

WE DELIVER RELIABLE MASS FLOW SOLUTIONS FOR STEAM



Eletta started business in 1947

Eletta Flow AB is a Swedish company founded in 1947 with a vision to provide innovative flow measurement solutions for various process industries. Since then, we have been at the forefront of the industry, independently pushing the boundaries and setting new standards.

Eletta's flowmeters are very well known for their reliability in critical applications. Some have worked perfectly and are still in use for more than 50 years. Planned obsolescence is a non-existent concept at Eletta.

At Eletta, we are passionate about what we do and take pride in delivering high-quality products and solutions to our customers. We ensure that our solutions meet the highest standards of quality and reliability.

Eletta prides itself on always striving for the best solutions no matter what your process requirements are. We believe in close co-operation and personal service.

Eletta's keywords Quality Sustainability Reliability Long service life Affordable Easy to install and mount Customer support Responsive Delivery on time Quick, simple and clear answers Customized solutions Technical support and advice Identification of problems Focus on solutions



Eletta manufactures flow meters and flow switches that are adapted to cope with a variety of media and application requirements. Eletta Flow is certified according to ISO 9001 and ISO 14001.

STEAM APPLICATION

Eletta - Your partner in steam measurement

Optimize your steam processes with our outstanding product Eletta Steam

We are proud to offer our high quality integrated solution "Eletta Steam" specifically designed to meet the needs of industrial compnies working with steam. Our innovative technology and expertise in the field will help you to optimize your steam processes for maximum efficiency and reliability.

Our steam solution can be used to measure the amount of steam in your plant. This can be used to monitor the results of energy saving programs and to compare efficiency of a plant unit. The steam can then be costed as energy at any stage of the production process, so that the cost of individual product lines can be calculated.

Why should we measure steam?

Measuring how much steam we use is important because it helps us make the best use of it. Steam is essential to run machines and plants efficiently. By knowing how much steam we use, we can also understand how much it costs to use it. This is important to ensure that our plants and buildings are operating efficiently and that we are not wasting energy.

The main benefits of using steam flow metering include:

- Plant efficiency
- Energy savings
- Process control

Why is our Eletta Steam flow meter important for your steam process?

Steam is a key component in many industrial processes, and accurate monitoring and measurement of steam flows is essential to ensure efficient and safe operation. Our flow meters give you:

Simplicity:

Instrument will be delivered as a complete Unit, ready to be isntalled Mechanically and to be power Supplied.

Accuracy:

Exact measurements of steam flows to ensure your process is working optimally. Measure steam consumption and optimize your processes.

Reliability:

Trusted monitoring to prevent downtime and minimize the risk of production stops.

Performance:

Optimized use of steam to reduce energy consumption and therefore costs.





Base Unit Steam

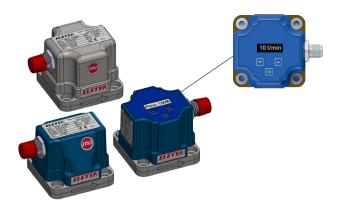
Control Unit



Base Unit Steam

The base unit for steam is an upgraded version of a well-proven and documented DP Flow messurement that we have supplied for over 75 years. The unit is pre-assembled with all parts from production. It is pressured tested as standard.

- Connection block for instruments and pipes from Flow element/pipe section.
- Built in Air vents
- Condensate pots
- Internal piping
- Plate for easy mounting of the unit.



Control Unit

The M series is one of the smallest dp flow meters on the market, measuring most fluids with automatic compensation for pressure and temperature changes. The M3 series is an accurate flowmeter, outstanding for steam.

- Housing: plastic or stainless steel
- Optional: loop-powered OLED 128*32 pixels display
- **Measuring range:** 1:10 turndown
- **IP class:** IP67
- Pressure classes: 10, 25, 50 bar



User Interface

Pipe sections







User Interface

Eletta's new flow computer for calculating mass flow for steam. Delivered fully configured based on saturated steam operating conditions. Changes on operating conditions will compensated by the User Interface software giving a calculated mass flow messurement. Simple connection to power and the control unit. USB port for transferring log files and updating software.

- Touch-screen Display
- Historical Trends & Graphs
- Remote access from Smart Phone
- Available in 5 Sizes
- e-mail function

Pipe Section GSS

Pipe Section FSS

The Pipe Sections in stainless steel 316L are available in different dimensions:

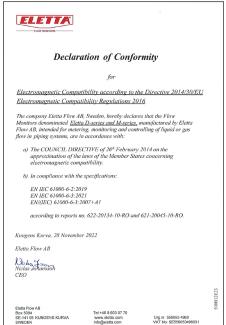
- FSS: DN15-DN500 for DIN max PN16
 DN15-DN500 1/2"-18" for ANSI max 150 lbs
- GSS: DN15-25 with BSP or NPT threads

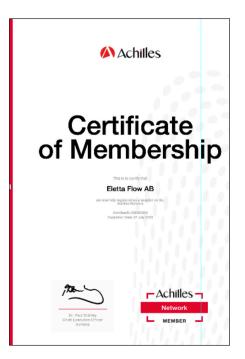


Approvals and certificates worldwide.

Tests have been made on our products resulting in reliable and stable products. Eletta offers a wide range of approvals and certificates worldwide...







REFERENCES

Around the world you have access to our unique know-how and product range. Proximity to our customers is crucial for effective solutions. To meet demand, we have a worldwide presence through our resellers and sales specialists....

References in Europe

- ALBA Spain
- ANKA Germany
- BESSY Germany
- CEA Saclay France
- CERN Switzerland
- DIAMOND LIGHT United Kingdom
- DESY Germany
- DLS United Kingdom
- ESRF France
- ESS Sweden
- FAIR Germany
- GANIL France
- Garching Germany
- Greifswald, Germany
- GSI Germany
- IKP Germany
- JYVÄSKYLA Lab Finland
- Forschungszentrum Jülich Germany
- KVI The Netherlands
- MEDAUSTRON Austria
- PSI Switzerland
- Synchrotron Soleil France
- SVEDBERG Lab Sweden
- Trieste Scpa Italy
- University of Jyväskylä Accelerator lab Finland

References in Asia and Africa

- NSRRC Taiwan
- BERC China
- iThemba Labs South Africa
- VECC, Variable Energy Cyclotron Centre India.

References in America

- National Argonne Laboratory USA
- CLS Canada







The costumer identified that their existing steam flow management system was too large and complicated, leading to increased operational costs. They required an updated solution to easily and accurately monitor and control their process steam flow.

Project Goals

- Achieve precise steam flow measurement
- Enhance energy efficiency
- Reduce operational costs
- Improve overall system reliability
- Solution

Challenges to Overcome

Integration with the existing system without causing significant downtime.

Ensuring accurate calibration of the ELETTA STE-AM system.

Mitigation Strategies

Scheduled installation during low-usage periods to minimize impact. Eletta factory training to ensure precise calibration and seamless integration and operation.

RESULTS

Accuracy Improvement:

Achieved a 15% increase in measurement accuracy.

Energy Savings:

Reduced energy consumption by 10% within the first three months.

Cost Savings:

Realized a 12% reduction in operational costs annually.

Customer Feedback:

"The new steam flow meter system has significantly improved our operational efficiency with its accurate measurments and ease of operation thus providing precise control over our steam usage." – , Operations Manager at Eco-Zinder.

The customer is very satisfied with the ELETTA STE-AM solution. They find it small, easy to install, and accurate. The customer uses the User Interface only for visualizing values. They use just the 4-20mA signal from the M-series (Control Unit) to the control/measurement they have. They have Profibus as communication to the measurement system.

CUSTOMER BACKGROUND

The customer produces chemicals, including copper and zinc concentrates, which are produced in large quantities. Eco-Zinder specializes in providing sustainable environmental solutions across various industries. They use steam for drying chemicals. They use three steam generators that generate about 10,000 kg/h of steam.

Eletta's steam meter is used to control the amount of steam they apply to the chemicals. This case study outlines the challenges, implementation process, and significant improvements realized through this upgrade.

SOLUTION

Implementation-Process

Planning and Design:

Conducted a thorough assessment of the existing system and designed a tailored installation plan.

Procurement:

Acquired the necessary equipment and materials.

Installation:

Installed the new steam flow meter with minimal disruption to operations.

Testing and Calibration:

Conducted rigorous testing and calibration to ensure optimal performance.

Training:

Provided comprehensive training to Eco-Zinder's staff on the operation and maintenance of the new system.

SUMMARY

Comparison with Previous State

Large and bulky Steam Instruments that were very complicated to operate leading to down time.

After:

Accurate measurements, reduced size and easy to operate and maintain.

Key Takeaways:

Investing in advanced steam flow measurement technology yields substantial efficiency and cost benefits.

Proper planning and expert installation are critical to the success of such upgrades.

The installation of a the ELETTA STEAM flow meter system has successfully addressed their operational and installation challenges, leading to improved efficiency, energy savings, and cost reductions.

WE BRING RELIABLE FLOW MONITORS AND FLOW METERS TO YOUR BUSINESS



www.eletta.com