



Azaran Sanjesh Petro-Equipment

Trading and Engineering Company

Supplier of Industrial Equipment for:
Oil and Gas, Petrochemical, Power Plant, Metal and Cement Industries.

Introduction to Company:

Azaran Sanjesh Petro-Equipment Company (ASPECO), is an industrial equipment supplier. The main experiences of the founding members of our company are in the field of oil & gas, petrochemical and refinery complexes. Our major clients are oil & gas, petrochemical, refinery complexes, power plant, food and beverage, steel complex, water and waste water, cement, paper and automobile industries. We provide the industrial equipment from the best and approved companies in the world wide such as: **ABB, Foxboro, Fisher, ENOTEC, Rosemount, Schneider Electric, Wika, Yokogawa, Samson, SMC, Endress & Hauser, SEL Hose, Parker, SKF, Timken, FAG, Dodge and ... etc.**



After that we succeeded in producing the high quality and standard mechanical parts and accessories such as: **diaphragm seal, thermowell, orifice flow meter, manifold valve and pressure accessories**. Also, we have devoted a part of our work to supply and assembling the **high-pressure hydraulic hoses and high-temperature SST Flexible hoses**, which we have met the needs of various industries many times. In the following, you will get more acquainted with the products of ASPECO.

معرفی شرکت:



پترو تجهیزات آذران سنجش (آسپکسو)، شرکتی مهندسی و بازرگانی است که با هدف تامین و تولید تجهیزات پر کاربرد صنایع کشور تاسیس گردید. عمده تجربیات اعضاء موسس این شرکت در زمینه تجهیزات صنایع نفت، گاز، پتروشیمی و پالایشگاهی است. مشتریان اصلی ما صنایع نفت و گاز، پتروشیمی، پالایشگاهها، نیروگاهها، فولاد، آب و فاضلاب، سیمان و خودروسازی می باشند. لذا توانسته ایم تجهیزات مورد نیاز این صنایع را از معتبرترین برندهای معتبر جهانی نظیر:

ABB, Foxboro, Fisher Rosemount, ENOTEC, Schneider Electric, Wika, Yokogawa, SMC, Endress+Hauser, Samson,

Parker, SKF, FAG, Timken و تامین و در اختیار آنها قرار دهیم. در این مسیر اقدام به تولید محصولات استاندارد و با کیفیت ابزار دقیق نظیر: **ترمومول ، دیافراگم سیل ، آرینیس و منی فولد ولو** نموده ایم. همچنین متناسب با نیاز صنایع بخشی از فعالیت خود را به تامین و مونتاژ **هوزهای فکسیبل استیل و هوزهای هیدرولیکی فشار قوی** اختصاص داده و توانستیم بارها نیاز بسیاری از صنایع را در این زمینه برطرف نماییم.

در ادامه با محصولات ما بیشتر آشنا خواهید شد.





Some Brands Which We Can Provide:





Pressure Gages and Switches:

Bourdon Tube, Capsule and Diaphragm Pressure Gauges & Pressure Switches

Pressure Gages & Pressure Switches are designed for use in oil & gas, chemical and petrochemical, refinery complexes, food and beverage, metal and steel, water and waste water, cement, detergent, paper, automobile and aviation industries, to measure pressure of gases or liquid media which do not have high viscosity or do not crystalize. They are built to resist the most severe operating conditions created by the ambient environment and the process medium. For use on power units, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines, chemical, petrochemical and refrigerating plants and on machines and equipment where pulsating pressures or mechanical vibrations are apparent, the **liquid-filled** with Silicon and Glycerin oil version is recommended. Pressure Elements are made from different types of alloys refer to its application and process fluid properties, like SST304, SST316, Brass, Monel, Inconel, Hastalloy, ... and etc.

Product Details:

Display Size: 40mm to 160mm

Contact Type: 821.1, 821.2, ...

(For more information see data sheet AC 08.01)

Pressure Range: 0 up to 1600 bar

Connection Type: Back Mounted, down mounted, Mounting Panel

Connection Size: 1/2, 1/4, 3/4 (thread type: NPTM, GM and BSPM)

Accuracy: 1 to 1.6 percentage

IP: 65



Model 232.50



Model 432.50



Model 732.51



Model DPGT 43.100



Model PGT 43.100



Model PGT 23.100



Pressure Transmitters:

Standard and High Accuracy Pressure Transmitters

Pressure Transmitters are the industry standard for differential, gage and absolute pressure measurement for use in oil & gas, chemical and petrochemical, refinery complexes, power plant, food and beverage, metal and steel, water and waste water and cement industries, to measure pressure of gases or liquid media. The coplanar platform enables seamless integration with manifolds, flow, and level solutions. The in-line, compact design allows the transmitter to be connected directly to a process for quick, easy and cost-effective installation. And the capillary platform with diaphragm seal is available for remote field instruments.

Product Details:

Output Protocol: 4-20 mA, Hart 4-20 mA, Profibus, ...

Power Supply: 9-42 Vdc, 2 wire (loop power)

Pressure Range: mbar and bar (Depends on request)

Connection Type: Alternative, Coplanar, Capillary, Direct, ...

Certificates: Explosion Proof or Safe environments



❖ Rosemount 3051 Series



❖ ABB 266DSH, 266GST, 266GRT, ...



❖ Foxboro IGP05S, IDP10, ...



❖ Wika A10, S11



❖ E&H PMD75, PMP71, ...



Temperature Gauge and Switches:

Bimetal and Gas Actuated Temperature Gages and Switches

Dial Thermometers and Switches works on the Bimetal Expansion or Gas Actuation principle. This enables scale ranges of -200 to +700 °C in different class accuracies, response times and resilience to environmental influences. Diverse connection designs, stem diameters and individual stem lengths enable a flexible measuring point design.

Dial thermometers with capillaries are particularly versatile and all thermometers are suited for operation in a thermowell if necessary.

Product Details:

Display Size: 40mm to 160mm

Pressure Range: -200 to +700 °C

Connection Type: Back Mounted, Down Mounted, Mounting Panel with Capillary

Contact Type: 821.1, 821.2, ...

(For more information see data sheet AC 08.01)

Connection Size: 1/2, 1/4, 3/4 (thread type: NPTM, GM and BSPM)

Material: SST304, SST316, ...

Accuracy: 1 to 1.6 percentage

IP: 65



❖ Wika R5502



❖ Wika S5550



❖ Wika TGS55



❖ Wika TGS73 – Back mounted



❖ Wika F73.100



❖ Wika TGS73 with Capillary



❖ Wika A52 & R52



Temperature Transmitters and Sensor:

Temperature Transmitter with Thermocouple and RTD

Temperature Transmitters act as an interface between a temperature sensor and the display or control device. They convert the output signal from RTD and thermocouple temperature probes, as a non-linear Electrical signal (Ohm or millivolt), into a linear milliamp signal which can be sent longer distances without degrading which results in more accurate measurements as well as a signal that can provide a platform for digital communications such as HART or Fieldbus. Reliability, accuracy and long-term stability of temperature transmitter are important factors in industrial critical processes.

Product Details:

Output Signal: 4-20 mA, HART, Profibus, ...

Power Supply: 9-42 Vdc

Connection Type: Panel Mounted, Head Mounted and Field Mounted

Sensor Type: RTD & Bimetal Thermocouple



❖ Rosemount 3144P



❖ Rosemount 644



❖ Rosemount 248



❖ Rosemount 214 (RTD)



❖ Rosemount 214C (Thermocouple)



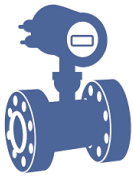
❖ ABB TTF 300



❖ ABB TTH 200&300



❖ ABB TTR 200



Flow Transmitters:

MAG, Rotameter, Coriolis, Ultrasonic, RADAR, Vortex and Turbine Flow meters

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Standard Flowmeters are used for measuring the amount of different types of fluid flow in your plant or industry. You can measure flow through a variety of different devices such as **Coriolis, differential pressure, vortex, magnetic, ultrasonic, turbine and positive displacement meters**. Selecting the right industrial flow meter for your application can be a challenging task. To make it easy, ASPECO recommends the best flow meter you should use for your particular gas, liquid, or steam flow application.

First, choose your application:

- Natural gas
- Compressed air measurement
- Gas mixing and blending applications
- Burner control
- Liquid measurement
- Steam flow measurement
- ...and etc.

Based on your application specifications, such as flow rate, pipe size and gas measured, ASPECO helps you select the perfect flow meter solution for your industry to improve quality and save money on energy costs, installation and maintenance.

Product Details:

Output Signal and Protocol: 4-20 mA, HART, Profibus, ...

Power Supply: 9-42 Vdc, 2 wire (loop power)

Connection Type: Standard Flange Per ASME or DIN Standard

Flow Rate: According to Process and Medium

Material: Corrosive and None Corrosive, High temperature and normal Temperature

Certificates: Explosion Proof or Safe environments





Level Transmitters:

Radar, Ultrasonic, Capacitive, Magnetic and Displacer Level Transmitters

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Contact or Non-contact level transmitters provide continuous level measurement over the range of the system rather than at a single point and produce an output signal that directly correlates to the level within a vessel. Levels in liquids, pastes, powder, bulk solids or liquefied gases are often measured in tanks, silos or movable containers. For continuous, interface and density measurement as well as for point level detection a broad range of measuring principles is available.

Radar, Ultrasonic, Capacitive, Magnetic, Hydrostatic and Displacer these transmitters employ different technologies designed individually for specific level applications.

For example, Radar level transmitters, use radio wave emissions just like radars. Usually, these devices are mounted at or near the top of a tank filled with a liquid. The transmitter itself sends out an electromagnetic signal into the liquid in the tank and receives a reflection of that signal. The transmitters will then accurately calculate the current fill level of the tank based on how long it takes the transmitted signal to return.



Product Details:

Output Signal and Protocol: 4-20 mA, HART, Profibus, ...

Power Supply: 9-42 Vdc

Connection Type: Standard Flange Per ASME or DIN Standard

Material: Corrosive and Non Corrosive, High temperature and normal Temperature

Certificates: Explosion Proof or Safe environments

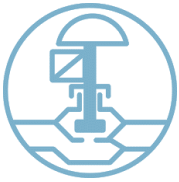


Foxboro 244LD



Fisher DLC3010
Fisher DLC3020





Valves, Positioners and Actuators:

I/P and Pneumatic Positioner and Actuators

Industrial positioners as a common control valve accessory, the valve positioner delivers pressurized air to the valve actuator so that the position of the valve stem or shaft corresponds to the set point from the control system. Valve positioners are typically pneumatic or analog I/P and are used when a valve requires throttling action. They require position feedback from the valve stem or shaft and deliver pneumatic pressure to the actuator to open and close the valve. Positioners are generally mounted on the side-yoke or top casing of the pneumatic actuator for linear sliding stem control valves, and at/near the end-of-shaft for rotary control valves. For either basic design type, "mechanical feedback linkage" connected directly to the valve's stem provides feedback to controller. The process controller tells the positioner to "change" position; the feedback linkage reports back to the positioner confirming that a change has occurred and gives a "sense" of the magnitude of the change in position.

And also pneumatic, electric (motorized), electropneumatic, and hydraulic actuators for linear and rotary high- and low-pressure control valves of all sizes for all applications including specialty applications such as oil & gas, cryogenic, water and Waste water, food & beverage, ... etc.





Integrated analyzer system solution:

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ABB Analytical possesses decades of experience in the area of explosion protection. This competence is unified with a unique portfolio based on the Advance Optima and EasyLine series. Simplicity is key for safe operation in hazardous areas and ABB Analytical offers the right analyzer portfolio from extractive to in-situ analyzers. Independent if ATEX, IECEx, CSA, or further local approvals are needed for installation in plants with potentially explosive gas atmospheres in Zone 1 and Zone 2, ABB is your one stop shop.

With Advance Optima (AO2000 Series) and EasyLine (EL3000 and EL3060 Series) ABB offers a broad range of continuous gas analyzers for the measurement in hazardous areas. From simple measuring task up to complex and flexible system solution, these are all possible with the EL3000, AO2000 and EL3060. Furthermore, a wide variety of different measuring technologies are available with all needed local certificates ex-works.

ABB Stack Gas Metering Systems:

The **(FPD580)** series is a range of stack gas flow metering solutions that, when combined with a CEMS analyzer, forms a complete CEMS package for the measurement of mass flowrate of pollutants into the environment. The FPD580 is based on the MAPT multi-port self-averaging pitot flow meter, thousands of which have been installed into a large variety of industries world-wide over many years.



❖ AO2000



❖ AO2040-Fidas24 Ex



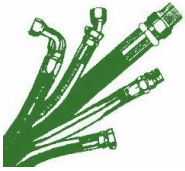
❖ EL3040



❖ Stack Flow Master FPD580



❖ AO2000-LS25



Rubber and Stainless-Steel Flexible Hose: Hose Fitting and Different Types of Connections

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Flexible hose lines offer many advantages over rigid tubing including routing ease, vibration absorption, sound deafening and the ability to accommodate movement of connected components. However, hose lines require caution in use not only to provide long service, but also to guard against potentially dangerous failure. Important.

The user should carefully observe the precautions, including the recommendations on the selection of hose and fittings, and fluid compatibility in addition, care should be taken not to exceed the minimum bend radius for each hose size and type in the hose section. Maximum operating pressure should not exceed pressures listed in the hose data. Instructions for assembling fittings to different hose should be followed carefully to ensure the performance of the completed assembly.

Some of the factors you must consider in installing the hose properly is:

- Changes in length
- Proper bend radius
- Protection from high temperature sources
- Elbows and adapters to relieve strain
- Rubbing or abrasion
- Improper hose movement

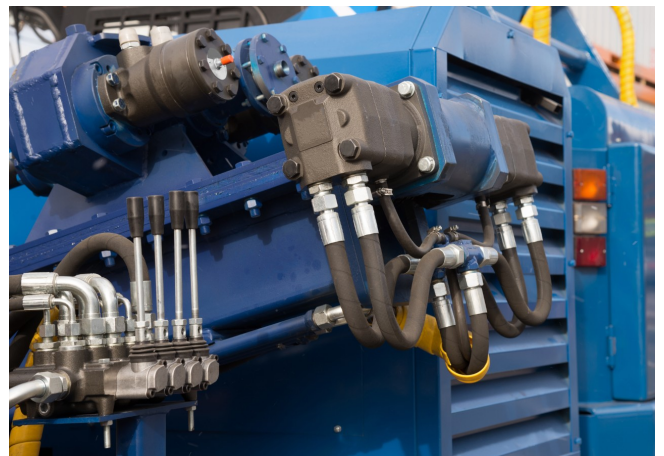
Product Details:

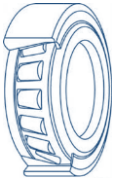
Material: Rubber, SST304, SST316, SST321, ...

Rubber Hose Temperature: ~ - 40 to +100 °C

Metal Hose Temperature: ~ up to 600 °C

Connection Type: Threaded & Flange





Industrial Bearing , Mechanical Seal and Coupling: Deep Groove Ball and Tapered Roller Bearing

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A bearing is a mechanical component whose function is to guide a rotating assembly. The bearing therefore allows the rotation of one element relative to another. They are therefore high-precision parts that allow equipment to move at different speed levels by efficiently transporting notable loads. They provide high precision and low friction and therefore enable high rotational speeds while reducing noise, heat, energy consumption and wear. When choosing a bearing, you must consider several important factors. The first factor to consider is the **load** that the bearing can support.

There are two types of loads:

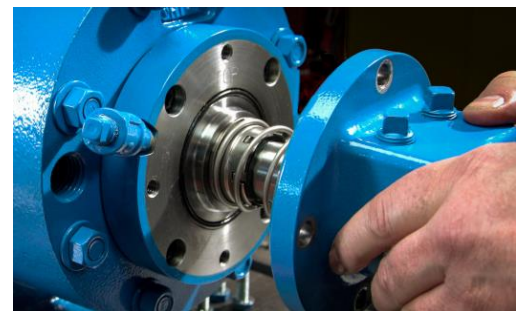
- **Axial load:** parallel to the axis of rotation
- **Radial load:** perpendicular to the axis

Each type of bearing is specifically designed to support an axial or radial load. Some bearings can support both loads: in this case we refer to a combined load. If you have to support a combined load, for example, we recommend that you choose a tapered roller bearing. If you need a bearing capable of withstanding a high radial load, then we recommend a cylindrical roller bearing. On the other hand, if your bearing needs to support lighter loads a ball bearing might be sufficient as they are often less expensive.

Rotation speed is another element that should be considered. Some bearings can withstand high speeds. The presence of a cage for cylindrical roller bearings and needle bearings allows for greater speeds than bearings without a cage. However, the choice of a higher speed is sometimes made at the expense of the load. You should also consider the possible presence of misalignment; some bearings are not suitable for this situation, such as double row ball bearings.

There are several types of bearings, the four main types are:

- Ball bearings
- Cylindrical roller bearings
- Tapered roller bearings
- Needle bearings





ASPECO Productions:



Orifice Plate & Orifice Flange

www.azaransanjesh.com info@azaransanjesh.com



Thermowell
With Different Types of Connections

www.azaransanjesh.com info@azaransanjesh.com



Chemical Diaphragm Seal

www.azaransanjesh.com info@azaransanjesh.com

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