

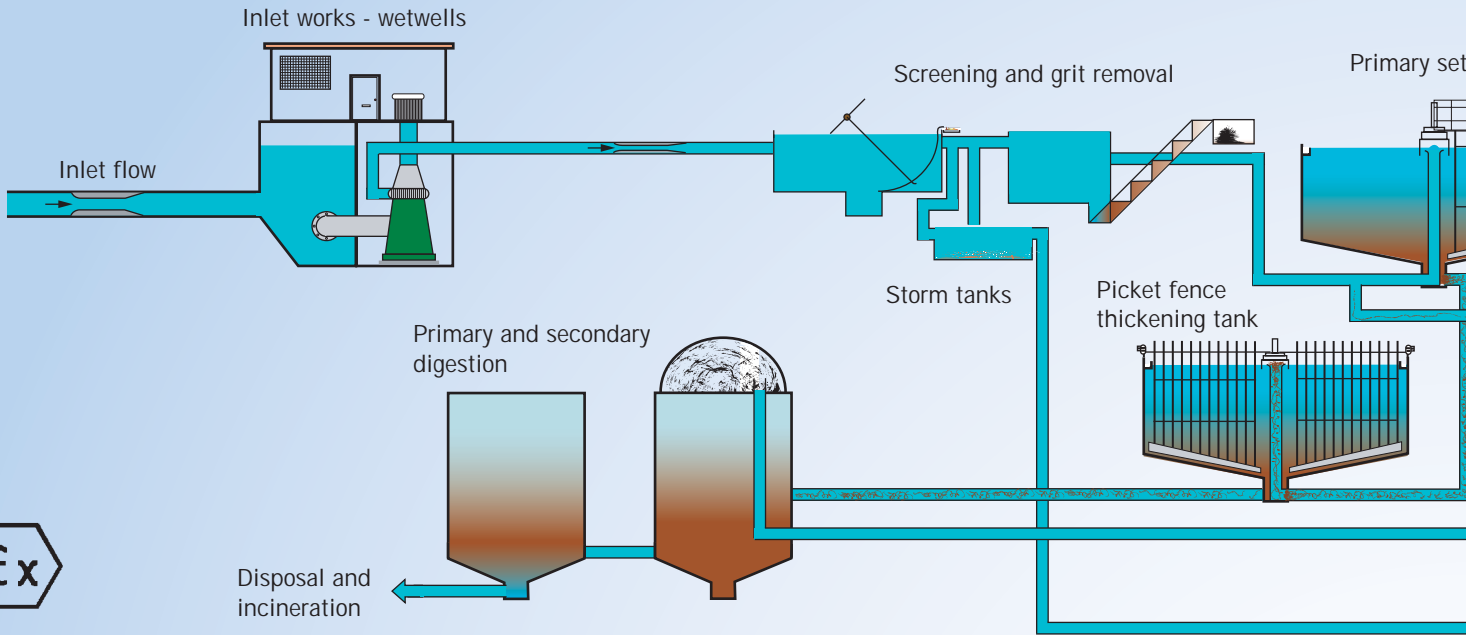
process measurement solutions



The water industry capability catalogue



Measurement and control



Inlet works

Application

Open channel flow monitoring

Product

MSP Intrinsically Safe open channel flowmeter using non-contacting ultrasonic level transmitter. Simple site set-up with standard flow structures pre-programmed. Flow measurement in accordance with EA requirements. Option of 4800 event datalogger

Penstock control

MSP Intrinsically Safe ultrasonic level system with software specially formulated for hunting penstock control.

Screen monitoring

MSP Intrinsically Safe level system to monitor level across a screen and initiate cleaning cycle as required

Full and partially filled inlet

AC600 ultrasonic time of flight clamp on flow meter suitable for pipe flow in most pipe materials up to 6m diameter, +/- 1% accuracy

Wet well, level & pump control

MSP Intrinsically Safe, ultrasonic level transmitters & control systems for automated wet well control of up to 4 pumps. All standard pumping regimes included, plus energy saving features. Option of hydrostatic pressure level transmitters.

Flow surveying

Evaluation of site process and flow measurement systems
Structural verification and certification
Complete design, installation and commissioning services
Full maintenance services available
Competitively priced, unbiased solutions for the requirements of the environmental market
Turnkey responsibility
Optimisation and management of the treatment process

Primary

Application

Digestion p

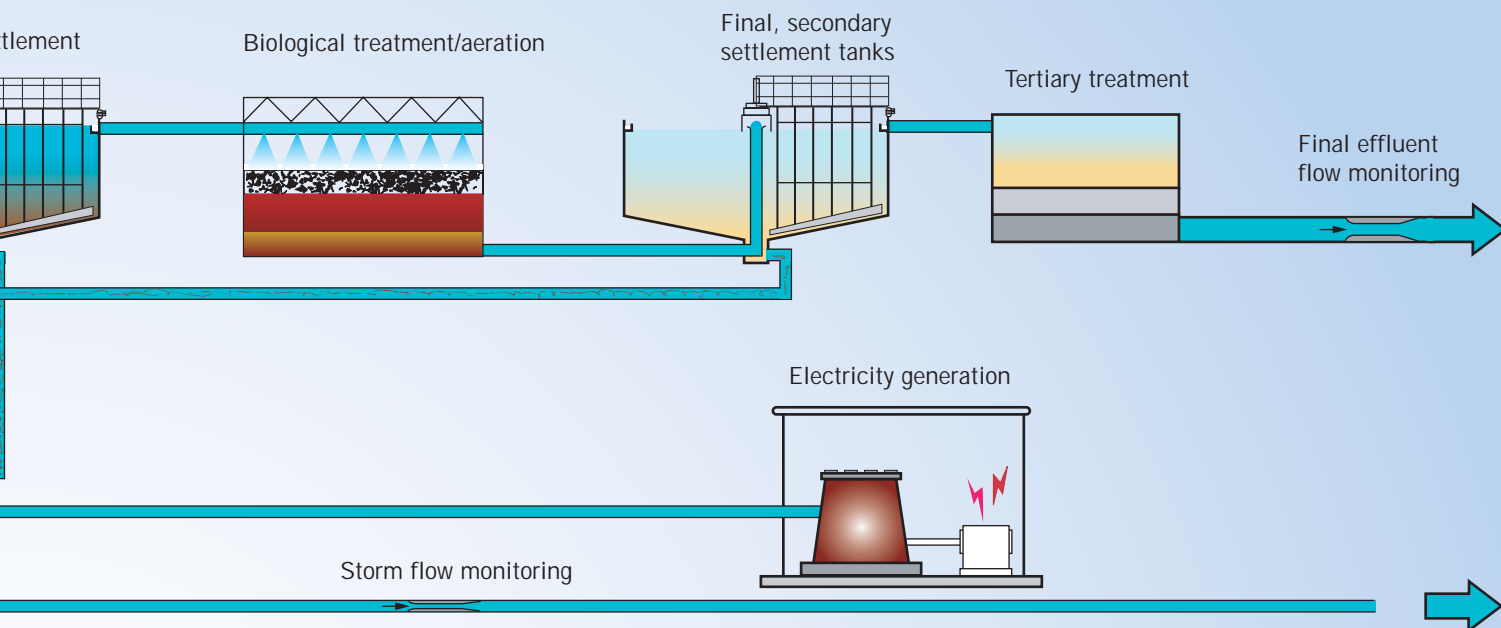
Sludge blank alarm

Auto desludging control and monitoring

Continuous

Boiler hous

... for the water industry



Settlement, thickening & digestion

Product

Plant MSP Intrinsicly Safe ultrasonic level transmitter for gas dome height measurement
 KB Series insertion pitot tube with 4301 differential pressure transmitter for gas flow measurement, 4301 pressure transmitter for gas pressure measurement
 MCU200 controller and sludge sensor for sludge seal alarm

Blanket MCU200/433 sensor system for simple sludge blanket alarm with relay output for pump control

Sludge MSM400 suspended solids monitoring system for analogue measurement of settled solids blanket density to initiate or control desludge process
 Pipe section sensor for discharge lines
 Automatic desludge control

Sludge MSL600 blanket monitoring - sonar based continuous sludge blanket monitor with a wide range of built in display, control, alarm, outputs features including 4-20mA and radio links to allow installation on rotating bridges

Plant Comprehensive range of float switches and water level Erab probes for control of water level in steam raising plant.
 Range of automation systems for the unmanned boilerhouse including water level control and Totally Dissolved Solids (TDS)
 Accurate steam flow measurement with KB Series averaging pitot tubes



Biological and final effluent treatment

Application

Aeration flow monitoring

Final settlement tank blanket monitoring

Final effluent discharge monitoring

Closed pipe flow monitoring

Final settlement tank blanket monitoring

Flow surveying

Product

4301 two wire Intelligent pressure transmitter with Solartron Mobrey's patented KB series averaging pitot tube. Excellent long term stability and accuracy, easy low cost installation

MSL600 blanket monitoring - sonar based continuous sludge blanket monitor with a wide range of built in display, control, alarm, outputs features including 4-20mA and radio links to allow installation on rotating bridges
 MCU200 for simple sludge blanket alarm with relay output options

MSP Intrinsicly Safe open channel flowmeter using non-contacting ultrasonic level transmitter. Simple site set-up with standard flow structures pre-programmed. Flow measurement in accordance with EA requirements.
 Option of 4800 event and datalogger
 AC600 full bore closed pipe time of flight non-invasive clamp-on flowmeter

AC600 non contact, non-invasive time of flight flow meter, low cost, clamp-on installation

The MSL600 is an easy to use sonar continuous sludge blanket monitor with an abundant range of built in display, control, alarm, output features including 4-20 mA.
 MCU200 for simple sludge blanket alarm with relay output option

Evaluation of site process and flow measurement systems. Structural verification and certification.
 Complete design, installation and commissioning services.

level ... pump control ... flow ... pressure ... boilers

Open channel flow measurement & control systems

Solartron Mobrey's expertise in ultrasonics and pressure has produced a new generation of level instrumentation specifically designed for the level and flow measurement requirements of the water industry.

Solartron Mobrey is a renowned authority in the manufacture and correct application of level instrumentation for open channel flow applications.

- ▶ Rugged IP68 transmitters
- ▶ 2 Wire, loop powered, 4-20mA output
- ▶ Wall and panel mounted control units display instantaneous and totalised flow values
- ▶ Standard and customised profiles to cater for all flow structures
- ▶ Process variable displayed in any engineering units
- ▶ Option of 4800 event logging on-board
- ▶ 5 Relays for control duties
- ▶ RS232 Comms options available
- ▶ Flow measurement in accordance with BS3680 Part 4

Continuous sludge blanket monitoring

Using the sonar principle, the MSL600 continuously monitors the sludge blanket interface

- ▶ Graphical display of sludge blanket
- ▶ Programmable control and alarm features
- ▶ Integral radio link
- ▶ Easy to use menu driven programming via membrane keypad
- ▶ 4-20mA output
- ▶ Self cleaning transducer



Ultrasonic level transmitters and control systems

Level transmitters and control systems for level measurement, wetwell and sump control

- ▶ 2 Wire 24V dc loop powered transmitters up to 12m range
- ▶ Reference accuracy +/- 3mm
- ▶ Resolution +/- 1.6mm
- ▶ Contents measurement displayed may be in any units, easily programmed by the customer.
- ▶ 4-20mA output
- ▶ Control systems with 5 relay outputs: Relays and current are field programmable
- ▶ Certified for use in Zone 0 hazardous areas
- ▶ Wall and panel mount control units
- ▶ Differential level for screens/filters
- ▶ HART digital comms

Suspended solids monitoring & control

With over 30 years experience Solartron Mobrey is a recognised leader in the field of ultrasonic suspended solids detection and control.

- ▶ Built-in display, control and alarm options
- ▶ Simple menu driven programming
- ▶ Local programming via a membrane key pad
- ▶ Continuous sludge blanket monitoring
- ▶ Fully configurable output functions
- ▶ Accuracy +/- 1db
- ▶ IP65 wall mounting enclosures
- ▶ 4-20mA output options
- ▶ In-tank or in-pipeline installation

level ... pump control ... flow ... pressure ... boilers



Ultrasonic flowmetering

The AC600 clamp-on flowmeter is used to determine the flowrate of liquid media in closed pipes

- ▶ Easy to install
- ▶ No pipeline downtime
- ▶ Non-intrusive, non-contact
- ▶ Suitable for pipe diameters between 10mm and 6.5m
- ▶ Up to 4 flow channels

Flow measurement of discharges

comprehensive survey and calibration in accordance with EA requirements

- ▶ Industrial and municipal discharges
- ▶ Evaluation of site process and flow measurement systems
- ▶ Detailed reporting in accordance with established company procedures
- ▶ Structural verification and certification
- ▶ Complete design, installation and commissioning services
- ▶ Full maintenance services available
- ▶ Turnkey responsibility

Averaging pitot flowmeters

The KB Series gives flow measurement of air, for aeration lane balancing

- ▶ Low permanent pressure loss resulting in significant energy savings
- ▶ Any pipe size from 13mm to 1800mm
- ▶ Accuracy +/-1% of rate maintained over a flow turndown of greater than 10 to 1
- ▶ Bi-directional flow sensing
- ▶ Steam flow monitoring on the boiler house



Hydrostatic level transmitters Series 9700

The 9700 series electronic pressure level transmitter for arduous conditions

- ▶ Flush mount ceramic sensor in tough 316SS body
- ▶ 2 Wire 24V dc loop powered
- ▶ 4-20mA output proportional to level and contents
- ▶ Option of remote non-interactive zero and span
- ▶ Wide range of mounting options includes IP68 submersible model
- ▶ Low cost installation
- ▶ Range to 100m H₂O
- ▶ Certified for use in zone 0 hazardous areas
- ▶ Flanged or threaded connections

Intelligent pressure transmitter

The 4301 is a high performance, intelligent pressure transmitter offering simple calibration and maintenance

- ▶ Wide rangeability
- ▶ Configurable outputs
- ▶ Flow totalisation
- ▶ Multi-function display
- ▶ 4-20mA output and HART digital comms
- ▶ PID control capability
- ▶ In-built flow profiles



Boiler controls

For both point and continuous level applications in the boiler house

- ▶ Wide rangeability
- ▶ Configurable outputs
- ▶ Flow totalisation
- ▶ Choice of float or probe controls

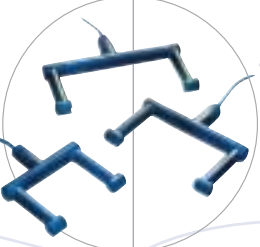


In addition to our comprehensive waste water product offering, Solartron Mobrey has a full range of instrumentation for the potable water industry. Products in the range include:-



Hydrostatic pressure & level transmitters

Tank contents transmitters and accessories for arduous conditions. The measurement solution where in-tank problems such as foaming, vapour layers and temperature gradients prohibit the use of other instrumentation.



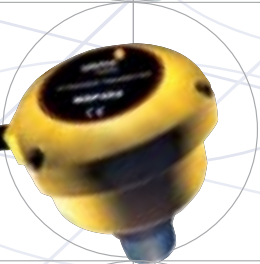
Suspended solids measurement

Suspended solids measurement on sludge discharge lines and sludge blanket detection. Special combinations of sensors are produced for specific clean water applications, including sludge blanket detectors, pump controllers and very high level alarms.



Density

Densitometers built to tackle the most difficult and demanding process and metering applications. Rugged and reliable with very low maintenance, they are the industry standard for on-line density measurement.



Smart level measurement

MSP422 2 wire 4-20mA output, ultrasonic level transmitter for tank level measurement. Widely used for reservoir level measurement and inventory control.



Solartron Mobrey products are available worldwide through subsidiary companies in Belgium, China, France, Germany, Poland, Sweden and the USA, and established distributors in all other countries. Wherever the application or the support need, you can rely upon Solartron Mobrey for a quality service.

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