



Level



Pressure



Flow



Temperature



Liquid  
Analysis



Registration



Systems  
Components



Services



Solutions

## W@M – Life Cycle Management

Supporting your business processes

Endress+Hauser 

People for Process Automation

# Endress+Hauser – People for Process Automation

Endress+Hauser is a global provider of automation solutions. Excellent products and innovative services support your processes with the highest degree of quality, safety and efficiency.

The company was founded in 1953 and remains independent and family-owned today. More than 7,000 associates serve customers in 38 countries.

Our “People for Process Automation” will support your success as they provide their extensive knowledge to optimize your automation processes and help to uncover hidden potentials. More about us:

[www.us.endress.com](http://www.us.endress.com)



## The key to success – information

The classic enterprise structure shows two clearly separated worlds: the world of business processes reflected in an ERP system and the world of production with its distributed control system. In recent decades, the development of industrial plants has mainly focused on two aspects: processes and their control during operation. Optimum instrumentation and sophisticated control mechanisms have continually increased process safety, productivity and economic efficiency.

This involves the optimum use of all plant components and the protection of their value. The condition of machines, sensors and all other facilities often represents a critical variable. Knowing the process status is not sufficient. A breakdown of one hour usually entails the loss of an immense sum of money. Avoiding plant downtime, keeping maintenance and repair periods as short as possible - these are the requirements which one has to face. Today, the key to predictive engineering and economic management of production plants is information.

# Island solutions: searching instead of finding



**Let's be honest, do you know as much about your plant as the processes running in it?**

- For example, does every engineer have the information required for installation, maintenance or repair of an instrument at any time and anywhere?
- Do your technicians have all the data to reconfigure an instrument as fast as possible and without having to shut down the plant?
- Can your employees order a required spare part fast and easily?

So far, plant information has been accessible only in a limited fashion. Small islands of information emerge at different points. The engineering, purchasing and production department, the maintenance team, quality management and many other associates have a different kind of knowledge of the same component. Furthermore, real-time data is usually not available.



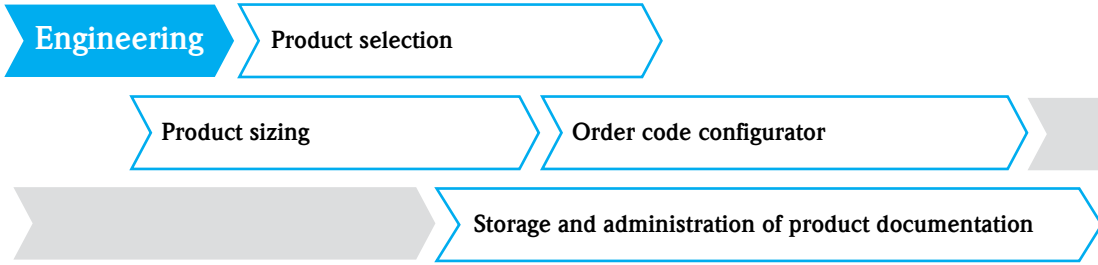
## Discover your plant potential with W@M™

Data concerning a plant and its components is generated right from the first day of planning: in engineering and sizing, in procurement, in installation and commissioning, in operation and maintenance. Every phase of the life cycle of a plant and its components requires information.

- W@M – Life Cycle Management is an open and flexible information platform with on-site tools and services supporting you along the life cycle.
- From engineering, procurement, commissioning through operation, maintenance and the replacement of individual components, W@M provides up-to-date and complete information.
- Availability of all instrument data 24 hours a day, 365 days a year – no time is wasted in searching for instrument information.
- Whether you are currently running an existing DCS with an Asset Management installation or have no system in place, your instrument data is stored and available for you at any time.



# Reliable planning and selection for instrument projects



The challenges in instrumentation engineering of a plant are numerous. Planners must obtain an overview of the whole project right from the start: they have to combine application and instrumentation to arrive at safe decisions.

This is equally true for product selection, calculation and the administration of different projects. Calculations are complex and the variety of products can lead to confusion. Safe calculations and sizing of measuring points become time consuming cost generators.

The Applicator software from Endress+Hauser is a convenient selection and sizing tool for planning processes. Using the application parameters, such as measuring point specifications, Applicator lists all suitable products and solutions.

Supplemented by sizing functions and a module for project administration, Applicator will alleviate your daily engineering workload.



In this way, you obtain the first information for a W@M data set which clearly identifies the instrument and facilitates the traceability of all processes during its entire useful life.

For example, this generates the specific order code of the instrument. A TAG number identifying the project and the location of the measuring point in your plant may be entered, if required.

## Your benefits

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

# Optimizing procurement processes – realizing savings potential

Procurement

Request for quotation

Product order

Delivery status inquiry



Being innovative, improving quality and reducing costs are demands that you and your company are constantly confronted with. Conducting part of your business processes electronically offers you a significant opportunity to optimize your business by drastically shortening the procurement process, realizing immediate savings in man-hours.

In the procurement phase, your secure access to the Endress+Hauser Online Shop allows simple and efficient ordering of standard products, services, consumables and spare parts according to your company's buying conditions around the clock.

An instrument may be fully configured in a fast and simple manner, the availability can be checked and your net prices viewed. Put the configured device in the shopping cart, place the order or request for a quotation first. Our CRM system will provide quick responses to your inquiries back into your shop account for viewing. The status of the order or shipment can be monitored immediately.

From the first piece of information to the delivery status - the entire procurement chain is available via your browser or as an integrated solution adapted to suit your procurement process.

## Your benefits

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

# Access to all required information

Installation

Connection of instruments

Access to device specific documentation

Loading of instrument software and drivers



During the installation phase, as you install and connect new instruments, fast access to current data is important. Engineering information and data sheets, operating and assembly instructions, documents including test reports, approvals certificates and many other items - all of these records are continually used in the operation of instruments, updated for each individual serial number to ensure the safe installation of your instruments.

Each individual document of all Endress+Hauser products is available from the Common Equipment Record database within the W@M™ portal - of course, in standard formats which facilitate display and usage.

We also offer Endress+Hauser software, from comprehensive programs through to DTMs (Device Type Manager) and extensions. You can download them directly and install them. You will also find an extensive collection of multimedia data for presentations and training seminars.

## Your benefits

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

# Reduced start-up time by quick and documented commissioning

## Commissioning

Optimum instrument setting for the process

Access to operating instructions

Programming of instruments

Loop check and calibration

Generation of documentation



For you, the operation of your plant is the most important phase of the life cycle. For this reason, all instruments must be configured for your process in the optimum way.

FieldCare is the software tool from Endress+Hauser for both instrument configuration and asset management.

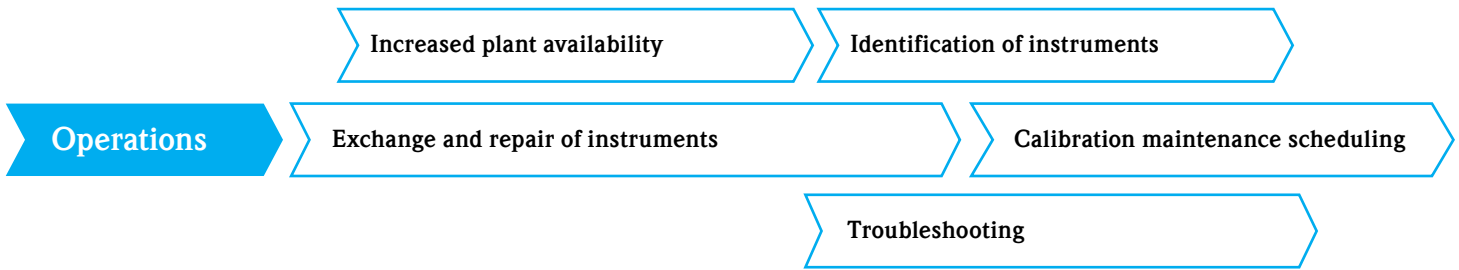
Data specified during the engineering stage is automatically transferred and recorded, avoiding error prone manual input. To commission an instrument, you have to load the correct DTM (Device Type Manager) for configuration or check against a copy of the original calibration certificate.

When calibrating your instrument, you might need a copy of the SOP (Standard Operating Procedure) of your instrument. You might also want to check previous maintenance schedules - all information is available to you at any time.

### Your benefits

- Simplified remote commissioning
- Increased safety of your personnel
- Eliminate the need for time consuming testing

# Cost effective operations with increased quality and safety



It is obvious that only a clear picture and detailed knowledge of the installed instrument base can be a solid foundation for a predictive maintenance and optimizing strategy for your plant. Whether you need to find information concerning spare parts, verify software versions, trace instrument history records on the basis of key events or view the plant database with its installed instruments – the information you need must be available quickly and be up to date.

The W@M portal supports you in operational matters and also assumes strategic tasks. The combination of data from plant operation and business processes creates information which is relevant to decisions and will optimize your value added chain.

**The goal is to decrease plant costs and increase plant availability.**



Equipment Record view in the W@M portal

Recalibration of measuring points

Documentation retrieval

Spare parts administration

Audit support - quality assurance



Several tools are available to allow you to utilize the maximum potential of W@M:

- FieldCare, the software tool for instrument configuration and asset management with a number of innovative functions
- Condition Monitoring, with an extended diagnostic function which alerts users in the event the instruments don't work properly due to internal reasons or a change in process conditions
- CompuCal, the high-performance calibration and maintenance software which helps you to automatically control all preventative measures concerning your field instruments, saves costs and increases the availability of the system
- Installed Base Assistant, a unique patented tool which efficiently integrates the instruments of the entire installed base into your W@M Asset Management environment
- Spare Part Finding Tool (SFT), in case an instrument fails, you have direct access to systems for error diagnostics and exact spare part descriptions for the instrument as well as its software compatibility
- Product Status List (PSL), you will get information on the age of the instrument, the implemented maintenance work and proposals for a respective successor

Each tool may be used on its own and can access current data during the life cycle. But together and in combination with W@M you will obtain the highest benefit for your plant because you will be completely informed on all business processes.

#### Your benefits

- Up-to-date information 24/7, 365 days a year
- Effectively service, maintain and optimize your installed base
- Continuous planning reliability

# Integrating all phases of the life cycle

Our unique portal solution is not available from any other instrument manufacturer

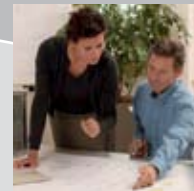
[www.us.endress.com/W@M](http://www.us.endress.com/W@M)



## Operations

- Up-to-date information 24/7, 365 days a year
- Effectively service, maintain and optimize your installed base
- Continuous planning reliability

[www.us.endress.com/IBA](http://www.us.endress.com/IBA)



## Engineering

- Applicator selection and sizing software: correct measuring instrument for your application
- Documentation and administration of projects
- Electronic spec sheet interface

[www.us.endress.com/Applicator](http://www.us.endress.com/Applicator)

## Commissioning

- Simplified commissioning tools
- Increased safety of your personnel
- Eliminate the need for time consuming testing with FDT compliant approach

[www.us.endress.com/FieldCare](http://www.us.endress.com/FieldCare)



## e-Procurement

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

[www.us.endress.com/e-business](http://www.us.endress.com/e-business)



## Installation and Start-up

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

[www.us.endress.com/Start-up](http://www.us.endress.com/Start-up)



# Plant optimal, results exceptional

Comprehensive life cycle management for process automation easily adapts to your individual business processes and delivers optimum management of measurement and control assets across the entire life cycle.

The open information platform manages both internal and external products and provides you with a value-creating superiority which guarantees time and cost savings as well as a cutting edge due to constant planning reliability.

You select instruments for the respective measuring task in a clear, fast and safe manner during the engineering phase. Automatic transfer to the procurement phase saves you time and money.

Your purchasing processes are simplified and shortened by electronic procurement from the Endress+Hauser Online shop.

W@M provides access to all required updated information worldwide and around the clock, 365 days a year. This simplifies the installation and commissioning of new instruments, optimizes plant availability and increases safety through permanent monitoring of processes.



## Additional documentation

- **Applicator, IN 013F** - selection and sizing tool for your planning processes
- **e-Procurement, CP 004Z** - solutions for optimizing your procurement process
- **Start-up and commissioning, FA 022H** - optimize your instruments' performance right from the start
- **FieldCare, CP 001S** - Plant Asset Management through Fieldgate
- **Installed Base Audit, FA 019** - your instruments' assets centrally organized
- **CompuCal™, CP 009S** - high performance system to efficiently maintain and calibrate your on-site instrumentation
- **W@M Enterprise, IN 100H** - open and flexible Installed Base Management

# Endress+Hauser's product portfolio

## Level

- Capacitance (RF)
- Conductive
- Mechanical
- Vibration
- Ultrasonic
- Radar
- Guided radar (TDR)
- Hydrostatic



## Pressure

- Gauge/absolute
- Differential pressure
- Hydrostatic



## Flow

- Electromagnetic
- Vortex shedding
- Coriolis mass flow
- Ultrasonic
- Open channel
- D/P flow
- Thermal flow



## Temperature

- Temperature transmitters
- RTDs/thermocouples
- Sensors



## Liquid Analysis

- Conductivity
- pH/ORP
- Chlorine
- Dissolved oxygen
- Turbidity
- Chemical analyzers
- Nitrate/organic sensors
- Sludge level



## Recorders

- Paperless recorders
- Visual data managers
- Safety data managers



## Components

- Displays
- Active barriers
- Process transmitters
- Power supplies



## Service

- Start-up
- Training
- Calibration
- Maintenance Contracts
- Installed Base Audit



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