

Dairy Industry

Optimisation & Control



Data Acquisition, Logging & Remote Access.

Flow: Open Channel & Full Pipe.

Concentration Measurement.

Suspended Solids & TDS.

pH, ORP & Conductivity.

Temperature.

Turbidity.

Pressure.

Level.

For:

Licence Compliance.

CIP Interface Detection.

Mass Balance Analysis.

Product Interface Detection.

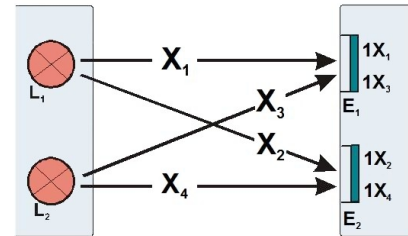
Loss Detection & Minimisation.

Online Product Quality Identification.

& many more process control improvements.

QuadBeam for Process Optimisation

- The QUADBEAM Sensors use advanced optical technology to provide stable, reliable & robust suspended solids measurements for industrial applications & harsh environments.
- Measurement ranges from 0-100 NTU up to 0-25 g/l activated sludge.
- Suitable for immersion into tanks & insertion into pipes. A variety of accessories are available for installation.
- Fully configurable electronics unit with 4-20mA output & 2 x relay outputs. Available in 1, 2, or 3 Channel versions.



MXD75

Specifications:

Measurement Input:

A mix of up to 3 Sensors. Suspended Solids Series S10, S20, S40 &/or Turbidity Series T30 &/or Electrodeless Conductivity Sensor ECS40 &/or pH & DO.

Current Output:

Up to 3 current outputs, each selectable 0-20mA or 4-20mA into 1000 ohms max, fully isolated to 2kV.

Setpoints and Control Relay:

2 change over relays per input. Fully configurable setpoints with volt free contacts for each relay. Rated at 5A at 30V DC /5A at 250V AC.

Digital Inputs:

Up to 8 separate inputs for remote activation of user defined operations. Can be configured to operate in normally open or normally closed modes.

Supply Voltage:

U - Universal 80-265V AC or DC, 15W max.

LV - 18 -36 V AC or DC, 20W max.

SD Card Interface

Measurement Units:

NTU, FTU, ppm, mg/l, g/l, %, EBC or OD can be selected & displayed.

Calibration:

Simple two point, or up to 9 point linearisations can be entered.

Ambient Operating Range:

-20°C to +50°C



S10 Sensor

Typical Application:

- Milk Fat Concentration (2HY or 3 HY)
- Product to Water Interface (2HY or 3 HY)
- Cream Product Identification (2HY or 3 HY)



Specifications:

Measuring Range:

0 to 40% Milk Fat.

Temperature Range:

0 to 85°C (Std Version)

0 to 105°C (Hi Temp Version)

Pressure:

10 Bar (HY Version)

Body Styles:

S10-IMM- Immersion Style Body.

S10-2HY- Hygienic Style Body with 2" Triclover fitting.

S10-3HY- Hygienic Style Body with 3" Triclover fitting.

Body Material:

PP (Standard Version)

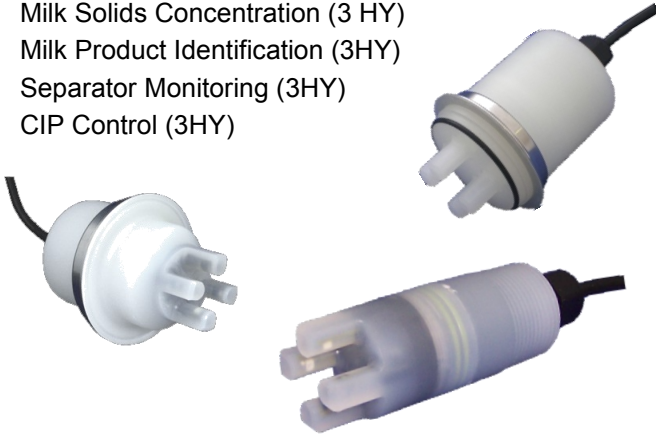
PVDF (Hi Temp Version)

QuadBeam for Process Optimisation

S20 Sensor

Typical Application:

- Product Loss Monitoring & Control (IMM)
- Product Water Interface (3 HY)
- Milk Solids Concentration (3 HY)
- Milk Product Identification (3HY)
- Separator Monitoring (3HY)
- CIP Control (3HY)



Specifications:

Measuring Range:

0 to 20% Milk Fat.

Temperature Range:

0 to 85°C (Std Version)

0 to 105°C (Hi Temp Version)

Pressure:

10 Bar (HY Version)

Body Styles:

S20-IMM- Immersion Style Body.

S20-3HY- Hygienic Style Body with 3" Triclover fitting.

S20-VN- Hygienic Style Body to fit Type N Varinline® access unit.

Body Material:

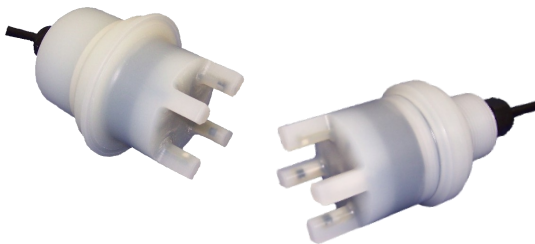
PP (Standard Version)

PVDF (Hi Temp Version)

S40 Sensor

Typical Application:

- Product breakthrough on plate heat exchangers (3HY)
- Solids content in whey (3 HY)
- Effluent monitoring / licence compliance (IMM)



Specifications:

Measuring Range:

0 to 1.5% Milk Fat.

Temperature Range:

0 to 85°C (Std Version)

0 to 105°C (Hi Temp Version)

Pressure:

10 Bar (HY Version)

Body Styles:

S40-IMM- Immersion Style Body.

S40-3HY- Hygienic Style Body with 3" Triclover fitting.

Body Material:

PP

PVDF (Hi Temp Version)

T30 Sensor

Typical Application:

- Monitoring of clarifier overflow weirs (IMM)
- Raw water inlet turbidity measurement to water treatment plants (IMM or 3 HY)
- Condensate water monitoring (IMM)
- Final outlet of effluent from DAF plants (IMM)
- Product breakthrough on plate heat exchangers (3HY)



Specifications:

Measuring Range:

0 to 50 through to 0 to 1000 NTU.

Temperature Range:

0 to 80°C

Pressure:

10 Bar (HY Version)

Body Styles:

T30-IMM- Immersion Style Body.

T30-3HY- Hygienic Style Body with 3" Triclover fitting.

Body Material:

PP with Fingers Polysulfone.

Product Phase or Interface, Solids Recovery

S20 Hygienic Suspended Solids Sensor

The S20 Sensor can quickly & accurately identify the interface between products & between flush water & product which could mean any or all of the following to your processes:

- Faster change times giving to reduced down time
- Increased yields
- Decreased waste treatment
- Decreased water consumption
- Improved quality control



Separator Control

The performance & control of separators can be improved by the installation of Quadbeam Sensors.

Positioning the Solids Sensor on the Centrate line will help with separator control ensuring performance optimisation & identifying any higher than desired solids concentrate.

A high concentration solids sensor in the Concentrate line can be calibrated against the plant lab & optimised around the concentration target providing accurate & immediate information of what is happening inline. By feeding the sensor output data into a controller separator feed rate can be optimised.

Benefits can include increased yield, reduced waste & improved product quality.

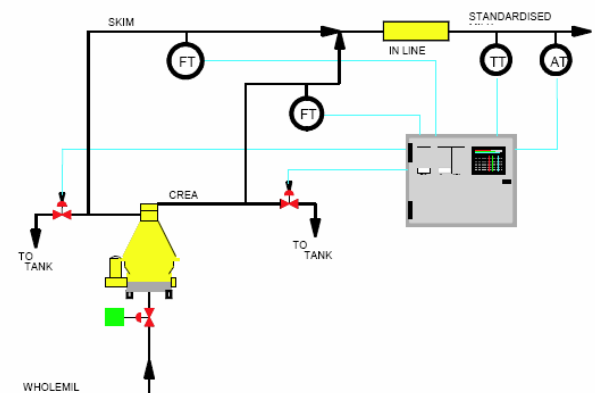


Milk Standardisation

The BASK milk standardising control system uses an in-line continuously monitoring instrument that provides an accurate measurement for controlling the fat concentration in milk mixtures.

System Features & Benefits:

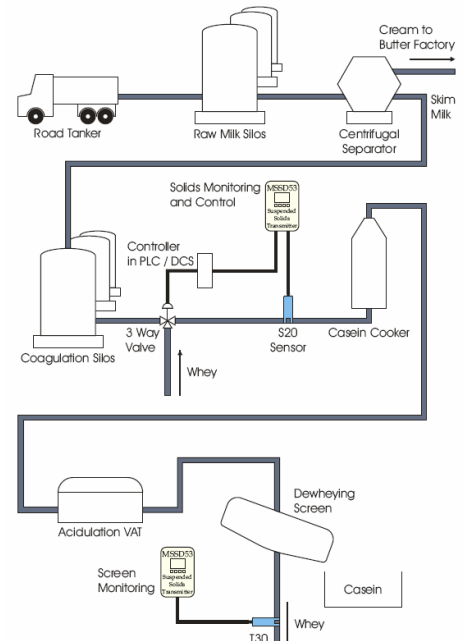
- Calibrated once during commission
- No sample lines required, so no loss of product
- Samples at a rate of once/second, therefore minimal dead time
- No special cleaning chemicals, just CIP in-line
- Zero maintenance, no moving parts
- No service contract required
- Accurate to better than +/- 0.05% fat (+/- 0.02% typical)
- Accurate to better than +/- 0.05% protein (+/- 0.02% typical)
- Simple, single standardizing adjustment
- Will integrate with any process



Casein Manufacture

A S20 sensor is installed in the common line from the silos to the cooker, connected to a MXD75 transmitter, gives a 4-20mA signal proportional to the curd density. A controller (PID algorithm) can use this signal to adjust a 3 way valve to control the whey addition & hence maintain uniform curd density.

A T30 sensor & a MXD75 transmitter can monitor the whey from the dewheying screen for casein solids to monitor the fines level. Quadbeam sensors have also been used to control the quantity of solids feeding the dewatering decanters to stop the decanters from being overloaded. The S20 sensor is mounted in the feed line to the decanter & a PID loop controls the level of solids via a 3 way valve where whey is introduced to keep the solids level constant.



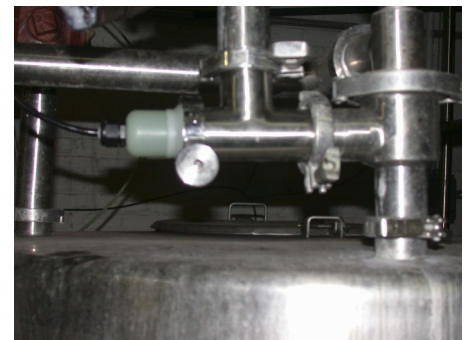
Wheys Fines Monitoring & Control

Another application in casein manufacture is to monitor the whey from the dewheying screen for casein solids to monitor the fines level. An increase in fines is an indication of problems in the previous stages. This application requires a T30 sensor & a MSSD53 Transmitter.

CIP Return

The inclusion of a S40-3HY Suspended Solids Sensor in the line means only the chemicals with the determined level of solids are going to waste.

- The ration metric system of measuring the alternating NIR light means they self compensate for any fouling on the sensor head, or as the electronics age , providing long term accuracy & repeatability
- The body that is exposed to the liquid is machined from a solid pieces of material meaning there are no lenses to leak, giving Sensor reliability
- An operating temperature of up to 85°C allows them to operate in the elevated temperatures of a CIP environment
- The High Temperature sensors can operate up to 105°C
- The simple user interface of the Transmitter means the unit is calibrated against the liquid the actual process, not a predetermined factory setting



Condensate Return

Break through detection for plate heat exchangers & other sources of contamination to heating & cooling water, can be monitored on-line to provide early warning of problems.

The T30-3HY sensor with the MXD75 transmitter can provide a 4-20 mA signal to a PLC or DCS, or it can operate as a stand alone system to generate an alarm in the event of a problem.

Product Loss Monitoring

Quadbeam Suspended Solids Sensors provide accurate, reliable & repeatable monitoring that can be used by plant managers as part of their performance improvement programs by reducing process waste, increasing yields & decreasing cost of waste disposal.

Continuous monitoring of drains with data displayed directly in the Control Room immediately alerts operators to unexpected loss of milk or other dairy product with a component of suspended solids. Trending analysis of the same data can also lead operators to find minor leaks, for example worn valve seats or hatch seals.

Quadbeam Sensors are designed to cope with the changing temperature providing a very reliable instrument. Four beams of attenuating light is used ratio-metrically to ensure the sensor self compensates as it becomes fouled or ages ensuring an accurate & repeatable signal.

Installation

Install the Quadbeam S20 Sensor into the plant drain, preferably where flow is monitored as well. In situations where there are exposed flumes or weirs use a S20-IMM. For Pipe Installation a S20-3HY can be used.

Where there is no full pipe or exposed flume or weir available it is common to continuously pump a sample from the drain into a manifold where a range of measurements can be made including Solids, Conductivity & pH.

Alarms can be set on the transmitter relays or within the plant system. Because of the Quadbeam's ratio-metric four beam method of measurement the instrument self compensates for variation in temperature & fouling of the fingers, providing an accurate & repeatable signal. It should not require regular cleaning.

The Sensors' transmitter provides a 4-20mA output to connect to a PLC or DCS.

Different plants set up there systems according to their standards & targets. They typically show the information as solids & flow, some as one output on a chart some as separate with a combined additional trend.

Benefits

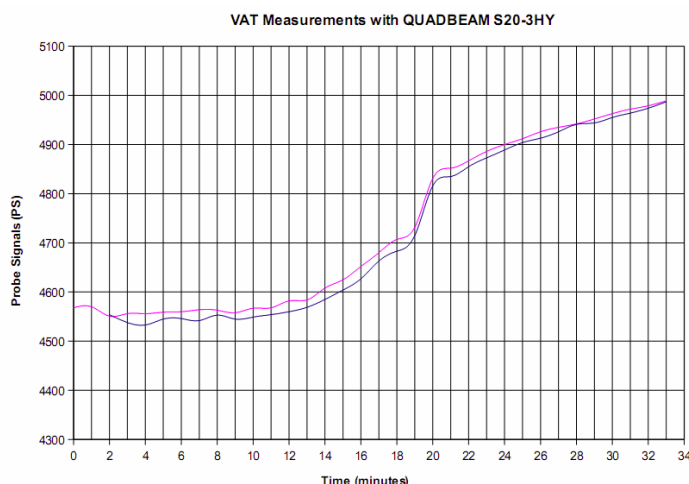
This type of monitoring is now standard in many advanced Dairy processing plants. Large savings have been made by plants catching small leaking valves or pumps long before maintenance checks, right through to early warning of large comprehensive product spills. Savings can easily be tens of thousands of dollars in just one event. Product Loss is also often used as a Key Performance Indicator & linked to performance in many plants.

Cheese Cutting / Coagulation

Quadbeam S20 Suspended Solids Sensor

The Quadbeam S20 sensor can detect the change in the optical properties of the curd & therefore be used as a tool to repeatedly identify a predetermined point in which to begin cutting.

The S20 Sensor & transmitter provide a 4-20mA signal that can be fed into a PCL or DCS. The signal reflects the progression in the coagulation of the curd, giving a repeatable readout of the state of the coagulation process.



Microwave Concentration Measurement

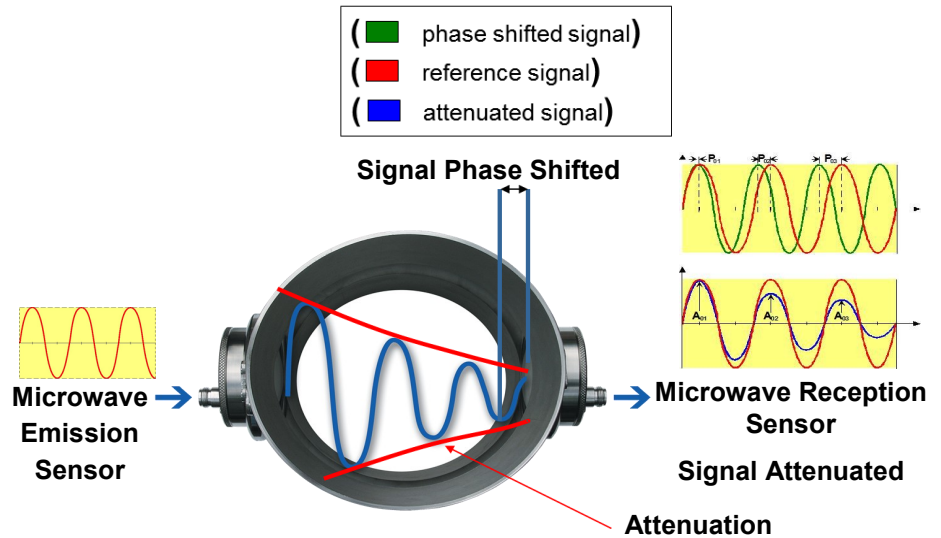
The Microwave Principle

Phase Shift

Decreased speed of propagation after the microwave signal has transmitted the medium.

Attenuation

Decreased amplitude after the microwave signal has transmitted the medium



Attenuation & phase shift related to the water content or dry substance

TS - Measurement of Cream Cheese

The microwave measurement system evaluates the concentration of the whole cross section between the sensors, thus, the actual process is measured representative & with high accuracy.

Installed after the separator, centrifuge or ultra-filtration plant & measures the dry matter in the cream cheese end product with a high reliability.

The signal can be used as quality control or directly for controlling the separation process.



ProMtec (Microwave Technology)

- Microwave measurement
- Connection via coaxial cables (max. 150m)
- Isolated 4-20mA output
- Up to 10 Bar pressure rating



Yoghurt Production

Increase Yields, Improve Machine Uptime, Reduce Operator Intervention, Improve Product Consistency, Reduce losses.

Quadbeam Technologies Sensors are used in a range of applications at yoghurt production plants providing substantial process & financial benefits.

Interface Control

Quadbeam's sensors are fast and repeatable, making them an outstanding instrument to accurately control water/product interface. The self compensating sensor means it is possible to detect the optimal point of interface every time. Customers' have claimed \$1000s of dollars saving a day by moving away from time and flow calculations to actual solids concentration control.



S20-3HY



MXD73

Total Solids Correlation

Customers have found a strong relationship between suspended solids and total solids allowing them to get actual real time total solids concentration measurement.

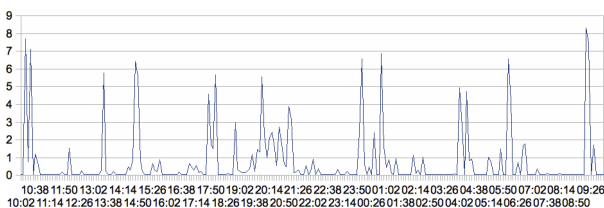
Solids Concentration monitoring also alerts any sudden drop in solids, as an example water or air slugs that have been caught in manifolds between tanks or silo switching.

Separator Control

From full automation with the QuadBask Controller to semi automation or continuous Solids Concentration Monitoring, Quadbeam Sensors help save considerable dollars in the production of Strained Yoghurt.

Sensors are mounted on one or all of the;

- Feed Line
- Product Line
- Return or Waste Line
- Whey Line



Loss Monitoring

With Quadbeam sensors positioned in drains, coupled with flow measurement, calculations are made to provide live monitoring of losses. Alarms can be set to alert to significant events.

Live monitoring also alerts Waste Treatment to allow inflow to be switched to a "calamity tank", taking significant spikes in solids concentration to Waste Treatment away to be feed back in at a controlled rate later.

Solids Carry Over

A S40 Sensor in the whey line of a Greek yoghurt separator will alert operators to suspended solids (protein & fat) carry over highlighting losses, nozzle plugging or other process control issues.



Sanitary In-Line Measurement

Sanitary Vibration Fork Level Switch

- IP69K Stainless Steel M12 electrical connection
- Power 10-35Vdc, SUS316L housing
- Suitable for liquid S.G. $>0.7\text{g/cm}^3$, viscosity between 1-10000cst
- Working temperature up to 150°C
- High/Low Fail-safe mode protection system
- Magnetic testing function
- High/Low level detection of any liquids



SCS Sanitary Tuning Fork



SCS16X

Sanitary Capacitance Level Switch

- No moving parts
- Maintenance free



SAS Sanitary Capacitance Level Switch

Sanitary RF Admittance Level Transmitter

- LCD displayed value is visible from the top of the housing
- Power Supply 12-35Vdc
- Detection accuracy is free from influence of temperature & pressure changes



EBS RF Sanitary Admittance Level Transmitter

Sanitary Thermal Dispersion Flow Switch

- No moving parts
- Maintenance free



SPS Sanitary Thermal Dispersion Flow Switch



GPS Sanitary Thermal Probe

Sanitary Magnetostrictive Level Transmitter

- High temperature disinfection (125°C)
- High pressure cleaning
- CIP cleaning system
- SIP disinfection system
- Pasteurization system
- Pharmaceutical equipment
- With filling & level control
- Temperature measurement

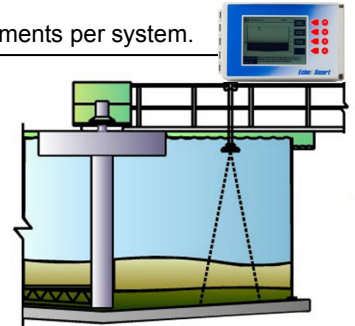


EGS Sanitary Magnetostrictive Level Transmitter

Thickener Bed Level Detection & Dispersion Layer

- Installation: Bridge mounted with wiper sensor
- Use: Monitor & control
- Range: 0.5 to 10m
- Up to 16 sensors per system
- Wired & wireless field network (RS-485 & ethernet options available)
- Benefits: Early warning of process upset
Improve management of flocculant dosing
Prevent rake stalling
More consistent underflow solids concentration

Up to 16 Measurements per system.



In-Line Turbidity & Suspended Solids Meters With Quadbeam Auto-Compensation Principle

- Suitable for immersion into tanks & insertion into pipes. A variety of accessories are available for installation.
- Fully configurable electronics unit with 4-20mA output & 2x relay outputs. Available in 1, 2 or 3 Channel versions.
- Options for automatic in-line cleaning in place. With inputs for Turbidity, Suspended Solids, pH, ORP Conductivity (TDS) & DO.

Flocculant Dosing Control: Feed

- Adjust dose rate of flocculant for changes to feed concentration to DAF plants, Clarifiers, Thickeners, Centrifuges & Filters.
- Combine with flow rate to calculate solids load.

Clarifier: Overflow

- Installation: T30 Sensor, immersion from bridge on thickener with Auto Air Blast cleaning.
- Use: Alarm, performance monitoring.
- Typical Range: 0 - 1000 NTU
- Benefits: Cleaner water circuit, reduced chemical costs, reduced



De-Watering: Centrifuges & Filters

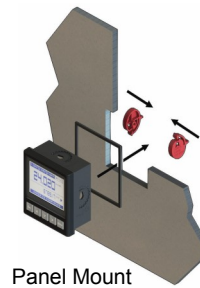
- Installation: T30 or S40 Sensor, in filter / centrate pipe.
- Use: Alarm, performance monitoring
- Typical Range: 0 - 0.3%

Environmental: Licence Compliance

- Installation: T30 Sensor with flow in open channel.
- Use: Recording & alarming
- Typical Range: 0 - 50 NTU
- Benefits: Environmental compliance certificate.

FLS ChemX - pH/ORP & Conductivity Controller

- 240 Vac, or 24 Vdc/ac
- 2 x 4-20mA - (Recording, Control or Temperature)
- 2 x Relay + 2 x SSR
- Panel or Wall Mount available, IP 67
- Manual or auto temperature compensation Sensor
 - ❖ Alarm, Control On/Off, Pulse Width Modulation or Frequency
 - ❖ Direct reading of raw probe response for diagnostic purpose & probe condition
 - ❖ Auto calibration routine
 - ❖ Simulating mode

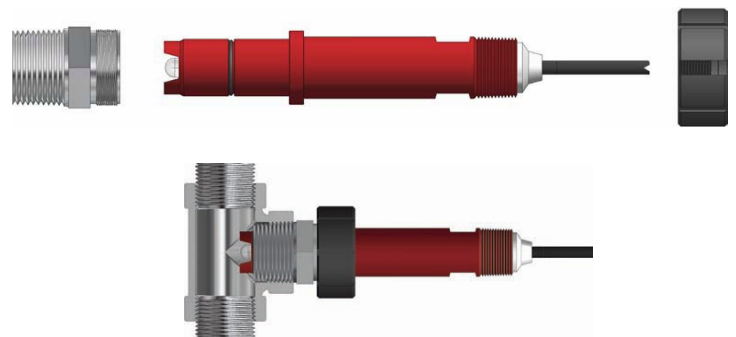


Tip Types



Barben Long Life pH & ORP Sensor

- Patented Axial Ion Path™ reference technology increases electrode lifespan in harsh application
- Quick & easy remove & install for checking & calibration
- Proprietary low-noise, high temperature signal cable
- Longer lasting performance
- Minimal maintenance
- Options for Auto Cleaning In-Line
- Immersion or in-line installation
- Flat Tip simplifies cleaning
- With temperature compensation
- Poison resistant
- pH range: 1-13pH
- Temp range: 0-100°C
- Max. pressure: 150psig (10 bar or 1000kpag)
- For ORP; Platinum, Gold or Silver Cyanide solid bullet
- Universal compatible with all manufacturer's analysers
- Sensor insertion depth from 2.6 to 12 inches (measured rib to tip of sensor)



Chlorine & Chlorine Dioxide

Chlorination



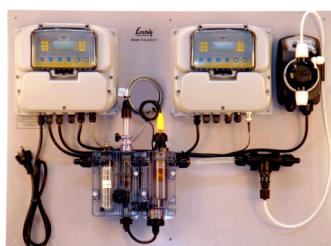
Chlorine Dosing & pH Correction with Turbidity Monitoring



Chlorine Dioxide Dosing, pH Neutralisation Turbidity Monitoring with Recording & Data Logging



Chlorine Dosing & pH Correction with Data Logging



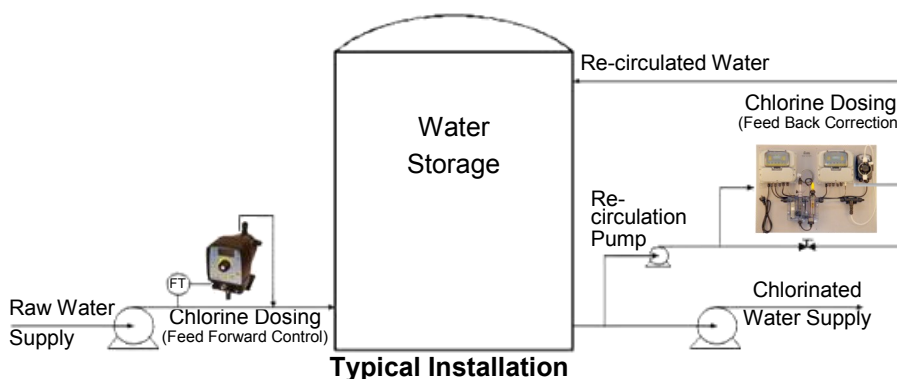
Chlorine Dosing & pH Monitoring



Chlorine Dosing with Self Cleaning Pre-Filter



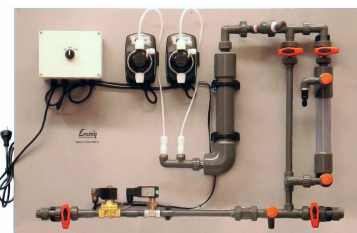
Chlorine Dosing & pH with Self Cleaning Pre-Filter



Chlorine Dioxide Generators



Basic Batch Tank System



Direct Dilution



Batch Tank with Pump Isolation & Relief



Direct Dilution with Feedback Control & Data Logging

Chemical Dosing

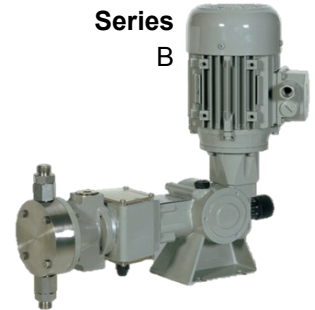
Solenoid & Motor Driven Dosing Pumps

- Solenoid
- Hydraulic diaphragm
- Mechanical diaphragm
- Piston
- Multi - head pumps
- Polyethylene tanks
- Safety relief valve & back pressure valves
- Injection valves & foot valves
- Pulsation dampeners
- Calibration cylinders
- Dosing rate: up to 3800 l/hr

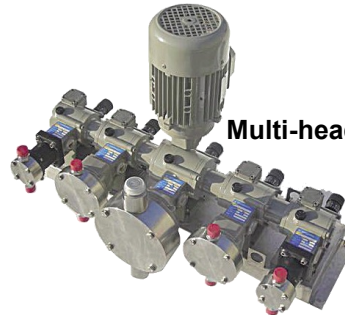
Series SD



Series B



Multi-head



Series A



Series D



Series BR



Series SDI



HC897



HC997



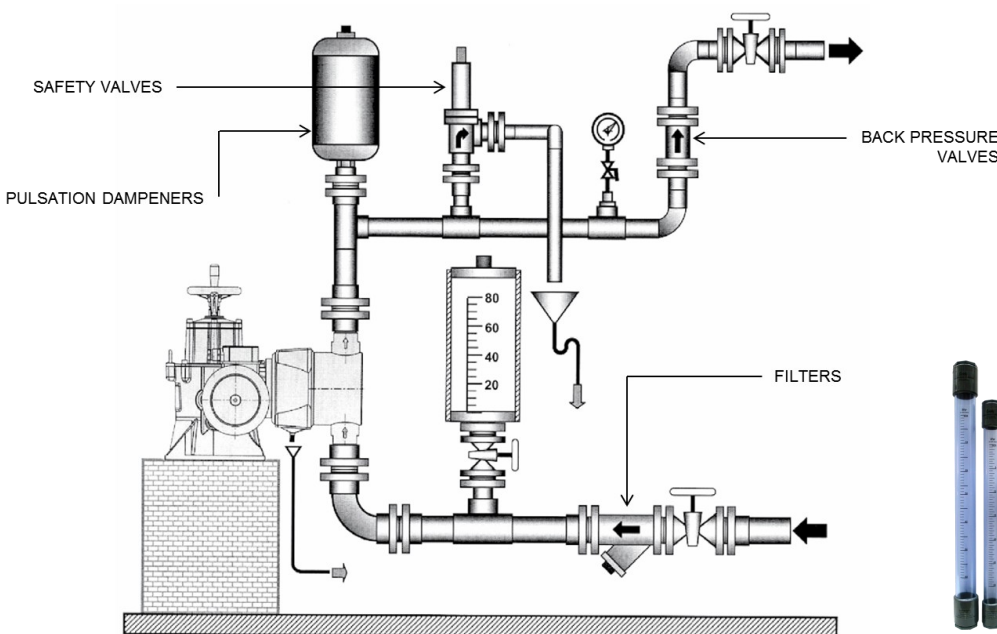
HC201



DRV



DMT / DEM



Accessories

Online Turbidimeter

Model MicroTOL

Designed for filtered water, raw water, waste water final effluent & industrial applications.

- Nephelometry measurement principal.
- Ranges 0 – 100 NTU & 0-1000 NTU.
- Resolution down to 0.001 NTU.
- Fast response & easy calibration.
- Accurate, reliable & cost effective.
- With ultrasonic cleaning

Simple Calibration



Ultrasonic Cleaning



Dissolved Oxygen

- Maintenance free DO measurement
- Using the revolutionary fluorescence principle
- Long term stability now enables reliable control
- Direct insertion into aeration tank.
- No need for floats or other costly mechanisms.



MicroTPW / TPI – Instruments.

Includes carrying case, one set of calibration standards, indexing rings, 4AAA alkaline batteries operator's manual & measuring cuvettes with light shield caps.

- MicroTPW Portable Turbidimeter (White Light) 0-1,100 NTU
- MicroTPI Portable Turbidimeter (IR) 0-1,100 NTU



Micro100 – Instruments.

Includes a complete set of calibration standards (0.02, 10 & 1000 NTU), two measuring cuvettes with light shield cap & operator's manual.

- Micro 100 WL Laboratory Turbidimeter, 0-1000 NTU, (White Light).
- Micro 100 IR Laboratory Turbidimeter, 0-1000 NTU, (IR Light).



DRT – 15CE – Instruments.

Includes: battery charger, sample cuvette w/light shield cap, 0.2 NTU reference standard, recorder output plug & instruction manual.

- DRT - 15CE Portable Turbidimeter 0-1000 NTU (White Light)



Data Recorder SRD-99 & CMC-99

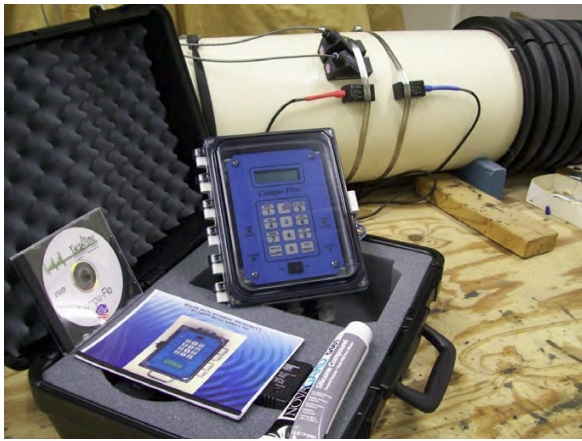
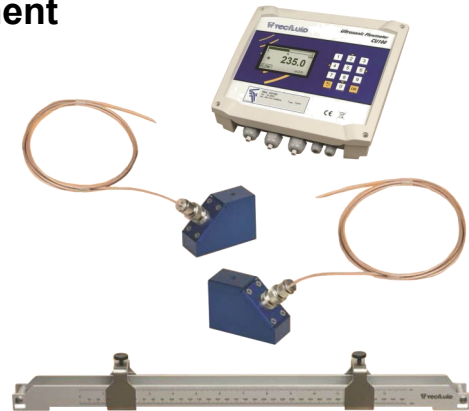
Available as portable or fixed installation, for monitoring & logging multiple water quality & environmental parameters. A variety of remote access & alarm options are available.



Ultrasonic Flow Meters

Non-Intrusive (Clamp On) Pipe Flow Measurement

- Clamp On Doppler for slurries
- Clamp On Transit Time for clean liquids
- Portable & Permanent instruments
- Pipe sizes from 80 - 2000mm



Open Channel Flow Measurement

- Bi-directional flow measurement for forward & reverse velocities from 10 mm/S up to 5m/S.
- Powerful, easy to use PC software simplifies flowmeter commissioning
- Sophisticated ultrasound processing ignores spurious signals
- Ultrasound signal quality monitor confirms measurement integrity
- High capacity data logger for permanent records of level, velocity & flow rate.
- Opto-isolated switch outputs for alarms & controls
- Optional 4:20 mA outputs for telemetry & control systems
- Optional modem for dial-up access & internet connectivity



Flow - General



Switch

Measurement Principles

- Thermal Dispersion
- Paddle Wheel
- Sprung Paddle
- Free Paddle
- Variable Area (Rotameter)
- Impeller
- Sprung Float
- Electromagnetic

Brands

- Tecfluid
- FineTek
- FlowLine
- Industrie Technik
- Meister Stromungstechnik
- Intek Rheotherm

Transmitters

Measurement Principles

- Thermal Dispersion
- Paddle Wheel
- Variable Area
- Impeller
- Sprung Float
- Electromagnetic
- Ultrasonic (T/T & Doppler)
- Turbine
- Rotary Piston (PD)

Brands

- Tecfluid
- FineTek
- FlowLine
- Mainstream
- Industrie Technik
- Meister Stromungstechnik

Indication (Gauges)

Measurement Principles

- Paddle Wheel
- Variable Area
- Impeller
- Sprung Float

Brands

- Tecfluid
- Meister Stromungstechnik
- Kytola
- FIP / FLS

Level - Liquid



Switch

Measurement Principles

- Magnetic Float
- Side Float
- Rotary Paddle
- Buoyancy
- Capacitance
- RF Admittance
- Ultrasonic
- Cable Float
- Vibrating Fork
- Conductive
- Optical

Brands

- Tecfluid
- FineTek
- FlowLine
- MAC3

Transmitters

Measurement Principles

- Magnetic Float
- Guided & Non-Guided Radar
- Magnetostrictive
- Buoyancy
- Capacitance
- Ultrasonic
- Hydrostatic (Pressure)

Brands

- Tecfluid
- FineTek
- FlowLine
- MAC3

Gauges

Measurement Principles

- By-Pass Gauges
- Sight Glasses (PVC)
- Buoyancy

Brands

- Emteq
- Tecfluid
- FineTek



Switches

Measurement Principles

Bellows
Bourdon Tube
Diaphragm
Capillary
Bi-Metal

Brands

Regulateurs Georjin
FineTek
Industrie Technik

Transmitters

Measurement Principles

Piezoresistive
Thermocouple
RTD (PT100/PT1000)

Brands

Regulateurs Georjin
FineTek
MAC3
Rhomberg

Gauges

Measurement Principles

Bellows
Bourdon Tube
Diaphragm
Capillary
Bi-Metal

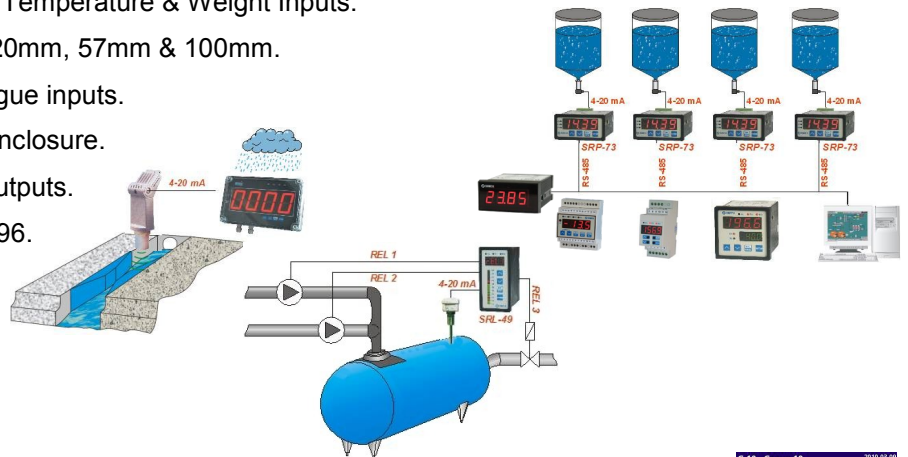
Brands

Regulateurs Georjin
Rhomberg
Teltherm

Display, Controllers & Loggers

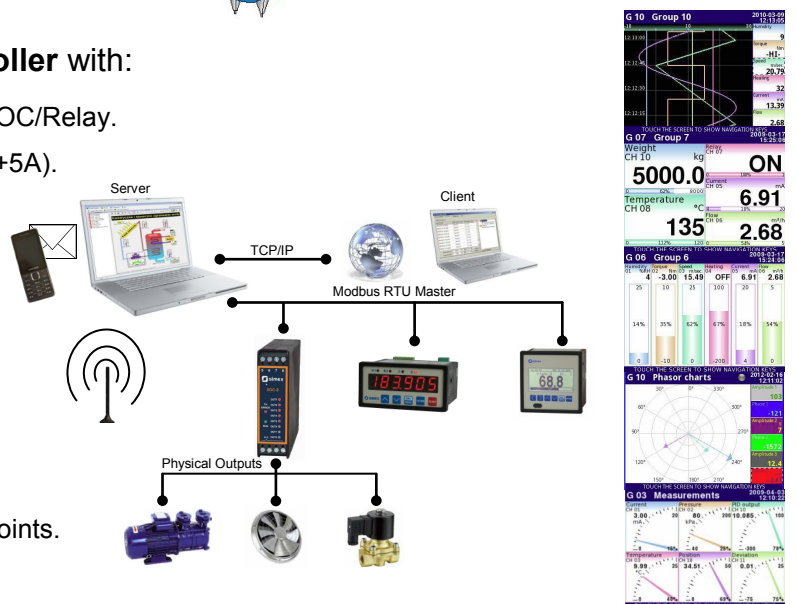
Single Channel Displays & Controllers

- Current (0/4-20mA), Pulse, Frequency, Temperature & Weight Inputs.
- Small & Large Displays: 9mm, 13mm, 20mm, 57mm & 100mm.
- Rate, Total or Both from pulse or analogue inputs.
- Panel, DIN Rail & Wall Mount (IP-65) Enclosure.
- Display Only or with Alarm & Control Outputs.
- Panel Sizes: 72x36, 96x48, 72x72, 96x96.
- Modbus (RS-485) Masters & Slaves.
- Batch Controllers & Counters
- Bar Graph Display



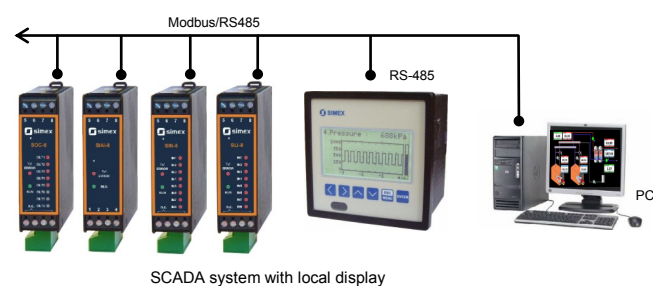
Multichannel Display, Recorder & Controller with:

- Inputs: Current (0/4-20mA), V, mV, TC, RTD, R, OC/Relay.
- Outputs: Current (0/4-20mA), V, SSR, Relay (1A+5A).
- Touchscreen Colour Display
- Ethernet Options.
- Modbus RTU (Master & Slave).
- USB Host (memory stick).
- Remote Access Options.
- Option for data logging.
- Control Modes: PID, PWM, On/Off & Frequency, Batch, Feedforward/Feedback, Remote Set Points.



Power Supplies & Signal Conditioners

- Modbus I/O Modules, Slaves for Input & Outputs.
- 12/24 Vdc Power Supplies, DIN Rail.
- Transmitters: DIN Rail & Puck. Temperature, Load Cells, mV, V.
- 4-20mA Signal Isolators.
- Semi - SCADA Software.
- Convertors: USB/RS485 & USB/RS232



Ex Barriers

- Rail Mount
- Back Plane Mount
- Galvanic Isolators
- Zener Barriers
- IECEX Certified
- SIL2 Capability
- HART Compatible



About PCS



For more than twenty years Process Control Services (PCS) have provided Measurement & Dosing equipment to an extensive range of industries, varying in size, throughout Australasia.

Continuous growth over the past twenty years driven predominately through word of mouth referrals has led to PCS achieving an outstanding market profile. With offices in Sydney, Brisbane and Melbourne combined with a network of over twenty regional sales outlets PCS is able to deliver top quality international brands at very competitive prices, backed by an outstanding level of customer service throughout Australia and New Zealand.

Process Control Services (PCS) are renowned for their industry expertise together with their extensive choice and range of equipment. Their highly trained engineers are able to offer extraordinary levels of expert service and advice through combining their extensive product knowledge with industry experience that extends in many cases beyond the life of the company.

We supply Flow, Level, Pressure, Temperature and Specialty Measurement Equipment and Chemical Dosing Equipment for monitoring, control & optimisation of industrial processes.

If you have a problem, call us, we have the solution.....

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