Instruments for Process Industry

Your partner for measuring technology and automation

- Fill level measurement
- Water level measurement
- Pressure measurement
- Temperature measurement
- Flow measurement
- Vizualisation devices
- Sensoric
- Signal converter

ACS-CONTROL-SYSTEM
knowhow with system

Your partner for measuring technology and automation
Your partner for measuring technology
reliable and competent - over 25 years

ACS-CONTROL-SYSTEM
✓ medium-sized enterprises
✓ development and production of level, pressure, temperature and flow sensors
✓ sensors for the most diverse requirements under the most extreme conditions
✓ optimal solutions
✓ innovative measuring systems

Your Team of ACS
✓ extensive „know how“
✓ years of experience
✓ continuous optimization
We would be pleased to put our expertise at your service in order to secure your economic success together with you.

Made in Germany
✓ production exclusively in Germany
✓ german or european suppliers
✓ up to 90% of the production material is verifiable from Germany
✓ fastest availability and best quality

Service
✓ ISO 9001 certification
✓ installation and commissioning
✓ project planning
✓ training
✓ maintenance
✓ factory calibration and factory repair
✓ maintenance and customer service
✓ equipment rental
✓ certificates and works certificates
✓ online service and technical consulting

Everything from one source
✓ all the expertise under one roof
✓ prototyping of software and hardware to the final production
Customised solutions for measurement
Development to customer specifications

OEM-Service
- customer-specific wishes
- development and production of individual sensors
- OEM series production
- development, design, embedded software development plus implementation of digital interface
- transparency and consistently high quality through standardized process
- development competence and production under one roof
- product development under real production conditions
- customer identification

Product development process
- Request Customer-specific specifications
- Idea exchange, Feasibility analysis
- Tender and performance specification
- Product development / Prototype
- Certifications
- Product acceptance
- Serial production

Customer-specific solutions

Everything from one source
Hydrocont® Sonicont® Vibrocont® Silocont® Capcont® Mycrocont®

Hydrostatic fill level measurement
✓ reliable and robust measurement
✓ waste water or food industries:
  available in various models and
  process connections

Ultrasonic filling level measurement
✓ non-contact measurement of liquids and solids
✓ adaptable to the most complex container shapes and measurement tasks

Radar measurement
✓ dust and steam independent level measurement of solid materials and liquids

Conductive limit value detection
✓ limit value detection or pump control in conductive liquids

Vibration limit switch for liquids and solids
✓ Reliable, mechanic free limit switches

Rotary wing limit switch
✓ classical limit switches for solids used in many applications

Capacitive limit switch
✓ simple and economical limit switch for liquids and solids

ACS fill level measurement devices in use
Hydrocont® D50 for hydrostatic filling level measurement in milk tanks. Its anti-condensation system makes this sensor particularly suitable for use in this humid environment conditioned by condensation water.
ACS water level measurement devices in use

Hydrolog® featuring the GSM module is used in rivers at large German power plants for water level logging and alarming and for lake water level and ground water measurement. The sensor is used for water level logging by competent authorities and will warn the persons in charge by SMS of high water using the GSM module.

Battery-operated water level sensor
✓ for autarkic recording and saving of measured values

Bluetooth interface converter
✓ Wireless data collection and configuration

Remote data transmission
✓ with GSM/GPRS-module
✓ via data transmission to one or more computers
✓ Option: Transfer via GPRS (General Packet Radio Service) directly to an FTP server - worldwide, self-sufficient retrieval

GSM module alarm
✓ alarms you by SMS of high and low water and the exceeding of upper and lower temperature limits

Rain overflow measurement
✓ water level measuring systems and data processing specifically for the monitoring and logging of rainwater
✓ calculation of the values for rainwater basin recording the values for basin relief, basin relief and sliding min and max values

Rain overflow calculation for measuring point xxx

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Precont®

Standard pressure sensors
- with analogue and switching output
- in 2-wire or 3-wire technology
- various options: strain gauge measuring elements, capacitive ceramic measuring sensors, with or without display, synthetic connector housings, stainless steel terminal boxes
- all customary process connections

Ex applications
- gas applications (ex area 0/1) and dust applications (ex area 20/21)

High temperature pressure sensors
- Processes safely monitored by measuring technology up to 370°C

Hygienic and pharmaceutical applications
- special pressure sensors with EHEDG-compliant process connections, material certifications and highest accuracy

Pressure switches
- 3-key operation with tactile feedback
- fast and easy startup and operation

Differential pressure sensors
- for smallest differential pressures and highest accuracy

OEM sensors
- to customer specifications

ACS pressure measurement devices in use

Precont® D40 featuring AKS used in a paper mill. High environmental temperatures combined with high air humidity and exposure to dirt have caused a high failure rate of conventional pressure sensors. Using the Precont D40, the efficiency of pressure sensors has increased considerably.
ACS temperature measurement devices in use
PTV sensor used by a well-known pharmaceutical company in one of their pipelines. Fast, dead-space free installation without heat-conductive paste makes the sensor ideal for this type of application. This sensor has been designed for easy validation, another customer requirement.
Flowcont® Fluxicount

**Flange versions, Flowcont F**
- for applications in water and waste water industries
- various models up to DN1000
- Ex versions
- compact and separate units available

**Hygienic versions, Flowcont L**
- especially for the food industry with hygienic process connections and stainless steel housing

**Flow measurement for partially filled pipes, Flowcont TGF**
- for use in full or partially filled pipelines

**Mass flow meter**
- with non-conductive media

**Floating object flow meter**
- classical mechanical flow measurement method
- with metal or glass cones
- indicator with limit contacts as well as with analogue outputs

**Consumption counter for compressed air and gases**
- calorimetric measurement principle
- inclusive measuring pipe line or screw-on pipe diameters up to DN300

**Flow meter**
- robust and hygienically optimized
- measuring ranges from 0.03 to 3 m / s
- monitoring of cooling circuits, lubrication circuits, filters and sieves, pumps, turbines, compressors and heat exchangers
- dry running protection for pumps

**ACS flow measurement devices in use**
Flowcont® F flange version used for flow measurement and entry of sludge quantities in a wastewater treatment plant.
Flowgas TMS 200 in use.
We offer a variety of display, evaluation and registration devices

### Display devices
- standard panels
- bargraph display devices
- multifunctional displays
- evaluation devices with multiple channels and limit values

### Digital screen recorder
- paperless recording devices
- for analogue and digital input channels
- with calculation functions and alarm
- ideal devices for record keeping and documentation for authorities
- modem port, Ethernet, USB, web server

### Industrial and process controller
- universal control devices
- for temperature, furnace, turbine, frequency converter, pressure and ratio control for dosing, mixing, etc.

### International specialists
- national and international sales partners
- various indicators and transmitters according to your wishes

ACS display devices in use

Process display DPA in a cabinet of a sewage plant and Regicont recorder in an operation panel in a municipal utility company.

DPA are used for fast visual illustration of the measured values by means of bargraph and freely adjustable digital display, whereas Regicents are used to record the measured values.

**Visualization**

**Flow measurement** – uncomplicated and easy
A good isolation amplifier becomes noticeable by not being noticeable at all.

**Isolation amplifier active**
- preset isolation amplifier
- multifunction amplifier with all power supply and transmitter supply
- as one or two-channel devices

**Isolation amplifier passive**
- for safe, galvanic isolation of analogue circuits without auxiliary power

**Ex isolation amplifier**
- isolation amplifiers used to supply sensors in Ex areas with galvanically isolated output signals

**Isolation barrier**
- Ex isolation barriers for various applications

**Limit value switch**
- for easy determination of the limit value of analogue and Pt100 signals
- easy adjustment by decode switch or LCD display

**Signal converter**
- converter for Pt100, thermocouple, potentiometer or other analogue signals into standardized signals

**Overvoltage protection**
- safety components protect signals and supply connections against overvoltage and lightning strike

ACS signal converter in use
TVA-120 isolation amplifier used in a control cubicle for galvanic isolation of analogue signals to be fed to a PLC (programmable logic controller) input board.
Optoelectronic sensors
- light sensors, reflecting light sensors, one-way, laser or frame sensors
- scanning objects at close range etc.

Safety light barriers
- light barriers in accordance with the association’s safety regulations
- used in front of hazardous machines and devices to avoid accidents

Dirt resistant light barriers
- special light barriers
- for use in very dirty and dusty environments

Light conducting cable with amplifiers
- fibreglass light barriers for measurements with difficult access, very high temperatures or vibration loads

Inductive sensors
- inductive proximity switches for non-contact switching of metal parts

Capacitive sensors
- non-contact switches for the detection of non-metal parts

Magnetic field sensors
- sensors are influenced by magnets
- very wide detection ranges

ACS sensors in use
Forked light barrier for label detection and positioning. Printer’s imprint scanner checks for production labels.
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