pump.
- Fire fighting system.
- LPG supply hose.
- Ex-proof Electrical panel.
- Air Compressor and pipe line.

---

Skid Mounted – LP Gas Filling Stations

This technology is the best for the ones who need a very cost-effective turnkey solution for the sale of LPG since it works as a complete refuelling station for vehicles. The skid can be supplied with or without tank and can be personalized with the dispenser of your choice.

**Technical Properties**

- **Nozzle Configuration:** 1 - 2 - 4 pcs
- **Size:** 45 x 123 x 230 cm
- **Number of Displays:** 2 - 4 pcs
- **Multimedia Screen:** Up to 32"

**Features**
- Ready to work autogas station solution on steel chasis. Low investment costs.
- Quick return of investment. Minimum workshop and engineering at site
- Flexible and modular solution.
- Simple layout and maximum safety.
- The plant can be made independent from external power supply (for example in rural areas) with LPG/NG Generator.
- Easy to operate. Comprise all necessary equipment for safe and reliable filling operation.
It allows safe handling of liquefied petroleum gas (LPG) transportation, storage, filling and unloading operations. Those are safety devices and accessories used in Tanks and Pipes Installations.

**USAGE AREAS**
- Transport tanks
- Storage tanks
- LPG piping
- Autogas stations
- LPG filling plants
Ahv 1400 Series Hydraulic Valves

They are used as Remotly Controlled Safety Valves at the fixed LPG storage tanks, spherical tanks or LPG transportation tanks (from 30 m³ to 5000 m³), at liquid or at gas outputs, or at Piping Lines. They can be either placed directly inside the outlet of the tank or outside it by installing them inside a housing case.

Technical Properties
Nominal Diameter: DN 50-DN 250
Connecting Flanges: DIN 2533- 2545 ASME B 16.5 RF
Operating Pressure: 20 Bar
Testing Pressure: 30 Bar
On-off Movement Distance: 40 mm.
Means of Operation: One way
Opening Process: Oil pressure
Closing Process: Spring pressure
Hydraulic Connection: R 1/4” female thread
Sealing Element: NBR, Teflon
Main Body Flange: GGG-50 nodular cast iron
Piston Casing: Honed seamless pipe
Spring: Stainless steel.

Hydraulic Operator

It allows the oil inside it to reach the hydraulic valves by hand pressing and by exerting pressure which forces the valves to open and to close.

Technical Properties
Max. Pressure: 100 bar
Hydraulic Connection: R 3/8” Female Thread
Storage Capacity: 2 lt and 3 lt.
External & Internal Relief Safety Valve

Aev-1100 relief valves are used to relieve the excessive pressure formed in LPG tanks and LPG pipes in general. The relief valves are set to open at a pressure of 17.5 bar. It is manufactured for stock tanks and LPG pipe installation.

Aevt series relief valves are used to relieve the excessive pressure formed in the LPG transport tanks. The relief valves are set to open at a pressure of 17.5 bar. They are manufactured to appropriately with the installations of the LPG tanks.
LPG Transfer Accessories

Aha-2821

- Flange Diameter: 2"
- Hose Connection (M. ACME): 2\(\frac{1}{4}\)"
- ACME Plug (F. ACME): 2\(\frac{1}{4}\)"
- Vent Valve: 1/4"
- Gasket: NBR
- Material: Brass Plug, Steel Nipple and Flange

Aha-2820

- Flange Diameter: 2"
- Hose Connection (M. ACME): 3\(\frac{1}{4}\)"
- Flange Connection (M. NPT): 2"
- ACME Plug (F. ACME): 3\(\frac{1}{4}\)"
- Vent Valve: 1/4"
- Gasket: NBR
- Material: Brass Plug and Nipple, Steel Flange

Aha-2825

- Flange Diameter: 2"
- Hose Connection (M. ACME): 3\(\frac{1}{4}\)"
- ACME Plug (F. ACME): 3\(\frac{1}{4}\)"
- Vent Valve: 1/4"
- Gasket: NBR
- Material: Brass Plug and Nipple

Aha-2832

- Flange Diameter: 2"
- Hose Connection (M. ACME): 2\(\frac{1}{4}\)"
- Flange Connection (M. NPT): 1\(\frac{1}{4}\)"
- ACME Plug (F. ACME): 2\(\frac{3}{4}\)"
- Vent Valve: 1/4"
- Gasket: NBR
- Material: Brass Plug and Nipple, Steel Flange

Aha-2824

- Hose Connection (M. ACME): 3\(\frac{1}{4}\)"
- Flange Connection (M. NPT): 2"
- ACME Plug (F. ACME): 3\(\frac{1}{4}\)"
- Vent Valve: 1/4"
- Gasket: NBR
- Material: Brass Plug and Nipple

Aha-2835

- Hose Connection (M. NPT or R): 2"
- Coupling Connection (F. ACME): 3\(\frac{1}{4}\)"
- Vent Valve: 1/4"
- Material: Brass Nut & Steel Nipple

Aha-2831

- Hose Connection (M. NPT): 1\(\frac{1}{4}\)"
- Coupling Connection (F. ACME): 2\(\frac{1}{4}\)"
- Material: Brass Nut & Steel Nipple

Aha-2837

- Hose Connection (M. NPT): 1\(\frac{1}{4}\)"
- Coupling Connection (F. ACME): 1\(\frac{1}{2}\)"
- Material: Brass Nut & Steel Nipple

Aha-2825-1

- For Use With ACME Connector Size: 2\(\frac{1}{4}\)" & 3\(\frac{1}{4}\"
- Material: Brass
Check-Lock

A Check-Lock Valve is a safety valve allows mounting and dismounting to the lines or to the tanks safely. (Serves as a safety lock)

**Acl2100**

**Technical Properties**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Service</th>
<th>Container Connection (M. NPT)</th>
<th>Relief Safety Valve Connection (F. NPT)</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acl2101</td>
<td>LP-Gas</td>
<td>1/2&quot;</td>
<td>1/4&quot;</td>
<td>Brass</td>
</tr>
<tr>
<td>Acl2102</td>
<td>LP-Gas</td>
<td>3/4&quot;</td>
<td>1/2&quot;</td>
<td>Brass</td>
</tr>
<tr>
<td>Acl2103</td>
<td>LP-Gas</td>
<td>2&quot;</td>
<td>1.25&quot;</td>
<td>Brass</td>
</tr>
<tr>
<td>Acl2104</td>
<td>LP-Gas</td>
<td>2&quot;</td>
<td>1.25&quot;</td>
<td>Brass</td>
</tr>
<tr>
<td>Acl2105</td>
<td>LP-Gas</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>Brass</td>
</tr>
<tr>
<td>Acl2106</td>
<td>LP-Gas</td>
<td>2&quot;</td>
<td>2.25&quot;</td>
<td>Brass</td>
</tr>
<tr>
<td>Acl2107</td>
<td>LP-Gas</td>
<td>3&quot;</td>
<td>2.25&quot;</td>
<td>Brass</td>
</tr>
<tr>
<td>Acl2108</td>
<td>LP-Gas</td>
<td>1.25&quot;</td>
<td>1.25&quot;</td>
<td>Brass</td>
</tr>
<tr>
<td>Acl2109</td>
<td>LP-Gas</td>
<td>1&quot;</td>
<td>1&quot;</td>
<td>Brass</td>
</tr>
</tbody>
</table>

Foot Valve

They are used at the suction nozzles of the overhead inlet pumps. It prevents air intaking by obstructing the backflow of the liquid at suction step.

**Afv1000**

**Technical Properties**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Service</th>
<th>Size</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afv1112</td>
<td>LP-Gas</td>
<td>1.25&quot;</td>
<td>Aluminum</td>
</tr>
<tr>
<td>Afv1002</td>
<td>LP-Gas</td>
<td>2&quot;</td>
<td>Aluminum</td>
</tr>
</tbody>
</table>
Rotogage (Tank Level Indicator)

They are used to measure the volume of the gas in the tank mechanically. They are of various sizes depending on the diameter of the tank.

---

**Technical Properties**

**Tube Length**
1) Art-2025 Tube Length: 82 cm (Approx.)
2) Art-2535 Tube Length: 120 cm (Approx.)

**Weight**
Approximate Weight: 2.5 Kg

**Connection**
Inlet connection or tank: 1" NPT

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Service</th>
<th>Tank Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art-2025</td>
<td>LP-Gas</td>
<td>2000-2500 Dia</td>
</tr>
<tr>
<td>Art-2535</td>
<td>LP-Gas</td>
<td>2500-3500 Dia</td>
</tr>
</tbody>
</table>

---

Excess Flow Valves

They are used at the outlets of the LPG tanks or at the required points of installations. When an excessive gas flow occurs due to pipe fracture or hose rupture for any cause, they block gas flow mechanically. Threads with flanges, pulleys, and line type threads, are available.

---

**Technical Properties**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Inches</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaav-001</td>
<td>1&quot;</td>
<td>One side threaded</td>
</tr>
<tr>
<td>Aaa2d-001</td>
<td>1&quot;</td>
<td>Two side threaded</td>
</tr>
<tr>
<td>Aaavf-001</td>
<td>1&quot;</td>
<td>PN40 flange</td>
</tr>
<tr>
<td>Aaa-114</td>
<td>1/4&quot;</td>
<td>One side threaded</td>
</tr>
<tr>
<td>Aaa2d-114</td>
<td>1/4&quot;</td>
<td>Two side threaded</td>
</tr>
<tr>
<td>Aaavf-114</td>
<td>11/4&quot;</td>
<td>PN40 flange</td>
</tr>
<tr>
<td>Aaa-112</td>
<td>1/2&quot;</td>
<td>One side threaded</td>
</tr>
<tr>
<td>Aaa2d-112</td>
<td>1/2&quot;</td>
<td>Two side threaded</td>
</tr>
<tr>
<td>Aaavf-112</td>
<td>11/2&quot;</td>
<td>PN40 flange</td>
</tr>
<tr>
<td>Aaa-002</td>
<td>2&quot;</td>
<td>One side threaded</td>
</tr>
<tr>
<td>Aaa2d-002</td>
<td>2&quot;</td>
<td>Two side threaded</td>
</tr>
<tr>
<td>Aaavf-002</td>
<td>2&quot;</td>
<td>PN40 flange</td>
</tr>
<tr>
<td>Aaa-003</td>
<td>3&quot;</td>
<td>One side threaded</td>
</tr>
<tr>
<td>Aaa2d-003</td>
<td>3&quot;</td>
<td>Two side threaded</td>
</tr>
<tr>
<td>Aaavf-003</td>
<td>3&quot;</td>
<td>PN40 flange</td>
</tr>
<tr>
<td>Aaa-004</td>
<td>4&quot;</td>
<td>One side threaded</td>
</tr>
<tr>
<td>Amaav-3412</td>
<td>3/4&quot; - 1/2&quot;</td>
<td>for manometer</td>
</tr>
<tr>
<td>Amaav-3414</td>
<td>3/4&quot; - 1/4&quot;</td>
<td>for manometer</td>
</tr>
</tbody>
</table>
Filling Valve With Acme Connector

Provides fast connection to the 1 ¾” ACME connector. It is used at the end of the 1” transfer hoses of the LPG bulk tankers. Open-Close is made by a simple action. It includes a safety catch to avoid turning it on accidentally. When filling process has just got completed, the gas inside it is discharged with the Purge which allows closing the valve, it provides full passage and it has high flow capacity. It is leak tested under 25 bar pressure.

Technical Properties

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Service</th>
<th>Inlet Connection (F. NPT)</th>
<th>Outlet Connection (F. NPT)</th>
<th>Locking Handle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afvac-1</td>
<td>LP-Gas</td>
<td>1”</td>
<td>1 ¾”</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1”-2” By-Pass Valve

Generally used with Autogas pumps to fix the pump pressure at the desired value (average 10 Kg /cm²). Inlets and outlets are R1” female threaded.

Ensures fixing the LPG pump pressure at a preset value. The desired pressure value is adjusted by the adjustment valve on the top.

Technical Properties

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Adaptor Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1”</td>
<td>FNPT R1” Threaded</td>
</tr>
</tbody>
</table>
Breakaway Coupling & LPG Transfer Hoses

Breakaway coupling is used with LPG supply hoses to prevent probable accidents which can happen when the vehicle moves while the hose is still connected to it.

Liquid Petroleum Gas LPG Hose provides excellent service across a wide variety of industrial and commercial LPG/propane delivery and supply applications. The flexible industrial rubber hose is available in long continuous lengths for efficient delivery/supply and maximum utility at job sites where the gas source might be a significant distance from the application.

**Technical Properties**
- **Inner Tube**: LPG resistant NBR, black smooth
- **Reinforcement**: synthetic textile, two braids.
- **Cover**: oil and weather resistant CR, black, smooth for ID < 25 mm, fabric impression for ID ≥ 25 mm.
- **Temperature Range**: -30°C to +70°C

**Features**
- Flexible and lightweight
- Excellent bending radius
- Very good cover resistance
- Dissipation of static electricity ensured by the tube and bonding braid
- Pin-pricked cover for combustible gas conveyance

Tanker Filling Hose Reels

They allow winding up small size hoses used in transport tanks. They are manufactured in single or double reels to suit the required size and diameters.

**Technical Properties**
- **Dimension**: 2", 1"
- **Adaptor Connection FNPT**: R2"
- **Container Connection Flange**: 2"
Balancer

It ensures filling hoses of autogas dispensers to stay in hanging position, is a reel system with spring, the string wound on this reel is attached to the hose with a bracket, when hose is pulled the reel releases the hose, when hose is released the reel pull the hose to avoid creeping of hose on the ground.

Monoblock, Ballvalves

Technical Properties

- PN 40, PN 16, ANSI CLASS LIB, ANSI CLASS 150 LIB threaded and flanged ball valves
- PN 40 mono block ball valves,
- Butterfly and Globe valves
- Strainers
- Check valves
- Pneumatic actuated mono block ball valves
- Compensators
Manometer & Thermometer

Manometer: Used for measuring liquid and gases which are suitable to copper alloys under vibrating conditions. For aggressive medias Stainless steel AISI 316 L or Monel 400 can be used.

Thermometer: Used where industrial accuracy is needed. Used with gas and liquids which do not react with stainless steel 316 L.

Technical Properties

Filling Liquid: Glycerin, Silicon oil
Case diameter: Ø100 mm, Ø160 mm
Pressure Range: 0,6 / 1000 bar
Accuracy: ± 1,0% (CL. 1,0)

Process fluid temperature
Operating Pressure: Full Scale Value
Conformity: EN 837/1
Protection Rate: IP65
PED: 97/23/EC Directive
ATEX: 94/9/EC Directive
Industry Sector: Petro-chemical plants, Mining industry, Machinery Manufacturing and Hydraulics/Pneumatics

Technical Properties

Case diameter: Ø63 mm, Ø100 mm
Temperature range: -30 °C / 120 °C
Accuracy: ± 2% (CL. 2,0)
Operating Range: Full Scale Value
Conformity: EN13190
Protection Rate: IP51
Industry Sector: Machinery Manufacturing, Heating, ventilation, air conditioning (HVAC) and vessel manufacturers
The LPG Transfer Unit transfers LPG from one place to the other.

**USAGE PLACES**
- Autogas stations
- Stocking facilities
- Filling facilities
- Gas transfer from sea tankers to land
LPG Compressor

Gas compressor allows transport of liquid LPG (Liquefied Petroleum Gas) from one place to another with vapour transfer. Pressure difference should be present for the transfer of liquid LPG. Gas compressors suck LPG in gas phase from one tank and forces it into another tank which causes pressure increase there and with increased pressure LPG starts flowing into the other tank to fulfill the transfer.

Suitable elevation difference as required by the pumps is not needed; liquid transfer can be made in every circumstance.

Compressor has two pistons. While one of them sucks, the other piston forces it to the place of transfer. This system is maintained by suction and compression valves.

Piston rings sucking and compressing the gas are made from special Teflon (PTFE) material.

To prevent gas passing into the bottom section, the lubrication part, a set of adjustable gaskets with nut and spring, are placed at the neck of the piston pin for sealing purposes. This gasket is made from special Teflon material.

Movement of the pistons is maintained by a crank. The crank is placed inside the crankcase and lies on bearings on two sides. Oil pump is activated with one side of the crank and automatic lubrication is maintained with the lubrication pump. Sufficient lubrication is checked by visual inspection through the inspection cap placed on the side and by oil pressure indicator. A pulley is placed on the other side of the crank and it obtains its movement from the electric motor driving the belts.

A safety valve, to protect the compressor from pressure increases, which might occur on the output (compression) end, is installed.

Suction and compression heads are joined with a four-way valve to interchange the suction and compression directions.

Technical Properties

- **Piston Diameter**: 101 mm.
- **Piston Stroke Length**: 76 mm.
- **Max. Transfer Capacity**: 57.5 m³/hour
- **Max. Operating Pressure**: 24 kg./cm²
- **Motor Power**: 11 Kw.
- **Max. Compression Power of Piston Arm**: 1.760 kg.
- **Max. Operating Temperature**: 75 °C
- **Empty Weight**: 412 Kg.
- **Transfer Capacity**: 770 Lt./Minute
- **Pressure Difference**: 1~2 Kg./cm²
- **Time Required To Transfer 10 Tons Lpg**: 25~35 Minutes
PSC model pumps are horizontal and self-priming, side channel with a NPSH inducer stage suitable for handling liquids which do not contain solid or abrasive matter. The NPSH inducer stage allows the pump to operate on the suction side under unfavourable conditions and at positive suction heads lower than 0.5 m.

The range comprises of six sizes each with 1 to 8 hydraulic stages whereby an optimum rating is obtained, ensuring the pump selected meets the required capacity and head.

The pumps of the PSC/LS series have a retaining stage to avoid the dry running by controlling the liquid level in the pump. This design is especially developed to handle liquids under vapour pressure or when the machine is pumping from the underground tanks.

Features
- The range comprises of 6 sizes each with 1 to 8 hydraulic stages whereby an optimum rating is obtained, ensuring the pump selected meets the required capacity and head
- Application variety with 48 different casing size
- Self-priming is up to 740 mbar
- Low NPSHr
- Liquefied gas handling
- Modular hydraulic design allows easy maintenance
- High resistance materials for the critical conditions
- The pump design is suitable for every type of seal (packing gland, single mechanical seal, double mechanical seal)
- High pressure at low capacity
- Many different material options can be applied (cast iron, ductile iron and stainless steel)

Technical Properties

Max. Capacity: 42 m³/h
Max. Diff. Pressure: 40 bar
Max. Viscosity: 100 cSt
Temperature Range: -40 °C to +220 °C

Different models with different capacities and specifications
LPG Meters

These meters are designed for high flow LPG transfer applications like truck unloading. Different models are available including mechanic meters and mass flow meters. Flow rates are from 120lt/min to 500lt/min.

**LD Meters with Mechanical Register**
- Basic flow meter for volume measurement. It can also work with a mechanical printer.

**PD Meters with Electronic Register**
- Cost effective device for volume measurement. Temperature compensation, automation connections, electronic printer, solenoid valve and predefined fillings are possible.

**Installation Sample Schema**
Air Compressors

Trouble-free and high performance for every kind of application with its DVK series oil-injected rotary screw air compressors. Manufacturing and assembly of every single part of these compressors, in which latest engineering software is used during design and analysis phases, is realized considering international quality standards.

**Tdk 1000 Technical Properties**

- Flow Rate Lt/Dk (7 Bar): 1800
- Flow Rate Lt/Dk (10 Bar): 1600
- Flow Rate Lt/Dk (13 Bar): 1300
- Motor (Kw / Hp): 11/15
- Connection (Inch): 3/4
- Dimensions (Mm): 800 x 1100 x 810
- Weight (Kg): 370
- Air Tank (Lt): Optional
LPG is a flammable and explosive gas. For this reason, necessary precautions should always be taken in LPG Filling Facilities. Fire equipment appropriate to the standards should be used.

Fire Pumps: It is selected according to the size of the facility.

Fire Cabinets: The fire hose is intervened by the fire hose inside.

Water Monitors: Provides remote intervention to the fire.
1200 liters/min. Water Monitor

It is used as a fire extinguishing equipment and allows the water to be easily directed to the desired area from a distance.

- The monitor offers 1200 lt/min at 10 Kg/cm² pressure. It is capacitive and it moves 360 degree hor and +90 o, -80 o vertical.
- The barrel is designed to dispense water. The barrel can be changed and replaced with foam.
- The barrel material is made of light-metal alloy corrosion-resistant aluminum.
- Su Monitor body joints are bedded with bearings. The surfaces of the sealing felts are covered with hard chrome. NBR nutring and o-ring are used as the sealing element.
- It is controlled by the valve connected to the monitor input.
- The movement of the monitor is provided manually. Position lock is available.

**Technical Properties**

Max. Working Pressure: 16 Bar
Min. Working Pressure: 5 Bar
Test Pressure: 24 Bar
Inside Diameter of Water Way: 60 mm
Max. Flow: 1200 lt/min. (under 10 bar pressure)
Connection Flange: DN65 ND 16
Output Connection: 2 ½” Male Threaded
Horizontal Movement: 360°
Vertical Movement: +90° - 80°
Weight: 34 Kg

<table>
<thead>
<tr>
<th>Input Pressure (bar)</th>
<th>Normal Flow (lt./min.)</th>
<th>Max. Shooting Distance (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>800</td>
<td>25</td>
</tr>
<tr>
<td>8</td>
<td>1000</td>
<td>40</td>
</tr>
<tr>
<td>10</td>
<td>1200</td>
<td>50</td>
</tr>
</tbody>
</table>
1200 liters/min. Water and Foam Monitor

This is used as a fire extinguishing equipment and ensures easy direction of water and foam to the desired area from a distance. Barrel of the water monitor is replaced to shoot foam. Foam rate is adjustable with a ball valve.

**Technical Properties**

- **Max. Working Pressure**: 16 Bar
- **Min. Working Pressure**: 5 Bar
- **Test Pressure**: 24 Bar
- **Inside Diameter of Water Way**: 60 mm
- **Max. Flow**: 1200 lt/min. (under 10 bar pressure)
- **Connection Flange**: DN65 ND 16
- **Output Connection**: 2 ½” Male Threaded
- **Horizontal Movement**: 360°
- **Vertical Movement**: +90° - 80°
- **Weight**: 34 Kg

<table>
<thead>
<tr>
<th>Input Pressure (bar)</th>
<th>Normal Flow (lt./min.)</th>
<th>Max. Shooting Distance (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>800</td>
<td>35</td>
</tr>
<tr>
<td>8</td>
<td>1000</td>
<td>50</td>
</tr>
<tr>
<td>10</td>
<td>1200</td>
<td>60</td>
</tr>
</tbody>
</table>
Monitor has a capacity of 2700 liters/min. at 7 kg/cm² pressure and rotates 360 degrees horizontally and 65 degrees vertically.

Monitor has two barrels to shoot foam and water.

Barrel is made from corrosion resistant aluminum-light metal alloy.

Monitor body is made from bronze.

Valves are 3" butterfly valves and both can be monitored simultaneously with a single arm.

Monitor is inter transformable from foam to water and from water to foam without turning off water jet action and is manually operated.

Pressure gauge with (0-16 kg/cm²) range is installed at the body outlet.

Body adjustment valve is 1 ½" ball valve, foam-water proportioning valve can maintain 1-7% proportioning

Monitor’s water foam valves are operated with the same arm.

Up-down and horizontal movements are achieved with the help of bronze gears working with manual gear disks

Monitor’s inlet collector 4”

Body of 4”inlet collectors are made from aluminum, check valves can be dismantled for replacement.

Body wall thickness is 8-10 mm.

Monitor body weight is 150 kg.

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**Technical Properties**

- Max. Working Pressure: 16 Bar
- Min. Working Pressure: 5 Bar
- Test Pressure: 24 Bar
- Inside Diameter of Water Way: 60 mm
- Max. Flow: 1200 lt/min. (under 10 bar pressure)
- Connection Flange: DN65 ND 16
- Output Connection: 2 ½” Male Threaded
- Horizontal Movement: 360°
- Vertical Movement: +90° - 80°
- Weight: 34 Kg

<table>
<thead>
<tr>
<th>Input Pressure (bar)</th>
<th>Normal Flow (lt./min.)</th>
<th>Max. Water Shooting Range (M)</th>
<th>Max. Foam Shooting Range (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>2300</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>7</td>
<td>2700</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>10</td>
<td>3000</td>
<td>85</td>
<td>73</td>
</tr>
</tbody>
</table>

Mobile model installed on trailer is also available.
Fire Fighting Water Pumps

- Water Pumps Sizes are selected to suit the size of the filling building and the number of tanks and driven electric or diesel engine.
- All interior bolt and screw exposed to pumped liquid shall be made of rolled bronze or corrosion resistant material.
- The pump shall be provided with automatic air-release valve, circulation relief valve and pressure gauges.
- Bearings shall have an L-10 rating of not less than 5000 hours at maximum load.
- The pumps shall be provided with at least four packing rings plus a lantern ring. The lantern ring may be permitted to replace one ring of packing.
- Impellers, wear rings, shafts, lantern rings, glands shall be made of corrosion resistant material.

Technical Properties

- **Capacity**: 200-250-300-400-450-500 GPM
- **Head**: up to 150 PSI
- **Speed**: up to 3000 rpm
- **Casing Pressure (Pmax)**: 16 bar

<table>
<thead>
<tr>
<th>Part</th>
<th>Definition</th>
<th>DIN 17007</th>
<th>EN-DIN</th>
<th>ASTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing</td>
<td>Ductile Iron</td>
<td>0.7040</td>
<td>GGG-40 (GJS-400-15)</td>
<td>A536 Gr. 60-40-18</td>
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<tr>
<td>Impeller</td>
<td>Cast Bronze</td>
<td>2.1050.01</td>
<td>G-CuSn 10</td>
<td>BS84 C90700</td>
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<tr>
<td>Shaft</td>
<td>Stainless Steel</td>
<td>1.4021</td>
<td>X20 Cr13</td>
<td>A276 Type420</td>
</tr>
<tr>
<td>Shaft Sleeve</td>
<td>Stainless Steel</td>
<td>1.4401</td>
<td>X5 Cr Ni Mo 17-12-2</td>
<td>A276 Type316</td>
</tr>
</tbody>
</table>
1/2” - 3/4” Spring

It is made of brass material. It allows water to spread in the shape of an umbrella. At an 8 bar pressure, it generates 15 liters per minute.

Fire Hose Cabinets

It is made of brass material. It allows water to spread in the shape of an umbrella. At an 8 bar pressure, it generates 15 liters per minute.

Fire fighting hose: 2” (size 85 – 52mm) originally imported, rubber inside, circular woven synthetic yarn outside red colored, endures 50 bar pressure, in rolls of 20m.

Hose nozzle: Size 85 (52mm) German type, aluminum injection

Monitored nozzle: Size 85 (52mm) German type, aluminum injection, on-off, jet-spraying.

2” (size 85): Brass valve and German type aluminum injection bushing

Outdoor fire cabinet: 70x70x20cm dimensions, 1.5 mm sheet thickness, outdoor type, with roof, with legs, includes reel for 1 unit 2” fire fighting hose, complete and ready to install
Ex-Proof Electrical Equipment

EXP-01  EXP-02  EXP-03  EXP-04  EXP-05  EXP-06
EXP-07  EXP-08  EXP-09  EXP-10  EXP-11  EXP-12
EXP-13  EXP-14  EXP-15  EXP-16  EXP-17  EXP-18
EXP-19  EXP-20  EXP-21  EXP-22  EXP-23  EXP-24
EXP-25  EXP-26  EXP-27  EXP-28  EXP-29  EXP-30
EXP-31  EXP-32  EXP-33  EXP-34  EXP-35  EXP-36
Certificates