Level | Pressure | Flow | Temperature | Liquid Analysis | Registration | Systems Components | Services | Solutions

Tailor-made field instrumentation

Measurement and control in the process industries

Endress+Hauser

People for Process Automation

Welcome to Endress+Hauser!

If someone asks me what makes Endress+Hauser so successful, I reply: "Our principles". It is the way in which we align our company, how we do business and how we relate to each other.

Our ultimate goal is to create outstanding value for our customers. We intend to achieve this by our presence in sales, services and production worldwide and through our wide range of instruments, services and solutions that are tailored to the requirements and needs of the market and customers.

We want to be a competent and reliable partner for our customers. We don't intend to sell them merely products but to work with them to find the best solution, as this is a precondition of successful long-term partnerships.

As a family enterprise, Endress+Hauser's culture is characterized by trust and responsibility. On this basis, I gladly invite you to get to know us. Discover how we can support you in the area of process instrumentation and see for yourself that we really are the "People for Process Automation"!

Klaus Endress
CEO of the Endress+Hauser Group

We rely on strong values
Since its foundation in 1953, Endress+Hauser has developed from humble beginnings to an international provider of process instrumentation. Customers all over the world trust in the knowledge and skills of our 8,800 associates. They rely on the culture of a family enterprise. The core of this "Spirit of Endress+Hauser" is responsibility and trust, reliability and cooperation – strong values which make us believe in a successful future.

Long-term objectives and sustained success characterize our strategy. Our sound equity capital base provides the security that we will be able to pursue it consistently – as a successful family-owned company.

The right solution for every task

Whatever you need to measure: we have the right solution for every task. Our comprehensive portfolio of instruments, services and solutions will help you to operate your processes in a safe, reliable, environmentally-compatible and cost-effective manner.

We speak your language
Be it precision, robustness, hygiene or efficiency: every industry has its specific requirements of process instrumentation. Technical specifications and standards have to be met and often compliance must be proven by documents and certificates. Nobody is more aware of this than you. Therefore, you need advisors who know your business and the competitive environment. People who speak your language.

Comprehensive knowledge of the processes of our customers is the beginning of every successful partnership for us. This is the only way in which we can discuss matters with you on an equal footing and find the best solution for your measuring tasks. We want to help you to stay successful and become even more successful. Trust in the know-how that we have gained over decades of working in many industries and applications!

Our field instruments use numerous measuring principles and model variants to meet all your requirements. Our considerable experience in the most varied communication systems helps us to integrate them into almost any environment. One of our principles reads: We adapt our instrumentation to the respective measuring point – and not vice versa. We make our offering based on price and performance. It is immaterial whether your process requires the highest degree of accuracy or economic efficiency – you will always receive the highest level of quality.

We are always right on your doorstep
Wherever you are, we are always right on your doorstep. Our own sales centers ensure distribution and services worldwide. Representatives and partners complete this close-knit network. And we supplement the offers of our online shops by e-business solutions that are completely customized to your needs.

Product centers in 11 countries combine our know-how in research, development and production. They ensure that your wishes are fulfilled in a fast, flexible and, above all, timely manner. And they surprise people again and again with groundbreaking new solutions. More than 3,600 current patents and patent applications demonstrate the inventive spirit and creativity of our developers.

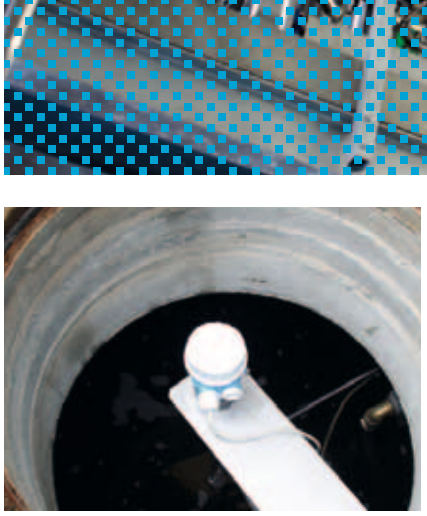
Level

Continuous level measurement and point level detection

Visionary concepts in the development of new products produce innovative solutions that meet the challenges of tomorrow yet can be integrated into the new automation systems of today.

Since 1953, Endress+Hauser has been manufacturing level measurement devices for industrial use in fluids and bulk solids of all kinds. During this time a number of different methods for level measurement or point level detection have been developed and constantly optimized.

Today you have at your disposal the most up-to-date measuring systems in a variety of designs with variable process connections and matching interfaces. All measuring devices have trade-specific and safety-relevant certificates and approvals.



Radar
Continuous non-contact Time of Flight measurement in fluids, even under extreme conditions such as changes of medium, gas formation, vapor, vacuum. Temperatures up to 400°C; pressures up to 160 bar.

Ultrasonic
Continuous non-contact measurement in fluids and bulk solids. Independent of specific medium properties. Temperatures up to 150°C; pressures up to 4 bar.

Guided radar
Continuous non-contact Time of Flight measurement in fluids and bulk solids. Independent of product properties such as humidity, density, dielectric constant etc. Reliable and safe interface measurement even with emulsion layers. Temperatures up to 450°C; pressures up to 400 bar.

Radiometry
Non-contact external measurement. For all extreme applications (e.g. toxic or highly aggressive media). Any temperature, any pressure.

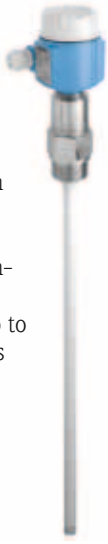
Vibronics for fluids
Point level switch for all fluids even in the presence of build-up, turbulence or air bubbles. Independent of the electrical properties of the medium. Temperatures up to 280°C; pressures up to 100 bar.

Vibronics for solids
Point level detection in all kinds of bulk solids up to a maximum grain size of approx. 10 mm. Calibration-free, maintenance-free. Temperatures up to 280°C; pressures up to 25 bar.

Hydrostatic
Level optimized pressure sensor cell for measurement in fluids, pastes and sludges. Independent of foam formation and changing product properties. Temperatures up to 400°C; pressures up to 40 bar.

Differential pressure
Level measurement in closed, pressurized vessels. Not affected by dielectric constant, foam, turbulences or obstacles. Temperatures up to 400°C; pressures up to 420 bar.

Capacitance
Point level detection and continuous level measurement in fluids and bulk solids. Even with aggressive media and heavy build-up; condensate-proof. Temperatures up to 400°C; pressures up to 100 bar.



Conductive
Easy, cost-effective level limit detection in conductive fluids such as water, wastewater, liquid foodstuffs etc. Temperatures up to 100°C; pressures up to 10 bar.

Paddle switch
Low-cost point level switch for bulk solids of all kinds up to a grain size of 50 mm, solid weight > 100g/l. Temperatures up to 80°C; pressures up to 0.8 bar.

Electromechanical level system
Robust, mechanical system for measurement in bulk solids for applications in high vessels (up to 70 m). Unaffected by heavy dust formation. Temperatures up to 230°C; pressures up to 3 bar.

Pressure

Measurement of process pressure/differential pressure in acids, sludges, gases or vapors

The fields of application for pressure measurement these days are varied, ranging from food and pharmaceuticals through to water and wastewater, chemicals, paper production and power generation. Pressure sensors ensure safety and supply important process data. In many cases pressure and differential pressure measuring techniques are used for level and flow measurement. This makes pressure one of the most important measured variables in process automation. For Endress+Hauser this is an incentive to forge ahead with advances and improvements in the development and production of high quality pressure measurement.

Endress+Hauser's wide range of devices for pressure measurement enable us to offer a pressure transmitter with ultra-modern technology and high quality materials for every application and every budget.

Transducer
A compact pressure transducer with preset measuring range. The range offers robust ceramic sensors up to 40 bar or metal sensors up to 400 bar for absolute and overpressure measurements.

Pressure switch
For safe measurement and monitoring of absolute pressure and overpressure in gases, vapors, fluids and dusts. Smooth operation with display and on-site operation as well as a modular adapter system for easy connection to all processes.

Analog and digital transmitters
Flexible device platform for universal application in your processes. The FDA-compliant materials and aseptic connections are especially suitable for hygienic applications. The analog digital transmitters are available with the following electronics variants: analog, HART®, PROFIBUS® PA or FOUNDATION™ fieldbus.

Digital transmitters
These high-end pressure transmitters offer you a comprehensive safety package and an intelligent operation and device concept. Reliable data management is provided in the form of HistoROM. The digital transmitters are developed, constructed and manufactured in compliance with SIL 3/IEC 61508.

Whether acids, sludges, gases or vapors – a pressure device is generally located where all the action is.
Sensors have to satisfy the high specific requirements of the applications from the initial development phase to final finished production. It takes more than just an understanding of physics to develop and produce the most important link with the process.

For more than 20 years, Endress+Hauser has been constantly developing and manufacturing pressure measurement and sensor technology for a wide variety of applications. Many of these solutions are unique to the market.

Flow

High performance instruments for the flow measurement of liquids, gases and steam

Plant safety, constant product quality, process optimization, environmental protection – these are just a few key aspects which demonstrate why flow measurement of liquid, gas and steam is playing an increasingly important part in industrial measurement technology.

Water, natural gas, steam, mineral oil, chemicals and wastewater are only some examples of fluids that have to be measured day in, day out.
Endress+Hauser supports you with modern high quality application-oriented flow measurement devices for dosage, filling, control or recording in almost all industrial sectors and applications.
High accuracy, reliable operation, easy start-up and low maintenance costs are just a few of the qualities you can always rely on with flow measurement devices as a customer of Endress+Hauser.

Electromagnetic
Universal measuring principle for all conductive liquids. Virtually independent of pressure, density, temperature and viscosity. Even solid-containing liquids can be measured, e.g. ore slurry, cellulose pulps.
Over 1 million Endress+Hauser magmeters installed since 1976!
Sizes: DN 2 to 2400.

Coriolis
Universal measuring principle for liquids and gases. Multivariable sensors: simultaneous and direct measurement of mass flow, density, temperature and viscosity. Independent of the physical fluid properties.
Sizes: DN 1 to 350 (max. 4100 t/h).

Ultrasonic
Volume flow measurement of clean liquids, regardless of electrical conductivity in either clamp-on or inline sensor type. Ultrasonic measurement enables cost-effective and economical flowmetering anywhere in the process. Independent of pressure, temperature and the physical fluid properties.
Sizes: DN 15 to 4000.

Thermal
Direct mass flow measurement of gases with low process pressure up to 40 bar. Measuring principle with a high turndown (100:1) and an excellent low-end sensitivity. Negligible pressure loss.
Sizes: DN 15 to 1500.

Differential pressure (DP)
Universally applicable for liquids, gases and steam up to 420 bar and 1000°C. Robust primary element as it is completely mechanical with no moving parts. The transmitter can be replaced during operation, e. g. for maintenance or modernization of the measuring point without interrupting the process. Sizes: DN 10 to 4000.

Vortex
Universally applicable for the measurement of liquids, gases and steam. Extremely robust with regard to external vibrations, dirt, water hammer and temperature shocks. Largely independent of changes in pressure, temperature and viscosity. High long-term stability, no zero point drift. Sizes: DN 15 to 300.

Temperature

Sensors and transmitters for the process industry

Temperature is the most frequently measured variable in process engineering. For years now Endress+Hauser has been at the forefront of leading international companies in industrial temperature measurement with its own development and production centers in Europe, the USA, Africa and Asia. Our products comply with international standards and specifications such as ATEX, FM, CSA, TIIS, IEC, NEPSI, SIL, NAMUR NE 21, NE 43, NE 89, NE 107 and GL are suitable for use in all sectors of industry.

The excellent price-performance ratio of our products and services provides a high degree of quality, reliability and safety, which is guaranteed to make you truly competitive. To this end we operate our own SIT+DKD certified and EC accredited calibration and testing laboratories for temperature measurement.

Temperature transmitters

Choose from head, DIN rail or field mounted transmitters with RTD or thermocouple input and freely programmable measurement ranges. Whether analog output or HART® protocol, FOUNDATION fieldbus™ or PROFIBUS PA interfaces, Endress+Hauser offers you the right solution for every occasion.

Head transmitters

Design according to DIN 43729.

DIN rail transmitters

For 35 mm mounting rails ensuring safe, process-near transmission of the sensor signal.

Field transmitters

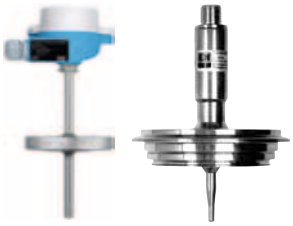
With on-site display (optional) for optimum safety and reliability requirements.

Temperature sensors

We offer a wide selection of resistance thermometers (RTD) and thermocouples (TC) to suit every occasion. Our patented Sensor On Tip Technology (SOT) offers the best response times on the market – up to 6 times faster compared to conventional sensors. This provides optimum preconditions for exact and safe process control. Predominantly class A sensors or better are used for our resistance thermometers.

Resistance thermometers

A wide range of process connections, mineral-insulated conductors and replaceable measuring inserts are available. Also available in compact design with M12 or 7/8" plug-in connector for simple and safe connection.



Thermocouples

For measurements at high temperatures even under the most difficult conditions.

Temperature switches

For monitoring, display and regulation of process temperatures. Available with various process connections (standard and hygienic). The sensors can be used in measuring ranges from -50 to +200°C.

Liquid Analysis

pH/ORP, conductivity, oxygen, turbidity, disinfection, nutrients, organic load

Liquid analysis is one of the most quality-relevant processing variables in the chemical, pharmaceutical, power, water and food industries. Reliable measuring points guarantee safe processes and high product quality. Endress+Hauser is the leading specialist worldwide for sensing techniques and analysis of pH, conductivity, turbidity and solids content, oxygen, chlorine, ammonium, nitrate and phosphate as well as other chemical components of fluids.

Ranging from single measuring points composed of sensor, process connection and transmitter to fully automatic measuring systems and application-specific engineering combined with ultra-modern communication technology – all the products are available from a single supplier.

The outstanding feature of these products is the innovative Memosens technology. It makes the sensors digital with integrated data storage. All relevant calibration and operation data are saved in the sensor. Memosens is the first non-contact measured value transmission from the sensor to the transmitter.

With the Memosens sensors, Liquline transmitters and the Memobase sensor and data management, Endress+Hauser offers a revolutionary maintenance strategy. Thanks to centralized and convenient sensor monitoring, Memobase delivers higher product quality and reduces maintenance costs.

This success is only possible in close cooperation with our customers, research institutes and universities, which enable us to develop application-specific products in line with the latest technologies.

Perfect command of all technically sophisticated production steps coupled with a high degree of automation, puts Endress+Hauser in a manufacturing class of its own. For the customer this means extended sensor operating times, fewer maintenance cycles and maximum measurement accuracy even with extreme applications.

pH/ORP
With glass electrodes and glass-free sensors (ISFET) employing Memosens technology, we offer a complete sensor family for all applications. Transmitters are also available as Ex version, with assemblies for a wide variety of uses and fully automatic measuring systems.

Conductivity
Conductive sensors with Memosens technology and inductive sensors for all measuring ranges; transmitters in Ex and non-Ex, integrated measuring systems, calibration systems.

Turbidity/Solids
Optical sensors based on the Memosens technology using the 90° scattered light method and sensors using the 4-beam pulsed light method for lowest to high concentrations, zone-tracking optoelectronic and ultrasonic measurement of sludge levels.

Oxygen
Amperometric and optical sensors with Memosens technology for continuous measurement of the concentration of dissolved oxygen in water supply and for oxygen trace measurement.

Chlorine
Amperometric sensors with Memosens technology for disinfection in the treatment of drinking water and swimming pools. Flow assembly for simultaneous measurement of chlorine and pH/ORP.

Analyzers
Photometric and ion-selective analyzers for water and wastewater control processes to ensure quality and optimize costs. They monitor nutrients, organic load as well as metals and are available as in-situ and cabinet systems.

Transmitters
Extra large display with plain text operation via navigator and softkeys, flexible module concept; 4-wire multichannel and multiparameter device; 2-wire device as Ex and non-Ex version, housing made of plastic and stainless steel, HART®, PROFIBUS®, FOUNDATION fieldbus™.

Assemblies
Immersion assemblies and built-in assemblies with all conventional process connections, automatic retractable process assemblies in various materials, also with EHEDG approval, even with fully automatic calibration and cleaning of the pH measuring point.

Samplers
Portable and stationary samplers for automatic sample-taking, defined distribution and safe storage of fluid samples.

Density and Concentration

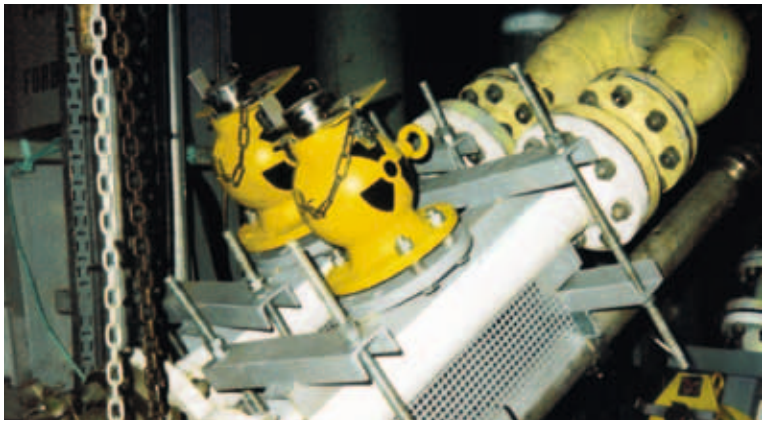
Quality measurement in liquids

Blending of preliminary, interim and final products, determining the exact density or concentration, monitoring quality and controlling process – all these activities constitute a reason for the density measurement of the fluid. Endress+Hauser offers the process-approved vibronic principle with an individually developed electronic for density measurement. This provides you with the possibility of determining density and concentration in a simple and fast manner across industries.

Liquiphant
Large number of process connections to choose from. Suitable for hygienic applications. Units of density: norm density, °Brix, °Baumé, °Plato, % volume, concentration, etc. with 2D and 3D tables. Formula editor to calculate customer-specific units. Up to five Liquiphant density sensors can be connected to the density computer FML621. Direct installation in tanks and pipes.

Coriolis – Promass
Maximum process dependability, because density, temperature and mass flow are all measured simultaneously. Approval for custody-transfer applications. No maintenance necessary. Units of density: standard density, standard volume flow and totalizing, % mass, % volume, alcohol tables (for mass and volume), target flow and carrier flow, °Brix, °Plato, °Baumé, °API, etc. Direct measurement in the pipe.

Radiometric – Gammapilot
Straightforward retrofitting without process interruption; the pipes do not have to be opened. No maintenance necessary. Units of density: g/cm³, g/l, lb/gal, concentration, % mass, °Brix, °Baumé, °API, etc. Installation from outside through the pipe, in the bypass or tank.




T1307
T1305
T1304
T1309
T1308
Loading Bay 10

Interface measurement

Suitable measuring principles for your individual interface application

Your application is of prime significance because the instrument serves the application and is only selected once the general setting is known. You get the optimum interface measurement solution in relation to your process requirements from us.
Precise interface measurement is important in continuous and dynamic processes. Is the overall level constant or variable, and if so, in which range? Should the overall level be available as a measured value in addition to the interface measurement.
Does emulsion occur during measurement?

The answers to such questions have a strong influence on the correct selection of instrumentation. We offer you transparency in relation to options, application limits and commissioning of the individual measuring principles. Guided radar, multi-parameter, capacitance instrumentation or radiometry – we support you in your application.

Guided radar
As the pulses impact the medium surface, only part of the sending pulse is reflected. Especially in media with a low dielectric constant (DK), the other part penetrates the medium. As the signal enters the lower medium with a higher dielectric constant (DK) it is reflected once more. Taking the delayed Time of Flight of the pulse through the upper medium into consideration the distance to the interface is determined in addition.
Applications up to 450°C / 400 bar.

Multiparameter
The name of the innovation in interface measurement is FMP55 Multi-parameter. This instrument combines the advantages of the capacitance and guided radar measuring principles. Emulsion layers may cause signal losses in interface detection in guided radar measurements. Only Levelflex FMP55 Multi-parameter can guarantee safe measured values for both the interface and the overall level with this unique, redundant measuring system.
Applications up to 200°C / 40 bar.

Capacitance
Media with a small dielectric constant (DK) cause very small changes of the capacitance value while media with a high DK produce respectively large capacitance changes in level measurement. In many interface applications, the medium with the smaller DK value is on top, e.g. in hydrocarbon on water. The upper medium merely provides a minimum contribution to the overall capacitance value – the issued level thus only refers to the water level (the interface).
Applications up to 200°C / 100 bar.

Radiometry
The gamma source emits radiation which is attenuated as it penetrates the container wall and the medium. On the opposite side of the container, a detector converts the radiation received into an electric signal. The measuring effect results from the fact that different interfaces absorb (attenuate) the radiation differently. If the transmitter has been calibrated to the media by wet calibration once, a correlation to the measurement of the interface results automatically.
Unaffected by process temperature and pressure.

Registration

Digital acquisition and analysis of measured data

Recording measured data has long been one of the key tasks in process engineering. Endress+Hauser has always played a vital role in the development of measurement techniques for recording and has become the market leader in paperless data recording in the world today. Hardly any other manufacturer can offer such a wide range of recording products – ranging from recorders for various industrial purposes such as sterilization, the pharmaceutical industry, water and wastewater monitoring, set-point monitoring of levels with warning by SMS and monitoring of milk pasteurization to monitoring of pipelines by remote control.

Field Data Manager
Field Data Manager (FDM) is a software package offering central data management and visualization of stored data.
This allows complete documentation of the data from a measuring point, e.g.:

- Measurement values
- Diagnostics events
- Protocols

- Store and visualize historical data
- Read out measured data via online interface or from mass storage
- Create reports and templates
- SQL database / manipulation secure data storage
- Automatic service for report generation, printing reports, read out of data, storing of data, secure export, PDF generation
- Export / import data

Data Logger Minilog B
Measured data collector with analog and digital input for acquisition and storage of analog and digital values, measurement of store room and transport temperatures, recording of operating times, unit number and quantity recording. The robust IP65 housing is suitable for field use.

Paperless recorder and multi-channel display
Ecograph T is a state-of-the-art solution to multi channel displaying, recording, monitoring and communication needs. The unit is easy to use and comes with a host of convincing features to save costs and simplify data acquisition.
It offers an unbeatable price: performance ratio. Manipulation-proof archiving of measured values with 100 % recall/retrace function.

Memograph M Data Manager
The new generation of videographic recorders – memorize, visualize, analyze and communicate process values. The innovative device is impressive because of its high functionality, modular construction and its intuitive operator concept. As a stand-alone system or as an efficient system component, Memograph M is the ideal solution for every task. New, with Modbus RTU Master.

Special application packages are available: mathematics package, tele alarm, batch, wastewater and storm overflow and energy software.

Components, Systems and Solutions

As a supplement to our field measurement technology, Endress+Hauser offers components such as display devices, isolators or power supply units designed to complete your measuring point at field level. In addition we offer systems for optimum integration of field measurement technology into your system world, e.g. process control systems and solutions for production, logistics and maintenance, throughout industry. Endress+Hauser is your competent partner, from sensor to process automation.

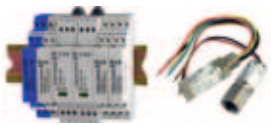
Components

WirelessHART gateway and adapter
Endress+Hauser's battery-powered WirelessHART adapter allows any 4–20 mA/HART device to be integrated into a WirelessHART network. The gateway buffers the transmitted values and makes them available for external clients via an Ethernet or RS-485 interface.

Isolators/power supply
For safe isolation of 4–20 mA standard signal loops, with international approvals (ATEX, FM, CSA, SIL).

Limit switches
With quick setup and simple on-site operation via three keys, LC display for limit values as well as bargraph and pluggable screw terminals.

Overvoltage protection
For limitation of excess voltage in signal and supply lines in Ex and non-Ex versions, as a module or module carrier or screw-in direct.



Systems

Fieldbus
Endress+Hauser is a leading supplier of fieldbus instrumentation. Practically all of our instruments can be equipped with a HART®, PROFIBUS® or FOUNDATION fieldbus™ interface, selected ones with a serial MODBUS or EtherNet/IP interface. As intelligent instruments, fieldbus devices carry additional information from the field, e.g. instrument status, maintenance and diagnostics. They save operational costs by increasing plant availability and are significantly cheaper to install and commission.

WirelessHART
There are many applications where accessibility or installation costs rule out the use of a fieldbus as communication medium. WirelessHART offers an economical solution for these tasks: temporary installations, rotating equipment, moving equipment, remote and difficult to access measuring points. WirelessHART networks are self-organizing and self-healing and thus require no special knowledge for installation.

Systems

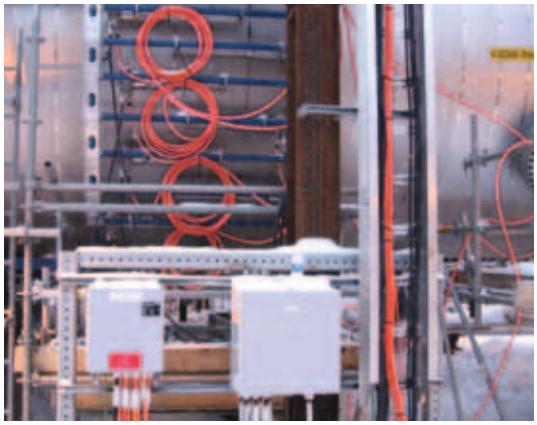
FieldCare
FieldCare is Endress+Hauser's FDT-certified Plant Asset Management tool, providing a range of functionality from simple device parametrization to Condition Monitoring solutions. It configures all HART®, PROFIBUS®, and FOUNDATION fieldbus™ devices in your plant and supports you in managing them. By using status information, it also provides a simple but effective means of checking their health. Third-party devices without FDT support can be integrated using the optional iDTM-HART and iDTM FOUNDATION fieldbus plug-ins.

Field Xpert
Designed for mobile plant asset management tasks, the Field Xpert handheld and associated Device Xpert software can be used to parameter and diagnose all registered HART® and FOUNDATION fieldbus™ devices. It can be connected point-to-point with an appropriate Bluetooth modem or an Ethernet Wifi network access point.

Solutions

Field Network Engineering
Endress+Hauser's experience and understanding of your fieldbus requirements allow us to apply the most appropriate technology in the most appropriate way, right from the start of a project. Our design processes ensure that the wealth of information available today from modern field devices can be used to reduce your operating costs and deliver new levels of process automation excellence. With our help you can be sure to choose the correct devices and components for the job, correctly dimension the fieldbus segments or wireless networks and ensure that the response times fit your application. We will help in the engineering, installation, integration and commissioning of the devices, and provide you with full documentation on project completion.

At our excellently equipped Fieldbus Test and Competence Center, "System World" in Reinach, Switzerland, we test and integrate our fieldbus devices in all important systems encountered in the process industry, ensuring seamless integration in your application. In order to ensure a high level of competence for both our service engineers and your operation staff, we also provide hands-on, certified training in fieldbus and wireless networks.



Fieldbus installation for a density profiling application

Solutions

Plant Asset Management
Effective management of instrumentation is a key factor in the efficient running of processing plant. By adopting a structured approach at all stages of the plant life-cycle it is possible to reduce both capital and operating expenditure. Additional advantages are higher plant availability, better product quality and increased yield. Endress+Hauser's Plant Asset Management tool set achieves this by:

- Shortening the start-up time of a plant regarding all activities around automation plant assets
- Optimizing plant availability by monitoring and predicting asset health and supporting efficient maintenance measures

In addition to FieldCare and Field Xpert, Endress+Hauser offers a number of other products and services around plant asset management. An analysis of your installed base will pinpoint potential weaknesses and provide a strategy for ensuring safer production. Our CompuCal software assists you in the scheduling, recording and archiving of calibration activities. Finally, web or enterprise access to W@M, our comprehensive instrument database, ensures that device information, spare parts, manuals, drivers and much more are accessible 24/7.

Calibrating flowmeters on-site with the mobile calibration rig

Components, Systems and Solutions

Components

Fieldgates
Gateways with Ethernet interface to binary, 4–20 mA, HART®, PROFIBUS® or FOUNDATION fieldbus™ signals allow plant access to device parameters. Applications include monitoring, plant asset management or inventory management.

Systems

P View SCADA
By visualizing the plant and providing the operator with the necessary decision support, SCADA systems contribute greatly to the efficient and safe operation of processing plant. Endress+Hauser's P View is a powerful, open SCADA software suite that supports the user in all aspects of modern plant operation. In addition to visualization, it provides trending, reporting and archiving. Its alarm management supports multimedia alarming, i.e. via SMS, email, FAX, phone calls, text-to-speech etc. It offers client-server architecture with web access and mobile monitoring via Pocket PC. It also provides interfaces to ERP systems such as SAP.

P View is the preferred choice for many Endress+Hauser solutions. Where the application dictates or the customer has other preferences, however, we also have extensive experience in deploying other SCADA systems.

Systems

SupplyCare
SupplyCare is a web-based information system for remote monitoring of tank and silo inventory at multiple site locations. Current measurement values of on-site assets can be accessed via fieldgates company-wide in the Intranet or worldwide via public telephone networks and the Internet. SupplyCare software for the collection and processing of data can either be installed on your premises or hosted by Endress+Hauser. Conventional web browsers allow information to be called up by authorized materials administration and logistics personnel – at any time and from any workplace. Secure access via the Internet can be provided for external partners and service providers. As an alternative or supplementary option, measured data can be integrated into existing systems at logistics, enterprise and management levels.

Solutions

SCADA and Control Solutions
Endress+Hauser offers state-of-the-art solutions for process automation based on our own and third party components. Examples are flowmeter based dosing and filling, leakage detection, type-approved tank management and control for sea-going and inland vessels, density profiling for oil/sand/water separation as well as FDA-compliant cleanroom monitoring. Our projects are realized to your requirements using open standards, because only these provide long-term protection of your investment and ensure interoperability between devices of different manufacturers. They are backed up by services tailored to the application, such as project management, engineering, installation, commissioning, site test and maintenance. Our world-wide presence ensures that you always have a local partner to provide support.

Dosimass flowmeters operating in a 12-lane line filler

Solutions

Inventory Management
It is essential for modern industrial enterprises to offer their customers a first class service while minimizing their own business costs. In many cases, optimization potentials in the production process have already been exhausted, which is why management is increasingly focusing its attention on logistics processes. Endress+Hauser provides support here with information solutions and information services for the tank and silo logistics of process industries: inventory is taken of current bulk solid and liquid assets at all locations, thereby supporting central procurement and internal distribution over widely scattered sites. Inventory management of raw materials can be outsourced to suppliers. Added value services such as Vendor Managed Inventory can be operated for the customer. This has the effect of reducing procurement and internal costs, while securing and increasing turnover on the distribution side.

Knowing the customer's inventory ensures efficient distribution

Life Cycle Management Services

Partnership and support – throughout the life cycle of your plant

Working together
Close contact with the customer, prompt reaction and competence are essential qualities for good customer service. With Endress+Hauser as your partner you benefit from an expanded local service network, qualified customer service engineers and centrally organized service control and standardized processes.
Besides complete support for your field instruments and systems we offer you:

- Seminars and courses for basic and advanced trainings and of your qualified personnel
- Phone support for immediate answers to urgent questions on our instruments, systems and services
- Works repairs and spare parts service

Maintain your competitive edge
Many companies outsource the activities that do not directly form part of their core business. When it comes to field instruments and process automation, they look for partners who:

- Guarantee maintenance, calibration, repairs and replacement of instruments for the entire lifetime of their plant
- Offer service contracts to minimize plant downtime
- Provide the necessary local competence at a reasonable price

W@M is Endress+Hauser's powerful solution for the management of your installed base
W@M is based on web technology, which makes the tools flexible and platform-independent. They can be hosted via the Internet or run as local enterprise solutions, stand alone or as a part of the customer's existing software environment via open and standardized interfaces.
The W@M concept is the information management aspect of Endress+Hauser's Plant Asset Management offer, delivering up-to-date information when it is needed, where it is needed.

Engineering

- Fast and safe selection and sizing of the correct measuring instrument for your application
- Documentation and administration of projects

Procurement

- Reduce procurement costs
- Optimize the quality and speed of your procurement processes
- Your price and delivery data is always available on-line

Installation

- Product documentation is available in different languages
- Software version information are always up-to-date

Commissioning

- Full documentation package to allow smooth transition into operations phase
- Increased safety of your personnel
- Eliminate the need for time consuming testing

Operations

- Up-to-date information: 365 days a year / 24 hours a day
- Effectively service, maintain and optimize your installed base
- Constant planning reliability
- Traceability of executed services with related documentations, ready-to-use for customer audit

12.06/I.I.

Instruments International

Endress+Hauser
Instruments International AG
Kaegenstrasse 2
4153 Reinach
Switzerland
Tel. +41 61 715 81 00
Fax +41 61 715 25 00
www.endress.com
info@ii.endress.com

FI00001Z/00/EN/13.11
71140816
INDD CS5

Endress+Hauser
People for Process Automation