AUTOMATED PROCESS LIMITED

...innovative know-how

Flow Measurement

- Paddle Wheel
- Oval Gear
- Turbine
- Electromagnetic
- Vortex
- Ultrasonic
- Coriolis
- Thermal Mass And Calorimetric
- Surface Acoustic Wave (saw)
- Mechatronic
- Variable Area (rotameter)
- Positive Displacement (mechanical)
- Displays, Recorders, Controllers And Computation Units For Flow Metering Applications

FLOW MEASUREMENT

AUTOMATED PROCESS LIMITED
...innovative know-how

Flow measurement systems for all liquids, gases and steam. Suitable for industrial process control, consumption and energy management applications.

- Paddle Wheel Flowmeters
- Oval Gear Flowmeters
- Turbine Flowmeters
- Electromagnetic Flowmeters
- Vortex Flowmeters
- Ultrasonic Flowmeters
- Coriolis Flowmeters
- Thermal Mass And Calorimetric Flowmeters
- Surface Acoustic Wave (saw) Flowmeters
- Mechatronic Flowmeters
- Variable Area (rotameter) Flowmeters
- Positive Displacement (mechanical) Flowmeters
- Displays, Recorders, Controllers And Computation Units For Flow Metering Applications

Endress+Hauser
People for Process Automation

bürkert
FLUID CONTROL SYSTEMS

CS INSTRUMENTS

PADDLE WHEEL FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Ideal for neutral, aggressive and solid-free liquids depending on the version.
- Nominal diameters up to DN2500.
- Simpler installation thanks to fitting system.
- Available as inline or insertion version
- Low flow versions also available

OVAL GEAR FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- For highly viscous fluids like honey, glue or oil.
- There are versions for low flow rate application
- Electronics available for indication, monitoring, transmitting, On/Off control and batch control
- High accuracy
- Programmable outputs: one or two transistor or relay output(s) and single or dual 4-20 mA current output(s)
- Automatic-calibration: TEACH-IN, simulation of outputs signals provided without the need for real flow
- Certified Exd hazardous area versions in all sizes.
- Quadrature pulse output option & bi-directional flow.
- No need for flow conditioning (straight pipe run etc.)

TURBINE FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Up to DN500
- High accuracy & repeatability
- Low cost of ownership, wide flow range
- Rugged & compact design
- Certified Exd & I.S. hazardous area versions
- Quadrature pulse output option
- Integral or remote pre-amplifiers & flow instruments
- ±0.15% custody transfer models available

ELECTROMAGNETIC FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Insertion Versions
- Inline Versions
- Versions for water and waste water applications
- Versions for hygienic applications
- Options for compact or remote electronic transmitter
- Versions for low flow, batching, dosing and filling applications
- Versions for high temperature applications

VORTEX FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Very suitable for compressed air, gas and steam applications
- Versions for high temperature and steam applications
- Options for compact or remote electronic
- Versions with integrated temperature and pressure sensors
- Versions with integrated temperature sensor
- Versions with integrated flow computer
- Versions with integrated ultrasonic flow sensor for technical and mixed gases applications

ULTRASONIC FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Suitable for a wide variety of liquids and gases
- Inline and clamp-on versions
- Versions with integrated temperature sensor
- Versions for energy consumption measurement
- Versions for concentration measurement
- Versions for low flow measurement
- Versions with integrated vortex flow sensor for technical and mixed gases applications

CORIOLIS FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Suitable for various liquids and gases.
- Versions for life science applications
- Versions for low flow, dosing, batching and filling applications
- Versions for chemical applications
- Versions for density and viscosity measurement
- Compact and remote electronic versions
- Burkert Mass Flow Controllers (MFC) and Mass Flow Meters (MFM) for liquids

THERMAL MASS AND CALORIMETRIC FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Reliable flow measurement in liquid and gases
- Versions for measurement of flow, consumption, pressure and medium temperature
- Versions for wet gas applications
- Compact and remote electronic versions
- Inline and insertion versions are available
- Analogue, pulse, RS485 Modbus RTU, M-bus and relay outputs
- Burkert Mass Flow Controllers (MFC) and Mass Flow Meters (MFM) for gases

SURFACE ACOUSTIC WAVE (SAW) FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- FLOWave SAW flowmeter
- Type 8098
- No obstacles inside the measuring tube, compact, lightweight and low energy consumption
- Conforms to hygienic requirements, CIP/SIP compatible
- Ideal for liquids with low or no conductivity
- Digital communication, parameterisation via Communicator, display and Wi-Fi
- Optional: ATEX certification, II 3G/D

MECHATRONIC FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Optimized for water, glycol solutions, industrial oils or coolants
- Integrated temperature measurement
- Integrated with reliable back flow prevention
- Installation without additional inlet or output pipe lengths
- Red/green color change for process values
- Very short response time

VARIABLE AREA (ROTAMETER) FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Suitable for liquids (Clean Water, Fuel & Oil), air and other gases(e.g., nitrogen, hydrogen, oxygen, argon, helium).
- Versions with all-metal design for optimal performance in hazardous area
- Versions with high resistance to acids and alkalis
- Operating pressure up to 400 bar (5800 psi) for some versions
- Temperature up to 300 °C (572 °F) for some versions
- With many different process connections
- Versions with 4 – 20 mA electrical output and limit switches
- There are versions suitable for panel mounting and battery assembly
- Assorted needle valves for flow control

POSITIVE DISPLACEMENT (MECHANICAL) FLOWMETERS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Gas Meters
- Water Meters
- Oil Meters
- Process Meters (Stream Unipulse Meters)
- Batching and Totalizing Meters

DISPLAYS, RECORDERS, CONTROLLERS AND COMPUTATION UNITS FOR FLOW METERING APPLICATIONS

AUTOMATED PROCESS LIMITED
...innovative know-how

- Evaluation units for flow monitoring
- Flow indicators, displays and alarm units
- Data loggers and recorders with flowmeter functions
- Batch, dosing, filling and loading/unloading controllers
- Flow and energy computers
- Multifunction controllers with flowmeter functions
- Options for panel mounting, field and remote mounting
- Flow consumption monitoring system
- Energy management system

OUR INDUSTRIAL SOLUTIONS AND SERVICES OFFERING

AUTOMATED PROCESS LIMITED
...innovative know-how

1. Liquid/gas storage/buffer tank level measurement and control
2. Liquid/solid dosing/filling/batching systems
3. Utility liquid/gas metering and inventory systems
4. Fluid loading and unloading systems
5. Industrial safety systems
6. Energy monitoring and management systems
7. Condition monitoring and control systems
8. Instrument maintenance and calibration services
9. Process plants/machines instrumentation and control
10. Compressed air quality solution according to ISO8573
11. Compressed air/gas leak detection and control
12. Control valves system design, assembly and services
13. Industrial wireless and IoT systems
14. Motors, pumps and fans monitoring and controls
15. Electrical panel building components, accessories and services

INDUSTRY

- Food and Beverage
- Pharmaceuticals
- Cement and Chemicals
- Plastics, Printing and Packaging
- Marine, Oil & Gas
- Power and Energy

SOLUTION & SERVICE

AUTOMATED PROCESS LIMITED
...innovative know-how
Third Floor, 30 Abeokuta Expressway, Near Cement Bus Stop, Dopemu, Lagos
Telephone No: +234 01 3424691 **Mobile line:** +234 0 8055103288
Email: sales@automated-process.com **www.automated-process.com**