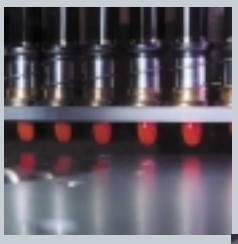
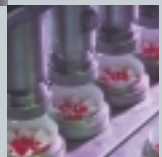
Field Instrumentation and Analytics
for Reliable Solutions in Process Automation

process AUTOMATION





SIEMENS

Profitable complete solutions with optimized process instrumentation and process analytics

Competitive advantage in the process industry relies on the ability to make processes faster, more flexible, more efficient and, above all, more cost-effective. Business processes, from production all the way to the office, need to be perfectly synchronized, coordinated and optimized – globally and across all business levels. This allows you to significantly improve the efficiency, availability, utilization, and quality of your plants and to leverage high rationalization opportunities through the integration of new systems.

Siemens is a competent partner to assist you in meeting these requirements. Many decades of experience in the measurement, analysis and control of industrial processes are the foundation of an unsurpassed expertise in all areas of process engineering. In the process gas chromatography, level measurement and positioners branches we are the global market leader as well as being a technology leader in many other areas.

Through the continuous innovation and improvement of our product portfolio, we are now able to offer you reliable and profitable solutions for every process automation application. Whether the application requires individual customized products or a complete system solution – our field-proven "Totally Integrated Automation" platform concept means full integration in data management, communications, configuration and programming.

You can benefit from the versatility of our complete solution for your process application. As well as from the openness of the systems, which is due to the standard PROFIBUS or HART communications interfacing for the easy integration of existing and future components. Add to this comprehensive services, from planning and competent technical consulting to commissioning and support in certification procedures to maintenance and in-depth operator training. In short: Field instrumentation and analytics for process automation from A to Z – Siemens is your one-stop partner.

Complete packages for field instrumentation and process analytics

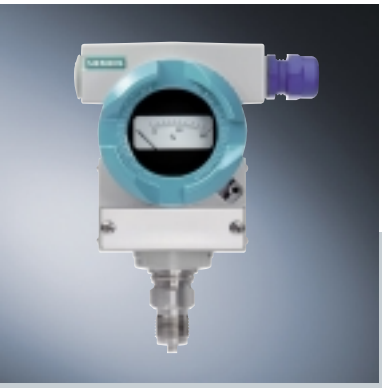
- Transmitters for pressure, temperature, flow, and level
- Positioners for pneumatic linear and rotary actuators
- Gas chromatographs, gas and liquid analyzers
- SIMATIC PDM software for control, maintenance and diagnostics

Integrated engineering and standardization for field instrumentation and complete solutions for process analytics

TOTALLY INTEGRATED AUTOMATION

Contents

Get a firm grip on pressures



MK II series

SITRANS P is a complete range of measuring instruments for measuring relative pressure, differential pressure and absolute pressure. In addition to high measuring accuracy and a robust design, the modular system has persuasive ease of use and functionality and a perfect safety concept. A proven program for any application.

PRESSURE MEASURING INSTRUMENTS

MS series

DS III series

SITRANS P easily handles extreme chemical and mechanical loads as well as electromagnetic interference in a range from 1 mbar to 400 bar. It offers additional safety features such as plant and self-monitoring, error diagnostics and notification of an upcoming calibration. A unique feature is the self-test function for fail-safe operation. Replacing measuring cells is a snap. This offers you the advantage of fast, easy and cost-saving on-site repairs. SITRANS P transmitters can be conveniently operated locally or remote-controlled in a fully digital manner via PROFIBUS-PA or HART protocol.

One series fits all applications

SITRANS P is designed for rated pressures up to PN 420. Materials used for the medium-wetted parts include stainless steel, tantalum, Hastelloy, Monel or gold plating. Explosion-proof versions are also available. The high safety standard is documented by internationally recognized certificates, including CENELEC, FM, CSA and NAMUR. Chemical seals are available in a variety of designs, with different filling liquids and a wide range of diaphragm materials.

The SITRANS P series at a glance:

- **MPS series**
  for convenient hydrostatic level measurements
- **Z series**
  single-range transmitters for pressure and absolute pressure
- **MK II series**
  for universal pressure measurements
- **MS series**
  digital solution with HART communications
- **DS III series**
  digital transmitter with integrated diagnostics, HART or PROFIBUS-PA communications and convenient pushbutton operation.

Z series

Keep cool in hot environments

The SITRANS T series are the professionals for temperature measurements, even in extreme conditions. Whether it is hot or cold or use in hazardous environments – the communication-capable SITRANS meets every expectation in a variety of industries. It offers high precision, is intrinsically safe and can be connected to a wide range of signal sources.

TEMPERATURE MEASURING INSTRUMENTS

SITRANS TW

SITRANS TF

Whether you need a transducer, transmitter, control-room, field/head mounted transmitter or complete measuring point – Siemens offers complete packages or separate components. The cost-effective SITRANS T transmitters offer high precision in every application and can be quickly and easily connected to thermocouples or resistance thermometers. With the intelligent SIMATIC PDM software package, parameterizing without input errors just minutes.

Choose among these products:

- **SITRANS TW Control-Room Instrument**
  Universal transmitter, HART communications, programmable via PC with SIMATIC PDM
- **SITRANS TF Field Instrument**
  For field installation, IP 65 protection, optional programmable digital readout
- **SITRANS TK Head Mounted Transmitter**
  For head installation, programmable with SIMATIC PDM, HART protocol and SIPROM TK
- **SITRANS T3K PA Head Mounted Transmitter**
  PROFIBUS-PA communications, programmable with SIMATIC PDM

All transmitters are also available as intrinsically safe versions – SITRANS TF is also offered with Ex d certification.

The right temperature sensor for the application

Resistance thermometers and thermocouples are available in a wide range of designs for applications in the process industry. Materials, process connections, design and accessories meet many process requirements. We also offer assistance in the selection of the right materials for the protective and neck tubes or of mounting options.

SITRANS TK
Head Mounted Transmitters

SITRANS T
Thermocouples/
Resistance thermometers

Know exactly what is flowing

SITRANS F series flowmeters are suitable for all media. They offer highly accurate and reliable measurement of flow rates for liquids of various consistencies, gases and vapors – mechanically, electro-magnetically or with ultrasonic signals. Key applications are the chemical and petrochemical industries, water/wastewater, pharmaceuticals, food processing and power.

SITRANS F M

SITRANS F US

FLOW MEASURING INSTRUMENTS

Due to their broad range of capabilities, SITRANS F flowmeters are multi-purpose instruments providing solutions for standard or extreme applications. They can handle medium temperatures from –20 °C to +180 °C, electrically conductive or non-conductive liquids, high-viscosity media or pulsating flows, in normal or hazardous environments.
Whatever the flow profile is, SITRANS F provides accurate measurements.

Complete units for many applications – the SITRANS F range of flowmeters offers:

- **SITRANS F M – Electro-Magnetic Flowmeters**
  Used to measure the flow of electrically conductive media starting from conductivities of 0.008 µS/cm. Flow rates up to 12 m/s are acceptable.
- **SITRANS F US – Ultrasonic Flowmeters**
  Universally applicable for media temperatures from –20 °C to +180 °C, low flow rates and high viscosity solvents, organically-based liquids and condensates.
- **SITRANS F VA – Variable Area Flowmeters**
  For flow measurements of liquids and gases from 1 l/h to 100 m^3/h.
- **SITRANS F R – Rotary Piston Meters**
  Positive-diplacement meter for liquids. Different material combinations available, also for measurements that are subject to calibration.
- **SITRANS F O – Orifice Flowmeters**
  Universal flow measurement for liquids, gases and vapors. Always provide accurate results even with large bores, high temperatures and extreme pressures.
- **SITRANS F I – Flow Indicators**
  Mechanical flowmeters for liquids and gases.

SITRANS F VA

SITRANS F R

SITRANS F O

SITRANS F I

Keep your eye on liquids and solids

SITRANS LR 300/400

SITRANS P

Siemens Milltronics offers a wide range of devices to monitor levels in liquids or solids, including slurries and bulk solids. The products use static or dynamic measuring methods, such as ultrasound, capacitance, radar or pressure, in process applications as well as in water/wastewater treatment.

MultiRange/Transducers

LEVEL MEASURING INSTRUMENTS

A broad portfolio of products is available to provide optimum solutions for a wide variety of applications. This includes reliable continuous level measurements in liquid and slurries, in tanks or vessels, intelligent system monitoring, over large distances, volume control, pumps and alarms. Measurements remain highly accurate and are not adversely affected even by extreme environmental conditions.

We have the best solution for every level measuring application. Choose among the following products:

CONTINUOUS LEVEL METERS

Radar

- **SITRANS LR 300**

Pulse radar technology provides reliable level measurements of liquids and slurries up to 20 m.

- **SITRANS LR 400**

High-frequency radar technology for excellent results for level measurements in liquids and bulk solids in storage tanks up to 45 m.

Hydrostatic

- **SITRANS P**

Hydrostatic level meter for tanks or vessels, for direct mounting or for mounting with remote seals.

Ultrasonic

Transmitters and transceivers

Numerous options for ranges up to 60 m as well as for single-point, dual-point and 10-point monitoring of liquids and bulk solids in a variety of applications, such as:

- **MultiRanger Level Transmitter**

Reliable, advanced ultrasonic transmitter. The perfect solution for short- to medium-range applications up to 15 m. Field-proven in the areas of water/wastewater, mining, pit and quarry industries, cement, chemicals, paper, food.

- **Echomax Transducers**

Easy to install and maintenance-free through contactless design. Built to withstand the harshest environment.

- **The Probe**

Compact level indicator for precise level measurements in tanks or vessels.

The Probe

Capacitance

- **Mercap**

The perfect level solution for extreme temperature and pressure conditions. Protected from dust, build up, steam and condensation.

Mercap

POINT LEVEL MEASUREMENT

- **Pointek**

For detection of pre-determined levels of bulk solids, slurries and interfaces. Measurements are made using the ultrasonic method or high sensitivity capacitance probes.

Pointek

Control valves accurately

When it comes to precision control of valves in different industries and applications, SIPART PS2 is the first choice, due to its high quality, control quality and ease of use. The integrated microprocessor means that SIPART PS2 offers clear advantages over conventional products.

POSITIONERS

The SIPART PS2 electropneumatic positioner has everything a leader in this field requires. The intelligent positioner offers significant advantages over conventional devices.

Some examples: Control via 4–20 mA, HART or PROFIBUS-PA connections allows flexibility in applications. Ex-protected versions further extend the scope of applications. The SIPART PS2 can also be used for linear and part-turn actuators. Easy local operation is ensured with pushbuttons and an LCD display. Fast set-up thanks to automatic commissioning feature with self-adjusting zero and span. Integrated diagnostic functions provide information about the status of both valve and actuator.

SIPART PS2

The SIPART PS2 positioner is available in different models:

- Control via 4–20 mA (standard) and HART signal (optional)
- PROFIBUS-PA communication interface
- For hazardous or non-hazardous applications, available either as an intrinsically-safe device (EEx ia/ib) or in a flame-proof casing (EEx d)
- In a plastic or metal housing
- With plug-in optional modules for alarms, position feedback and external position transducers

SIPART PS2

SIPART PS2 (EEx d)

SIPART PS2 (EEx d)

Optimize your control loops

The SIPART DR series has proven its value more than 200,000 times in the control of all kinds of industrial processes, but also in mechanical and systems engineering and other industrial areas. The compact controllers with continuous output signal or step contact output have been designed especially for space-saving panel mounting.

PROCESS CONTROLLERS

SIPART DR19

SIPART DR21

SIPART DR22

SIPART DR24

Apart from their reliability, SIPART DR controllers excel due to their ease of use. Various software packages are available to make their handling easy and intuitive and to extend their scope of application.

The standard version already offers a comprehensive controller hardware. It can be upgraded quickly and easily for specific applications with a large number of optional input and output modules. Plug-in modules for communications over RS232/RS485 or PROFIBUS-PA are also available.

The following SIPART DR versions are available for the different fields of application:

- **SIPART DR19**
  96 x 96 mm format, for applications in mechanical and systems engineering, for thermal processes, in the steel and ceramics industry, in paint production, water treatment or bottling plants.
- **SIPART DR21**
  The ideal solution with comprehensive display functions for all standard tasks. Various control functions and status messages.
- **SIPART DR22**
  Solves complex closed-loop control tasks as single or dual-channel controller, with additional computational functions in the input range.
- **SIPART DR24**
  The multi-talented unit for all process-specific tasks such as mathematical calculations, logic operations, open-loop controls and time-controlled closed-loop contols. Up to four independent control loops.

SIREC DS

Precise monitoring and documentation

The highly complex processes in industry, research and development place equally high requirements on visualization and analysis. The SIREC series of process recorders offer future oriented solutions for any measurement, monitoring, and recording application.

SIREC DM

PROCESS RECORDERS

SIREC DH

SIREC process recorders are used in many industries, with applications covering all major industries and areas, including environmental protection. Whether the task includes the continuous monitoring of process quantities, plant maintenance, process optimization or troubleshooting – SIREC units offer a full line of competent solutions.

The broad product range can handle any task. This is true for the new SIREC D display recorder as well as for the proven continuous line, dot and hybrid recorders of the SIREC P/L and Variograph series. All SIREC D units have a standard Ethernet port for real-time communications over the Internet or Intranet.

The comprehensive SIREC series of process recorders at a glance:

NEW GENERATION OF DISPLAY RECORDERS

- **SIREC DS – The cost-effective solution**
  Up to 6 general-purpose inputs, 144 x 144 mm front panel, 5" color LCD display, floppy disk storage.
- **SIREC DM – The flexible solution**
  Up to 16 general-purpose inputs, accuracy +/– 0.02 %, 144 x 144 mm front panel, 5" color TFT display, PCMCIA and floppy disk storage
- **SIREC DH – The ultimate solution**
  Up to 32 general-purpose inputs, 300 x 300 mm front panel, 12.1" color TFT display, PCMCIA and floppy disk storage

SIREC PU

PROVEN PAPER TAPE RECORDERS

- **SIREC P/PA – The low-cost 6-channel dot recorder**
  Measuring cycle 640 ms in all channels, with and without alphanumeric printout
- **SIREC L/LA – The low-cost recorder with front-side PC interface**
  1, 2 or 3 analog channels, 2 digital channels, (300 ms) measuring cycle, with and without alphanumeric printout
- **SIREC PU – The versatile recorder with mathematical functions**
  6 analog channels, digital display, (300/500 ms) measuring cycle, real-time clock
- **SIREC Variograph 3521: All measurements simultaneously on the same chart**
  3, 6 analog and 6 digital non-skew measuring channels, (120/240 ms) measuring cycle, can also be used as a continuous line recorder
- **SIREC Variograph 3590: Improved representation of measurements through wider chart**
  3, 6 analog plus 6 digital channels or up to 12 analog channels, (1,500 ms) measuring cycle, can also be used as a continuous line recorder
- **SIREC Variograph 3560:**
  Improved representation of measurements through increased visible chart length 6 digital channels, up to 12 analog channels, (1,500 ms) measuring cycle

Get the right weight and mix

Weighing and batching systems play an important role in all areas of production and process engineering. The SIWAREX components for weighing systems and the Siemens-Milltronics belt scales, weigh feeders and bulk meters provide the perfect weighing system for every application.

SIWAREX

WEIGHING AND BATCHING SYSTEMS

The SIMAT system platform offers additional advantages, including the complete integration of the SIWAREX into the PCS 7 process control system. SIMATIC standard components allow easy customization of the weighing system to your specific applications. Standardized interfaces, integrated functions and consistent tools also ensure a cost-effective configuration.

The entire range of load cells, weighing electronics, belt scales, weigh feeders, and bulk meters is available.

The SIWAREX range at a glance:

SIWAREX Weighing Electronics

- Totally integrated in SIMATIC or connected via PROFIBUS
- High precision and high functionality for complex batching and filling applications
- Suitable for hazardous environments
- Official calibration certificate

Load Cells

- 5 load cell series for different applications
- High precision and large measuring range from 10 kg to 280 t
- Hermetically sealed, extremely long life
- Ex-certified, official calibration certificate Stainless steel mounting units

Load Cells

DYNAMIC WEIGHING SYSTEMS

Belt Scales

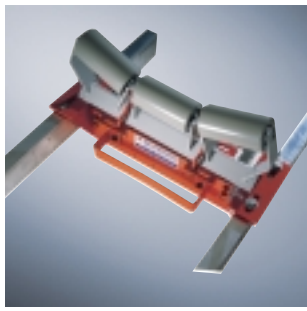
High precision and low maintenance requirements due to patented load frame without moving parts, easy calibration. Different versions available, also for critical and extreme heavy duty applications.

Weigh Feeders

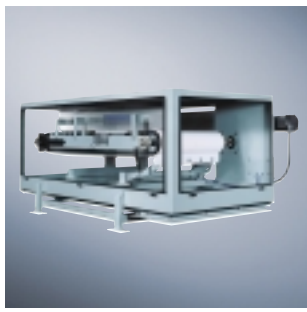
Compact units available as low, medium and high-capacity models with a variety of belt widths, inlet configurations, and construction materials. Options include open, enclosed, food-approved, and stainless-steel constructions.

Solids Flow Meters

Compact units for metering the flow of sand, grain, pellets, seeds, nuts, etc. in different granularities and material densities. Display of throughput and total volume, and alarm through microprocessor-controlled transducer.



Belt Scales



Weigh Feeders

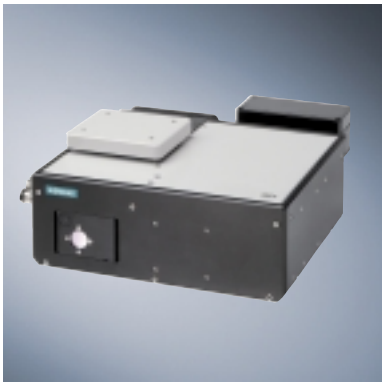
Solids Flow Meters

Detect traces in every medium

Siemens spectrometers are the key for real-time continuous analytic and monitoring applications in a wide variety of processes and industries, particularly in refineries, in the petrochemical industry, in the chemical and pharmaceutical industries, in food and beverage and many other relevant fields of applications.

PROCESS SPECTROMETERS

NIR spectrometers for process automation
NIR means **N**ear **I**nfra**r**ed and provides real-time information about the concentrations of substances and mixtures, the size of total parameters and the properties of process media.
Areas of application include continuous identity checks (e. g. final inspection), quantitative and qualitative analyses, and dynamic process monitoring.



SINIS A

The product range includes:

- **SINIS A AOTF Spectrometer – Strong for routine applications**

The light-weight, compact unit is designed for the routine analysis of liquids, pastes, powders, and solids. With its design features, including the PROFIBUS connection and the suitability for hazardous areas, it meets the requirements for use in the field close to the process, even in harsh environments.
SINIS A optimizes the quality control of raw materials and end products, provides fast results and ensures seamless, continuous documentation and data exchange.

- **SINIS FT FT-NIR Spectrometer – Interferograms through rotating mirrors**

As the first NIT spectrometer worldwide, SINIS FT uses rotating mirror movements to generate the interferogram.
SINIS FT enables the simultaneous measurement of the chemical and physical characteristics even in complex process media and high-speed processes. SINIS FT is a reliable component of process control for the measurement of aliphatic and aromatic compounds in fuels, the tracking of chemical production processes or the classification of polymers.

SINIS FT

LDS 3000

QUANTRA

Quantra Mass Spectrometer – detects every trace of mass

With Quantra, you get the world's first high-resolution analyzer for online applications. It is predestined for reliable trace and residual gas analysis, the analysis of more than 20 trace elements, for emission measurements in the chemical industry as well as for the residue analysis in semiconductor manufacturing.

Due to its unique mass resolution, Quantra can reliably identify even nearly identical masses. Quantra was especially developed for harsh process environments and offers a low-maintenance design.

LDS 3000 Laser Diode Spectrometer – Core measurement

The LDS 3000 can be used to measure one or several gases under extreme conditions. You even get accurate and reliable results at high temperatures of approx. 1500 °C or when operating in high dust concentrations.

The LDS 3000 is suitable for in-situ concentration measurement, e.g. in smoke gas purification or in filter plants. Ideal applications exist in the chemical, petrochemical, steel and metal-producing industries as well as in the production of cement and paper.

Monitor and determine gases

CALOMAT 6

From emission monitoring in waste incinerators to gas analysis in the chemical industry to rotary kiln monitoring in cement plants – the highly accurate and reliable Series 6 analyzers will always do the job. With newly developed gas analyzers, Siemens continues its successful series.

GAS ANALYZERS

OXYMAT 61

ULTRAMAT in field housing

ULTRAMAT 23

The operation of the analyzers is menu-driven and in accordance with the NAMUR recommendations. All analyzes lend themselves to easy integration into the SIMATIC Totally Integrated Automation concept and to parameterization using the SIMATIC PDM software via integral RS-485 and PROFIBUS-DP and PA interfaces. The SIPROM GA software package even allows remote service and preventive maintenance. All Series 6 analyzers are also available as Ex-protected versions.

Overview of the Series 6 gas analyzers:

- **CALOMAT 6**
  Uses the thermal conductivity method to accurately measure the composition and concentration of process gases. Primarily designed for the measurement of hydrogen and rare gas concentrations in blast furnace gas and carbon dioxide mixtures.
- **OXYMAT 61**
  The OXYMAT 61 is a low-cost oxygen analyzer for standard applications. It can use ambient air as a reference gas that is supplied to the analyzer section with the integral pump.
- **ULTRAMAT 6, OXYMAT 6**
  The ULTRAMAT 6 and the OXYMAT 6 are high-end analyzers in 19" design or field housing. They can be used in all applications from emission measurement to process control, even in the presence of highly corrosive gases.
- **ULTRAMAT 23**
  The ULTRAMAT 23 can measure a wide variety of infrared-active gases as well as oxygen. It is a low-cost multi-component NDIR analyzer for standard applications, e. g. emission monitoring.

Selectively determine process components of complex mixes

The best of both worlds – since the merger of Siemens and Applied Automation, you can benefit from the expertise of no less than two leading vendors in process analytics. The new MAXUM edition II process gas chromatograph combines a wide variety of probes with a flexible oven solution.

PROCESS GAS CHROMATOGRAPHS

This new development is the world's first solution that handles gas chromatographic measurements in the chemical and petrochemical industry as well as in refineries in a single unit.
The MAXUM edition II combines the analytic properties of the Siemens PGC 302 chromatograph with the parallel chromatography and Ethernet communications of the Advance MAXUM from Applied Automation.

MAXUM edition II

The broad range of separation columns and detectors allows highly selective and sensitive analyses of a wide variety of process components. The MAXUM edition II is ideally suited for use in harsh industrial environments and offers several key advantages, including:

- Many detector types: FID, WLD, FPD, ECD. HID, ELCD and multi-detectors
- Flexible oven design, temperature-controlled and energy-saving airbath oven, isothermal airless ovens and dual-oven technology
- Valveless live metering and live separation column switching with electronic pressure regulators for unbiased measuring results
- Parallel chromatography, separating a complex application into several simple partial applications
- Open network with TCP/IP and Ethernet for communications with PCs, other chromatographs or a process control system.

Exactly analyze the properties of liquid media

SIPAN analyzers

If you need to know the exact nature of your process medium, the SIPAN liquid analyzers is the right choice. They master essential measuring methods for the continuous measurement of liquids in all industrial processes.

LIQUID ANALYZERS

SIPAN sensors

SIPAN operating panels

Whether in 2-wire technology (SIPAN 32) or 4-wire technology (SIPAN 34), as a field unit or as an Ex-protected design with HART protocol or PROFIBUS PA communcations – SIPAN is the perfect measuring solution, e. g. for conductivity (contacting/toroidal), concentration, pH, redox, and dissolved oxygen. The analyzers are offered with a complete range of sensors and accessories.

Typical applications include:

- Energy generation
  (e. g. control of boiler feed water)
- Chemical industry
  (e. g. H_2SO_4 concentration)
- Petrochemical industry
  (e. g. control of condensate)
- Food and beverage
  (e. g. CIP control)
- Pulp and paper
  (e. g. pH measurement in paper recycling)

Especially the communications capability via PROFIBUS enables further important diagnostics functionality and considerably reduces the wiring and engineering effort. An additional benefit is the convenient operation and parameterization via SIMATIC PDM in the field or in the control system. SIPAN means full and cost-effective measuring convenience for all liquid analytics applications.

All process instruments under control

SIMATIC PDM (Proces Device Manager) is a consistent, manufacturer-independent software tool for the operation, configuration, parameterization, maintenance and diagnosis of intelligent field instruments based on the worldwide leading EDD standard. It can be used independent of a specific automation system via a PC or programming device or as an integral part of the SIMATIC PCS 7 process automation system.

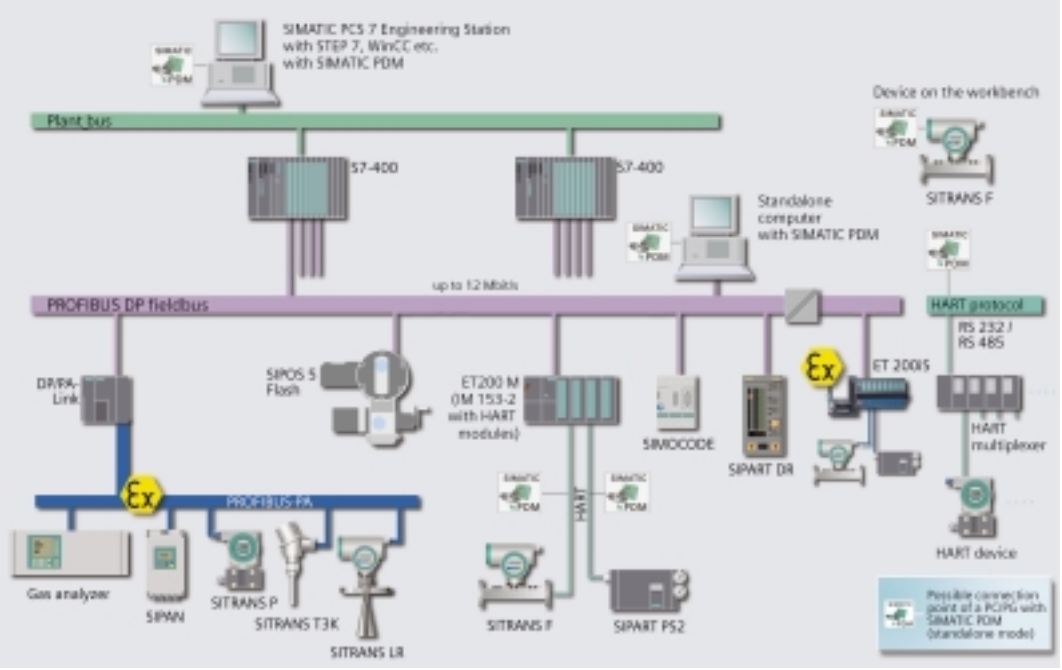
SIMATIC PDM SOFTWARE

The following core functions of SIMATIC PDM enable you to keep all instruments and automation processes under control:

- Set up and modification of parameters
- Comparison
- Plausibility checks
- Data management
- Commissioning functions

Communications is possible via HART protocol, PROFIBUS-DP, PROFIBUS-PA or other protocols.

Perfect interaction of all components and functions: Totally Integrated Automation
This is the platform concept that encompasses all products and systems in process automation. The heart of this concept is the SIMATIC PCS 7 process control system. Standard SIMATIC S7 components and software packages for typical process automation functions form the basis of the functional scope of SIMATIC PCS 7.



In addition to a common technical basis, Totally Integrated Automation is characterized by three integration levels:

- Integrated data management
- Integrated communications
- Integrated software for configuration and programming

Integrated engineering and standardization in field instrumentation

Siemens offers a complete service package to assist you in engineering, designing, supplying, installing and commissioning measurement solutions for complete industrial plants. In addition, we guarantee a seamless after-sales service based on a user-friendly documentation of the plant.

SOLUTION CONCEPTS

Real-world measurement technology from Siemens is a multi-faceted offering. For example, we provide all field instruments from a single source, as requested by many customers. Our "one-stop shopping" approach includes both sensors and actuators. This supports an integrated engineering of your complete field instrumentation all the way to the integration with your process control system. Additional industrial components and systems integrate seamlessly into the overall plant and ensure smooth process flows.

Overview of our services portfolio:

- Plant engineering and scheduling by an experienced project management team
- Specialists assist you in the selection and utilization of the field instruments
- Plant documentation is implemented with advanced tools:
  - Basic documentation, including device specifications, product and utilization lists
  - Higher-level documentation, including plant, process, identification and earthing concepts
  - Mechanical documentation, including setup and installation diagrams, hook-ups, cable routings
  - Electrical documentation, including circuit and wiring diagrams, cable lists
- Clarification and delivery of all required field instruments
- Intensive preparations for installation
- Reliable supply of installation material
- Installation and/or installation supervision
- Commissioning and/or commissioning supervision
- Comprehensive after-sales service

Regardless of the solution we offer you – the focus is always on customer value.

Analyzer systems for custom solutions

Our customers' requirements drive the solution. We offer you an integrated design from the sampling point to sample preparation to complete analyzer cabinets, for portable applications or for installation in a larger analyzer shelter. This also includes signal processing and communications to the control room and process control system.

To offer solutions for your application needs, we can rely on many years of worldwide experience from process automation and engineering and a collection of specialized knowledge in key industries and industrial sectors, including:

- Chemical industry
- Petrochemical industry
- Pharmaceutical industry
- Food and beverage industry
- Steel industry
- Building materials industry
- All kinds of combustion and furnace processes

Portable analyzer system

You can rely on this services portfolio:

- Competent consulting by experienced specialists
- Support during the approval phase
- Basic and detailed engineering with advanced tools
- System assembly and testing in our own facilities in the USA, Germany, and Singapore
- Worldwide commissioning by specialists
- Maintenance, spare parts supply and focused training

Analyzer shelter

Analyzer rack

Your Siemens partners worldwide...

can be found in the Internet on our homepage
http://www.fielddevices.com or http://www.processanalytics.com
see under "Your partner"

Änderungen vorbehalten 03/02 | Bestell-Nr. E20001-A240-P710-X-7600 | Dispostelle 27900 | 41C7497 P1.ALLG.52.2.5 WS 030210.0 | Printed in Germany

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