

PROCESS INSTRUMENTATION LAB

- The Process Instrumentation Lab Helps to Understand the Basics Functions and Physical Properties of PROCESS AUTOMATION & INSTRUMENTATION. The Participants Are Trained On Basics, Parameterization & Commissioning of Devices.
- These Labs Are Based On Latest Products, Technology, Configurations Used in Industries Like Petroleum, Power Plants, Sugar Plants, Cement Plants Etc.
- Which Gives Opportunity to Practice/Simulate Operations & Failures and Also Possibility of Large Variety of PROCESS-PLANTS Develops Interest. Our Intelligent Instruments Are Also Designed for Seamless Interplay with The Larger World of Industrial Automation.
- Siemens Sensors and Transmitters Are Ideally Suited for Integration into Control Systems Such as SIMATIC PCS 7 – Enabling Greater Process Transparency and Smarter Decisions for Your Business.

Software's Installed:

- SIMATIC PCS 7 V8.2

SIMATIC PCS 7 V8.2

SIMATIC PCS 7 V8.2, the new version of our proven process control system, we focused on the future-oriented opportunities of digitalization right through to field level.

- That's why we expanded our system solution to include particularly powerful and compact hardware products that support PROFINET, the world-leading industrial Ethernet standard – and allow greater freedom in plant design and operation.
- In any facility, space comes at a premium. And at a cost. Our response is the SIMATIC ET 200SP HA.
- The compact, modular periphery creates space in the control panel, providing advantages for system designers and operators.
- Its highly scalable structure makes it possible to precisely align expansions in the control panel with actual needs.
- And tool-free connection using push-in terminals and fixed wiring cuts the costs of engineering, assembly and wiring.
- The SIMATIC ET 200SP HA reduces the footprint of the entire system, saving costs in terms of space, air conditioning, power requirements, etc., for the I/O's in the control panel. |
- Its expanded temperature range (from -40°C to +70°C) and Conformal Coating makes the SIMATIC ET 200SP HA ideally suited for field use.
- Further advantages include Change in Run thanks to a redundant layout.

PCS 7 Training Kit

Much more than a traditional distributed control system (DCS):

- SIMATIC PCS 7 combines a unique scalable architecture with powerful engineering tools and a wide variety of additional functions such as alarm management, process safety and asset management, all of which can be integrated seamlessly into your existing environment.
- SIMATIC PCS 7 has everything you need to completely and safely automate your entire production process, from goods receipt to goods issue, in both manufacturing and process plants.
- Providing continuous operation and consistent product quality while reducing plant costs are only a few of the many challenges that the Process Industry is facing today.
- The control system plays an important role in meeting those challenges.

Sitrans TH 300 HART

SITRANS TH300 with HART- protocol is designed to support all common thermocouples, resistance and millivolt sensors.

- Setup is quick and easy with SIMATIC PDM or handheld communicator.
- Unique user-friendly details are implemented: Without opening the 4-20mA loop the output current can read out directly with a multimeter.
- A red/green LED shows the technician the status at a glance.

Sitrans F US SONO 3300

The SITRANS F US SONO3300/SITRANS FUS060 flowmeter consists of a SITRANS F US SONO 3300 sensor and a SITRANS FUS060 transmitter. The sensor is available in carbon steel and is fitted with integrated transducers. It also comes with signal cables enclosed in stainless steel pipes. The SITRANS FUS060 transmitter makes use of an advanced transit-time signal processing technology ensuring reliable and accurate signal detection for a wide range of processes.

Sitrans FUS 060 HART

The SITRANS FUS060 flow transmitter features a range of advanced technologies to optimize efficiency and accuracy and is ideal where the requirements of the OIML R117 custody transfer standards have to be met. It comes with 2 tracks as standard or an optional 4 tracks for better performance and higher accuracy. It has extended diagnostic capabilities, ATEX certification and bus communication.

Sitrans F M Mag 5000 HART

The SITRANS F M MAG 5000 is a microprocessor-based transmitter engineered for high performance, easy installation, commissioning and maintenance.

Sitrans FC Mass 6000

The SITRANS F C MASS 6000 is based on the latest developments within digital signal processing technology – engineered for high performance, fast flow step response, fast batching applications, high immunity against process noise, easy to install, commission and maintain. The SITRANS F C MASS 6000 transmitter delivers true multi parameter measurements i.e. mass flow, volume flow, density, temperature and fraction.

Sitrans FC Mass 2100

The SITRANS F C MASS 2100 DI 1.5 has demonstrated superior performance in numerous applications and field trials relating to mass flow- and density accuracy and turn down ratio. The single continuous tube design without internal welds, reductions or flow splitters, offers optimal hygiene, safety and CIP cleanability for food & beverage and pharmaceutical applications.

Sitrans P 300

It is Measurement cell for gauge and absolute pressure stainless steel housing with laser-printed nameplate, together with a wide range of hygienic process connections, mean that it is highly suitable for use in the food & beverages industry as well as for pharmaceutical processes. With a maximum deviation in measurement of 0.075% and the proven operating philosophy.

Sitrans P DS III HART

The SITRANS P DS III series includes digital pressure transmitters for measuring gauge pressure, absolute pressure, differential pressure, flow and level.

Sitrans LR250

SITRANS LR250 is your first choice for liquid level measurement in storage and process vessels up to 20 meters (66 ft.). With its range of antennas, this transmitter can handle whatever you need it to. Its new flanged and hygienic encapsulated antennas mean corrosive or aggressive materials and hygienic or sanitary requirements are no challenge for this transmitter.

Pointek CLS200

Pointek CLS200 is a versatile inverse frequency shift capacitance level switch with optional rod/cable choices and configurable output, ideal for detection of liquids, solids, slurries, foam and interfaces. The digital version (with PROFIBUS PA) includes a display and provides additional diagnostic features.

Sitrans Probe LU

SITRANS Probe LU is a 2-wire loop powered ultrasonic transmitter for level, volume and flow monitoring of liquids in open channels, storage vessels and simple process vessels.

Double Acting Actuator

The SIPART PS2 from Siemens is an electro pneumatic positioner which has been providing safe and trouble-free operation in an extremely wide range of process industries worldwide for 20 years. The electro pneumatic positioner is particularly distinguished by its versatility. The valve positioner safely and reliably controls the complete variety of control valves, and can additionally handle challenging applications.

Courses Offered:

S.No	Domain	Course Name	Hours	Prerequisites
1	Electrical /Automation	Basic of Process Instrumentation	50	Electrical, Electronics, Mechanical, Instrumentation engineers (7 th Semester)
2	Automation	SIMATIC PCS 7 Basics	40	Electrical, Electronics, Mechanical, Instrumentation engineers (7 th Semester)

