



Analytical Instruments



Honeywell Analytical Instruments and Sensors measure critical process parameters such as pH/ORP conductivity and dissolved oxygen in a wide variety of industrial applications for reliable process monitoring and control. Honeywell offers a broad portfolio of analytical instruments and sensors to help run production smoothly, efficiently and safely, allowing users to optimize costs. The portfolio includes the Durafet pH electrode, the only industrial, solid state pH electrode on the market, available with remote or integral transmitter.



Digital controllers



Honeywell digital controllers are ideal for monitoring and controlling of process variables –temperature, pressure and levels in a wide-range of applications such as ovens, environmental chambers, packaging machinery and plastic machinery in industries like pharmaceuticals, power generation, automotive and biotechnology. Honeywell has different offerings based on panel cutout sizes and different options. The controllers are highly accurate, cost-effective, reliable, simple and ideal for wash-down applications. They improve the quality and efficiency of a production environment significantly.



Magnetic operated level gauges



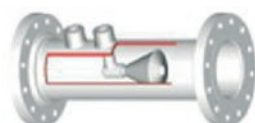
Hadro Magnetic level gauges offer reliable, accident-free and maintenance free usage through a simple and break-resistant construction at a maximum process pressure of 320 bar and a temperature range from -50°C through 400°C. The level is indicated directly with a separation of the measurement and indication area. A level transmitter based on a reed chain of resistors completes the offering.



Primary flow elements



Emco Controls has a wide range of other primary flow elements, fit for each purpose. Orifice plate assemblies are the most common in the process industry, the portfolio is completed with venturi tubes for low pressure loss requirements, flow nozzles for high velocity applications, wedge tubes for clean and non-clean fluids (slurries) and cone flowmeters as an alternative with higher accuracy and repeatability than orifice flow assemblies, with less pressure loss and shorter pipe runs.



Process recorders



Honeywell Paperless Recorders enable electronic acquisition and storage of data, helping manufacturers make informed decisions faster and improving operational reliability. In addition, these recorders eliminate the costs associated with traditional chart recorders. Data analysis software helps in graphing continuous and batch data, analyzing and archiving data configuring the paperless recorders, acquiring data in real-time and exporting this to other software packages such as Excel.



Modular systems



Honeywell HC900 Process and Safety System is an advanced process and logic controller for diverse control needs with SIL2 certification for ESD systems.

Experion LX is a purpose-built distributed control system (DCS) leveraging the proven Experion PKS technology to effectively meet process automation requirements in continuous and batch process control applications. This flexible automation solution is simple to use and configure and is ideal for differently sized industrial operations in a wide range of industries.



Pitot tubes



Emco Controls Pitot Tube is a simple but very effective flow measuring device based on differential pressure, combining low installation and operation cost with great reliability for gases liquids and steam. The process connection can be threaded or flanged. Intra Automation offers the choice of different sensors, depending on line size and flow. The advantages compared to orifice plates are: Lower installation costs, shorter up/down straight pipe run requirements (saving a huge amount of space) and lower permanent pressure loss.



Flame detection for burners

BFI Automation offers different type of flame monitoring systems which are specially designed to monitor different fuels under normal combustion and air conditions, or under low NOx conditions on steam generator constructions. BFI products can be used with light or heavy fuel oil, natural gas or coke oven gas, P.F. coal of different qualities, combined fuels (gas, oil, coal). Special scanner heads are available for refinery and chemical applications and for use on gas turbines.



Spark & Hot spot detection

Firefly is the world's leading supplier of fire and dust explosion protection systems for the process industry. Experience and research show that effective and reliable detection of ignition sources is decisive in reducing risks (damage to plants causing loss of revenue and/or human life) thus ensuring uninterrupted production in industrial processes. We will provide you with greater safety and productivity by designing systems adapted for your process.



Imperial Eastman (left) is the world's first manufacturer of fittings. Imperial supplies a full range of fittings for low pressure (pneumatic) and high pressure (6000 Psi and above). **Safelok** (right) manufactures twin ferrule and instrumentation pipe fittings, condensate pots and airhearers in stainless steel, hasteloy, navy bronze, etc.



Pressure switches

Custom Control Sensors or **CCS** produces different kind of switches for industrial applications where high requirements are set. Available as pressure, Dp, vacuum and temperature switches with ATEX/UL/CSA and GOST certification. The pressure (differential), vacuum and temperature switches are based on the Dual-snap principle, so there is no drift in operation.



Detection of smouldering materials

GTE offers unique fire detection: ADICOS, the safe, preventive fire gas detection system. It is based on detection of various gasses present during fire or smouldering processes. GTE has developed this new type of early fire detection system for use in humid, very dusty and hazardous, Ex-areas. This preventive fire detection equipment can be used in areas that, until now, could not be monitored. ADICOS is custom-made to fit the installation area and is compatible with the safety equipment of other well known suppliers.



Gas Detection

Honeywell Analytics have more than 50 years of experience in gas detection and has a broad portfolio of portable and fixed gas detection for flammable and toxic gases. For practically every application, Honeywell has a solution.



Tube bundles

KME (previous known as Kabelmetal) is among others the manufacturer of OSNA-LINE heat traced bundle systems. They are used for analysing or impulse tubes, such as NOx-, pressure- and Dp steam pre insulated sample tube bundles.

- Tubes and tube bundles of corrosion-resistant materials in a weatherproof plastic jacket for pneumatic and hydraulic control system
- Thermal insulated tubing for steam traced metering, sampling and analyzer lines as well as steam and condensate lines
- Electrically traced pre insulated tube bundles



DP meters

Mid-West Instrument designs and produces differential pressure gauges. The delivery program can be divided into: differential pressure gauges, Delta Tube (Pitot-tube) pressure transmitters. Dp gauges 1/2 to 3% accuracy several systems, piston, bellow or bourdon tube with reed switches or 4-20 mA transmitter. UL/CSA/Atex certified. Available in stainless steel, aluminum or special alloys.



Control valves



A. Hock manufactures the former Honeywell series 2000 2 way and 2003/2013 3 way control valves. The valves are engineered and assembled according customer needs and are supplied with pneumatic or electric actuators and accessories such as digital positioners, limit switches, solenoid valves, flow boosters and air filter / regulators. Excellent quality and service.



Actuators & Ball valves 1/4" - 24"



Alfa Valvole and **Imperial Valve** are both manufacturers of industrial ball valves, built-on actuators and accessories. The ball valves are available in ANSI and DIN flanges, sizes 1/4"-24", rating 150-2500 lbs & PN6-PN160, floating ball or trunnion mounted.

Metal seats

We supply also metal seated ball valves, designed for high pressure and high temperatures. They are often used for gas-shut off valves and control gate valves in applications for oil, gas and power plants.



Piping valves and strainers



Virago Valves supplies all kinds of piping valves like gate-, globe-, check- and butterfly valves and Y-, T- and Basket type strainers in various ratings, sizes and materials.

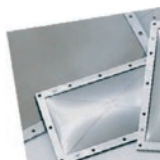


Bursting discs & explosion panels



Marston's rupture discs offer a quick, safe and reliable protection against over and under pressures. Rupture discs are deliverable for steam, gas, liquids, at temperatures

of -150°C up to +550°C, high pressures and vacuums, and fit a large size range from a couple of millimeters up to several meters. The range of explosion panels offer a large program for many applications like bulks and silo's.



Gas control



Honeywell has developed a reputation of world leader in Gas Control, measurement and analysing equipment by acquiring RMG and Elster Instromet.

The former RMG and Bryan Donkin products consist of gas pressure regulators and safety devices, designed to provide accurate pressure reduction, primarily utilized in commercial, industrial and multi-installation applications.

The Elster product range consists of (custody transfer) gas flow measuring instruments and analysers such as gas chromatographs and wobble index analysers



Double block & bleeds large bore



Imperial Valve has introduced a new selection of large bore double block & bleed valves sizes.

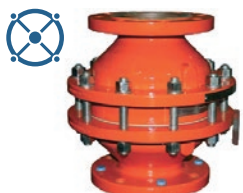
They are available in ANSI and DIN fanges, sizes 1/2"-24", rating 150

-2500 lbs & PN6 - PN160, floating ball or trunnion mounted. Actuators, gear boxes and extended handles can be offered for these valves.

Cryogenic and high-temperature applications are also available. The double block & bleed valves are supplied in standard and exotic materials.



Flame arresters



Elmac Technologies is one of the international technical leaders in flame arresters and tank and vessel protection for some of the world's most challenging industrial environments.

Elmac products are in general suitable for gas groups 1A up to IIC. The product range of Elmac consists of:

- Flame arresters (in-line, end-of-line, deflagration, detonation)
- Low pressure venting
- Ancillary equipment



Liquid level switches

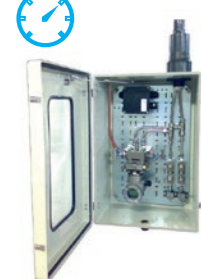


Emco Controls level switches are designed to control the level of corrosive or non-corrosive liquids.

The float operates the switch by means of a magnet, to ensure a reliable, leak- and maintenance free solution. Stainless steel material for the wetted and non-wetted parts is standard. There is a wide selection of options, including an IP68 submersible version, for both horizontally as vertically mounted applications.



Enclosures, Hot-Boxes



DP Systems is a manufacturer of enclosures. These GRP or Glass Fibre Reinforced polyester enclosures are applied in the industrial environment where instruments need to be protected against temperatures corrosion and or mechanical damage. The enclosures are available in

the following models:

- GRP instrumentation enclosures and sunshades
- Hot boxes, formed to the shape of the installation



Pressure transmitters



Honeywell Smartline Pressure transmitters have set the industry standard in pressure measurement. With an accuracy up to 0.025%, a stability of 0.01% per year and a response time of 90ms, the 700 and 800 series Gauge, Differential and Absolute pressure transmitters are fit for the most demanding applications in the Oil & Gas, refining and chemical industry. ATEX, IECEx, FM, CSA, GOST-R and SIL2/3 approved.



Flowmeters



Honeywell Versaflo is a comprehensive series of flowmeters, with Coriolis mass flowmeters, Vortex flowmeters and Clamp-on Ultrasonic flowmeters. The flowmeters can be Supplied with integral or remote mounted converters and the clamp-

on ultrasonic is also available as a battery powered portable instrument. Built for all purposes such as Oil&Gas, refining, chemical, food & beverage, water & waste water industry. Hazardous area approvals include ATEX, IECEx, FM, CSA, GOST-R.



Wireless Instruments



Honeywell OneWireless offers a wide range of Industrial Wireless solutions according the International ISA100.11A Standard. Unique flexibility and highest reliability with a wireless backbone of routers or "sensor meshing", where each sensor can be a router. Wireless instruments include Absolute, Gauge

and Differential pressure, temperature (for 2 temperature sensors), a universal I/O transmitter with switch output. There is also a HART adapter available, which enables you to transmit all HART signals of a traditional HART transmitter wirelessly



Instrumentation valves



Imperial Valve - products are designed for a large size of applications in the sectors oil & gas, refinery, chemical processes, and energy generation systems.

The delivery program of Imperial Valve exists of: ball & needle valves (ANSI-class), manifolds, mono flanges, double block & bleed valves.

All valves are available in NPT, BSP, BW, SW, with flanges, clamped joint or compression tube fitting.



Temperature transmitters



Honeywell Smartline Temperature transmitters consist of 4 series:

STT170 series economic, STT650 DIN rail mounted, STT750 General purpose and STT850 high performance. The products have unique features as dual compartment housing, dual sensor option, and a advanced graphical display. De Gidts & Feldman combines the temperature transmitters with thermowell assemblies, screwed or flanged, from bar stock or welded, in order to offer a complete temperature measurement solution.



Levelmeters



Honeywell SmartLine® Non-Contact Radar Level Meter measures distance, level, volume and mass. Based on FMCW (Frequency Modulated Continuous Wave) technology, providing a more stable measurement than pulse radar and is well suited for agitated process conditions and the most demanding applications.. SmartLine® Guided Radar Level Meters use TDR (Time Delay Reflectometry) to measure distance, level, interface, volume and mass.



Configuration tools



Honeywell configuration tools are very useful for configuring and maintaining instruments both in the field as in the Control room. The new MCT404 is a hand held configurator that manages Honeywell DE devices as well as

practically any HART device on the market. Available with ATEX Ex i certification Field Device Manager Express software enables management of HART and Profibus devices, irrespective of the device type or manufacturer. Support is provided for device configuration, management and associated diagnostics tasks.