## **Endress+Hauser Australia** Product, Service, Solution and Project capabilities





## Endress+Hauser – the People for Process Automation

Endress+Hauser instruments reliably gather all information from the industrial processes that enable you to operate your plants economically with optimum product quality and safety for employees and the environment. Our competence goes well beyond field instrumentation with capabilities in engineering, software/services, customised solutions and field tools for verification and commissioning of systems and transmitters.

Since 2001, Endress+Hauser Australia has been directly supporting Australian customers through our extensive range of services from full technical sales support through to service technicians for field assistance and commissioning. With our head office in Sydney and branch offices located in Brisbane, Melbourne, Adelaide, North Queensland and Perth, as well as a network of representatives across the country, our team are able to provide local and reliable support where you need it.

Endress+Hauser is a world leader in the field of process measurement with complete technologies for flow, level, pressure, liquid analysis, gas analysis, temperature and systems for data acquisition. Our field instruments use different measuring principles to operate reliably and accurately in any situation. Ongoing compatibility into a variety of process control platforms utilising a range of communication solutions including Ethernet/IP, IO-Link, Foundation Fieldbus, Profibus and HART, is ensured with our dedicated test laboratories.

In addition to our instrumentation we can support you to ensure that your process is optimised and safe. Whatever your location or your industry, our service team is there to help you reach your goals. Based on our process knowledge and technical expertise, a uniform approach through clear procedures ensures that the work we conduct for you is done properly. Customised services and training can also be adapted to your needs, contact us today.

If you need help implementing an instrumentation project we have a team in Australia that can help make this happen. Our project management capabilities are based on worldwide harmonised and standardised processes. Professional communication and collaboration leads to trust which is key to successful process automation projects particularly when it comes to largescale projects or when outsourcing non-core functions is required.

Our extensive product, service, solution and project offerings in process measurement has led us to become a major supplier to industries including:

- Mining and Minerals Processing
- Water and Wastewater
- Power and Energy
- Food and Beverage
- Life Sciences



## People for Process Automation



Scan the code or <u>click here</u> to find out more about Endress+Hauser Australia

## **Our Instrumentation Portfolio**



#### Flow measurement for liquids, gases and steam

Consistent product quality, safety, process optimisation and environmental protection - these are only a few reasons why industrial flow measurement is becoming more important all the time. Water, natural gas, steam, mineral oil, chemicals are some of the fluids that have to be measured day in. day out. There is no single, across-the-board technology suitable for all these applications, so you can choose the flowmeter best suited to your process needs from our comprehensive product basket.

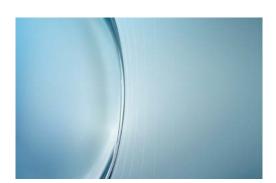
More information >>>



#### Level measurement

Constant product quality, plant safety and economic efficiency - these are important aspects for any level measuring point. Levels in liquids, pastes, 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. Endress+Hauser supports you from planning through commissioning and also maintenance of your measuring point.

More information >>>



#### Pressure measurement

Whether pressure, level or flow, todays pressure measurement technology is often used for measuring liquids, pastes and gases. With a wide range of sensor technology Endress+Hauser offer instruments that perform well in any application.

More information >>>



**Temperature measurement** Endress+Hauser offers a complete assortment of compact, modular and multipoint temperature sensors, thermowells, measurement inserts, transmitters and accessories for all types of process industries such as Oil & Gas, Chemicals, Food & Beverage, Life Sciences, Mining and Minerals Processing, Power & Energy.

<u>More information >>></u>

## reduce costs.

More information >>>

## Endress+Hauser.

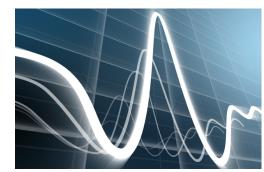
More information >>>

# 0

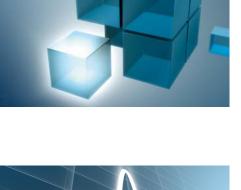
#### Liquid analysis in all applications

Environmental protection, consistent product quality, process optimisation and environmental safety - just a few reasons why liquid analysis is becoming increasingly essential. Liquids such as water, beverages, dairy products, chemicals and pharmaceuticals have to be analysed day in and day out. We support you in fulfilling all these measuring tasks with application know-how and cutting-edge technologies. Discover our comprehensive portfolio and choose the product best suited to your process needs.

More information >>>



More information >>>



#### Software solutions

Apart from all relevant measuring and system technologies, we also offer appropriate software tools for all branches across the industry. Our comprehensive portfolio spans a range of software solutions optimising your inventories and supply chain, for device calibration and configuration through to condition monitoring by providing valuable asset information over the entire life cycle. Our energy management solutions allow you to monitor your energy use in order to be more efficient and

#### System components and data managers

Today the requirements on measurement technology go far beyond the mere recording of measurement values. Measuring devices need to be supplied with power and to be protected against overvoltage, the measurement value is to be visualised or processed, limit values have to be monitored as well as the data has to be archived in a secure way. These tasks are covered by the system products and data managers from

#### **Optical analysis of chemical properties**

Monitoring, measuring and controlling your chemical process is important to speed up process development, improve process efficiency, maximise process safety, and ensure product guality. Our world-leading analysers help customers optimise key industrial processes and more reliably monitor product quality. Key technologies in our portfolio include Raman Spectroscopy, Tunable Diode Laser Absorption Spectroscopy (TDLAS), and Quench Flurescence (QF).

## **Our Service Portfolio**

#### Committed to improve plant performance, for your success

#### **Commissioning Services**

Proper commissioning of your process instrumentation is essential to handle critical factors such as time, resource availability and access to specific skills during the start-up phase. Utilising Endress+Hauser's commissioning services allows you to achieve long-term operational benefits. Our Australia-wide team of experienced technical experts ensure a sustainable beginning-to-end solution for your commissioning projects, regardless of the scale and location of your facility.

#### <u>More information ></u>

#### **Diagnostic and Repair Services**

Because measurement instrumentation is essential for your processes, we utilise decades of service expertise for various applications. Our team of dedicated service engineers across every state in Australia offer comprehensive diagnostics and repair services for your industrial measuring instruments. Save costs and resources and minimise possible downtimes of your Endress+Hauser products. By combining extensive application know-how with specialised tools, we are able to deliver quality, quick and precise service.

#### <u>More information ></u>

#### Maintenance & Calibration Optimisation Services

How can you find the right balance between costs and maintenance activities without compromising safety. A review and redesign of the maintenance processes in a plant can enable maintenance and plant managers to make decisions on how to reach strategic asset management goals. On one hand Endress+Hauser consultants use in-depth metrological expertise and analyse calibration data to help customers find their optimal calibration intervals. On the other hand, our asset management specialists review current maintenance processes to provide recommendations to reduce operational costs.

#### <u>More information ></u>

#### **Installed Base Audit**

Installed Base Audit is a sevice for auditing and analysing the instrument base installed in processes. The main aim is to develop fact-based recommendations to create a maintenance schedule that increases plant availability and cuts cost. The service defines maintenance priorities according to available resources and production requirements, identifies out-of-date documentation, reduces complexity of older systems and identifies necessary measures to increase production.





Scan the code or <u>click here</u> to find out more about our Service support in Australia

#### **INPEX, Northern Territory**

INPEX owns and operates one of Australia's largest resources project which includes an onshore processing plant, an offshore processing facility and an FPSO (floating production storage and offloading facility).

Endress+Hauser Australia worked with the EPCs from Korea and Japan that designed the system and has commissioned approximately 1000 devices including flow, level and tank gauging. We have also been consulting with the plant owner in optimising the install base.

#### **CSL Limited, Melbourne**

More than a century ago CSL made a promise to save lives and protect the health of people with a range of serious and life-threatening medical conditions. Their broad range of medicines include those that treat disorders of the immune system, bleeding disorders, shock, burns, and vaccines to decrease risk of influenza.

Endress+Hauser are CSL's instrument vendor globally for instrumentation ranges including flow, level, pressure, temperature, pH and conductivity. E+H have provided additional support through automated calibration systems, documentation and engineering services.



#### **On-Site & Remote Support Services**

Our technical support experts ensure your installed base of instruments, software, and/or automated solutions keep running smoothly over time. With extensive service expertise and knowledge about instrumentation and application, our technicians can help you in critical situations quickly and sustainably to ensure continuous performance. Our service experts will execute and restore your device remotely or guide you through custom processes by direct access with a guaranteed prompt response.

#### <u>More information ></u>

#### **Industrial Training**

Your employees play an important role in your company's overall performance and manufacturing process. Endress+Hauser supports you to enhance and refine their production and maintenance knowledge - no matter if they are experienced engineers, practicing technicians or industry newcomers. Our experienced Australian-based instructors apply years of service expertise to help your staff learn how to operate instruments properly and apply corrective and preventive maintenance of your measurement devices.

More information >

More information >



#### Archie Rose Distilling Co., New South Wales

Recognising the increasing demand for their premium spirit portfolio, Archie Rose Distilling Co. conceived an ambitious plan to upscale their current craft distillery to a world scale, state of the art distillery to cater for the growing demand for years to come.

Endress+Hauser delivered a whole project package from a single-source supplier saving a considerable amount of time in the engineering phase. All hygienic instrumentation follows international standards (EHEDG and FDA) to ensure product quality with additional Ex approved devices that the ensure safety of staff and equipment.

<u>Read the full case study ></u>

## **Our Solutions Portfolio**

#### The combination of reliable products and expertise in customised solutions

#### Zero Loss

"Zero Loss" refers to the aim of maintaining perfection to the nearest degree, through both quality control and displaying repetitively excellent performance. Here at Endress+Hauser, we offer a guarantee of dedication to Zero Loss, as we endeavour to bring you the trademark quality which we are known for, both on time and as promised. Through applications such as our pinpoint tank gauging systems, offloading metering systems, or inventory control systems, we make it our mission to strive for perfection, and help you maintain that competitive edge within your industry.

#### **Quality Compliance**

"Quality Compliance" refers to the commitment to assist with adherence to government regulation or product quality and to operate and monitor safely and accurately. Here at Endress+Hauser, we dedicate ourselves to helping our customers work within government statute at all times and to operate at the pinnacle of precision and safety

continuously. With systems such as our wet chemistry analysers, our advanced Steam and Water Analysis Systems (SWAS), and laser-based gas analysis products, Endress+Hauser strives to ensure that your applications are completed in a fully government compliant and safe environment.

#### **Digital Solutions**

"Digital Solutions" refers to the transition of process parameter monitoring from an analog to a digital platform. At Endress+Hauser, we have been at the forefront of digitalisation within our sensor technology, like Memosens<sup>®</sup>, in our analytical portfolio. We continue innovation in this space with solutions that turn process data into digital information at your fingertips. Our suite of cloud-based monitoring solutions, diagnostics via Heartbeat<sup>®</sup>, and IIoT ready devices provide rapid and accurate digital data to ensure that your business always stays one step ahead.



Food & Beverage process solutions for consistent excellence

Find out more >



Mining, Minerals & Metals process solutions, extracting more from less

Find out more >



Water & Wastewater process solutions to ensure compliance

Find out more >



Oil & Gas process solutions to enhance your operations

Find out more >



Power & Energy process solutions for stability and efficiency

Find out more >



Chemical process solutions customised for plant optimisation

Find out more >



#### Netilion - Industrial Internet of Things (IIoT)

The Endress+Hauser IIoT monitoring solution unleashes the power of your field instruments by providing you with insights that allow you to improve your operations. This is achieved by providing access to important instrument data on any device, anywhere, anytime.

Our IIoT solutions consist of a suite of easy-to-use packages consisting of measurement technology, communication solutions and mobile apps. With these packages, you can access your important measurement data immediately, at any time and from anywhere. You can thus ensure ideal production conditions and good perspectives for success.

#### Find out more >

#### Benefits of an Endress+Hauser IIoT Solution

Easy to integrate into existing process control architecture

- Based on workflows, not code
- No changes required to HMI/SCADA/DCS .
- Easy and quick to change

Customisable dashboards Evolves with changing business requirements

Custom and personalised dashboards .

Data from multiple sources Visualise information from disparate systems

- Can sit alongside existing HMI/SCADA/DCS
- Access by Business Users, not operators
- Little or no impact to existing systems

#### **Commonwealth Scientific and** Industrial Research Organisation (CSIRO), Queensland

The CSIRO operates an aquaculture research facility on Bribie Island. Australia. The facility has several large nursery and grow-out ponds for the production of prawns to harvest size.

Endress+Hauser supplied a complete turnkey solution for real-time monitoring of water quality parameters DO, pH, temperature and salinity. This included all analytical instrumentation, mounting assemblies, enclosure, and the customised Netilion Water Network Insights (NWNI) cloud-based data visualisation system allowing for real time monitoring of water quality.

Read the full case study >

### **Our Project Services**

## Smooth project management based on worldwide harmonised and standardised processes

Our Australian based Project Services team help to ensure your plant's optimal performance with engineering tailored to your requirements. For new (green field) or upgraded (brown field) plant projects, our engineering services help optimise plant measurement performance from the engineering to operation and testing phase with efficient and sustainable solutions. With state-of-the-art engineering tools, we complete the planning and design of the application and offer a flexible choice of system components. Our expert recommendations come with more than 60 years of field experience and intend to lead you to productivity excellence.

Our Project Management Services include:

- Consistent execution both nationally and globally
- Dedicated Project Coordinator and Project Manager
- Specific project plan covering all deliverables
- Fortnightly progress reports
- Coordination and management of project specific packaging and shipping requirements
- Factory acceptance test (FAT) / site acceptance test (SAT) and commissioning services
- Backup of relevant project data (with optional online access)

Our Project Engineering Services include:

- Embedded engineering
- Project engineering
- Instrumentation sizing calculations using Endress+Hauser applicator sizing software
- Generation and population of data sheets using Endress+Hauser specification sheet producer

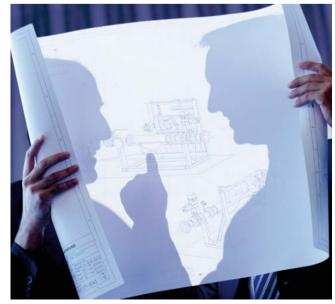
- Creation and population of project documentation database
- Electrical hook-up drawings
- Customer specific inspection and test plans

#### Amrun (South of Embley) Bauxite Project, Queensland

The Amrun project is a greenfield bauxite construction project in Far North Queensland. The site currently produces 22.8 million tonnes of bauxite in a year (by end of 2019) in the south of the Weipa Peninsula. The project involves the staged increase in production of up to 50 million dry product tonnes per annum.

Endress+Hauser was appointed as the main instrument vendor(MIV) by Bechtel which was the project's EPCM (Engineering, Procurement and Construction Manager). We supplied the vast majority of the field instrumentation (flow, pressure, temperature, level, liquid analysis) including with 3rd party items from a large number of vendors. We supported our customer from FEED (Front End Engineering Design) to Operation by providing project management services, documentation and site commissioning to ensure finalising the project on time and within budget.







#### Endress+Hauser Australia as your Main Instrument Vendor (MIV)

The Main Instrument Vendor (MIV) approach involves a cooperative partnership between Engineering Procurement Consultants (EPC), end users, and an instrument vendor. This concept engages the instrument vendor early during the detailed engineering phase of the project. As the MIV, Endress+Hauser Australia are able to liase with all instrumentation suppliers to add value and expertise with proper equipment selection, system integration, and field architecture. The MIV strategy has been proven to reduce overall project costs, with earlier time to completion, and delivering far greater benefits to the end user.

Benefits to the EPC include:

- Reduced technical risk, with expert product selection, and application advice
- "Best of breed" control system and instrumentation combinations are possible, with complete flexibility independent of field technology using Hart, Profibus, Foundation Fieldbus or traditional analogue 4...20 mA systems.
- Project specific 2D drawings and 3D objects are available for advanced modelling
- Reduced detailed engineering time and costs
- Simplified procurement and reduced administration costs with a single vendor
- Smoother and faster commissioning
- Reduced rework and minimised change orders
- Optimised logistics—warehousing, inspections and tagging

#### Osmoflo, South Australia

Osmoflo was contracted to provide a desalination plant to treat high salinity water produced from a variety of coal seam gas (CSG) wells in Australia.

As the main instrument vendor Endress+Hauser provided expertise at all stages of the project, from FEED (Front End Engineering Design) through to procurement and delivery, bringing significant efficiency improvements. A particular highlight was the provision of 12 custom designed water quality monitoring panels for turbidity. These plug and play panel solutions provided time savings during installation and commissioning. In total, more than 170 separate tags were delivered.

<u>Read the full case study ></u>

Among the many end user benefits that can be delivered using the MIV approach, perhaps the strongest is the ability to leverage Endress+Hauser's powerful Field Care Plant Asset Management Software. This means the project can be delivered together with a fully populated electronic database for maintenance and efficient management of all the field equipment, from day one.

The many other benefits include:

- Field Device Tool (FDT) based asset management tools with advanced diagnostics capabilities
- Fully Web-enabled Asset Management through W@M
- Uniform user interface for operators and maintenance personnel across the complete range of Endress+Hauser instruments.





Scan the code or <u>click here</u> to find out more about our specialised Main Instrument Vendor service

#### Quality control and quality product means reliability

Endress+Hauser Australia has developed and implemented an integrated management system (IMS) in order to document the company's business practices, to better satisfy your requirements and expectations. The integrated management system meets the requirements of international standards ISO 9001:2015, ISO 14001:2015, OHS AS/NZS 4801:2001 and OHSAS 18001:2017.

This system addresses the design, development, production, installation, servicing and project management of process measurement products, services and projects. Services include but are not limited to commissioning, repair, maintenance, calibration and engineering.



## Process ins

#### Safety by design

Process instruments are often installed in hazardous areas, inserted into extreme process pressures and temperatures, and exposed to all types of materials. They must have designs that manage the risks of these conditions over their life cycle. Each Endress+Hauser instrument begins with safe design and manufacturing procedures built on generations of past knowledge and experience, ensuring the highest level of mechanical integrity.

#### Innovation

Endress+Hauser was founded over fifty years ago and has become synonymous with invention and innovation, with the invention of the vibrating fork level switch. Endress+Hauser has continued to invest in research and development and holds over 7800 active intellectual property rights worldwide.





Some standout innovations have included:

- Gammapilot The world first 2-wire loop powered nucleonic compact transmitter for point level detection, continuous level, interface and density measurement
- Field Xpert award winning tablet PC for mobile plant asset management in hazardous areas(Ex zone 2)
- iTHERM TrustSens award winning hygienic selfcalibrating temperature sensor, fully compliant to FDA 21 CFR Part 11 regulations and GMP rules

#### MEMOUSENS Memosens 2.0 for simple, safe and connected liquid analysis

Memosens technology has revolutionised liquid analysis. It converts the measured value to a digital signal and transfers it inductively to the transmitter, ensuring increased availability of the measuring point and trouble-free processes. With Memosens 2.0, liquid analysis now becomes completely future-proof and ready for IIoT.

- **Simple**: Get started with digital liquid analysis easily and quickly. Memosens 2.0 can be integrated incrementally into existing processes
- Safe: Increase the availability of your measuring points by quickly localising errors and disruptions
- **Connected:** Boost plant efficiency by digitally networking all measurement processes

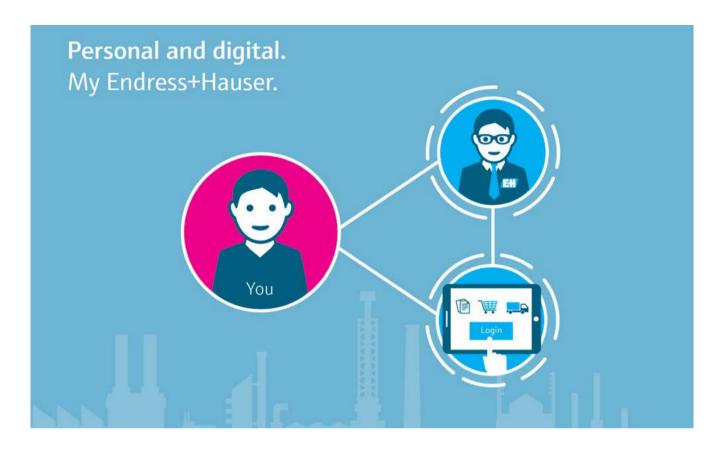


#### Heartbeat Technology - unique verification function for maxmium plant availability

Heartbeat Technology is a one-of-a-kind diagnostics, verification and monitoring function for the optimised monitoring of process-critical instruments and processes. The benefits are clear: reduced testing effort, less downtime, and optimised maintenance. Other features include:

- Fully integrated testing and verification functions

   available for flow, level, temperature and
   analytical devices
- Can be performed anytime without process disruption
- Permanent instrument and process diagnostics for reduced maintenance and targeted remedial action
- Metrologically traceable device verification (TÜV-certified)



### **E-commerce on My Endress+Hauser**

Complex daily operations can still be an easy experience. New possibilities, new experiences with endress.com

Discover the new functionalities on the smart and powerful endress.com platform that connects you directly to us and our wide network of sales representatives. Buy all your products online with the flexibility you need.

Your personalised account lets you easily conduct operations within a few minutes. View transactions, buy products, order spare parts, download technical documentation, add product lists and find the most suitable product for your application – in the office, in the field, on the go.

Some benefits of having your own account include:

- Configure and purchase products instantly or request quotes from your sales representative directly
- Keep track of your entire purchase history online and easily repurchase, order spare parts or accessories
- Access all technical information and documentation on your purchased products
- Personalise and share product lists within your business for recurring orders
- View product pricing with your company's pricing applied
- Track the progress status of your quotes and orders





Scan the code or <u>click here</u> to find out more about going digital with My Endress+Hauser

<u>Register for a free account here ></u>

#### www.au.endress.com

Head Office	Queensland	North Queensland	Western Australia	Victoria/Tasmania	SA/NT
Endress+Hauser Australia Pty Ltd Lvl 1, 16 Giffnock Ave, Macquarie Park NSW 2113 Phone 1300 363 707	Bldg 4, 107 Miles Platting Rd, Eight Mile Plains, OLD 4113 Phone 07 3457 0200	Lvl 1, 112 Denham St Townsville OLD 4810 Phone 07 3457 0200	Lvl 2, 92 Walters Dr Osborne Park WA 6017 Phone 08 6350 2200	Bldg C, 211 Wellington Rd, Mulgrave, VIC 3170 Phone 03 9263 8000	Endress+Hauser Australia Pty Ltd Phone 02 8877 7050

au.endress.com

