

Industrial Instrumentation Classes! These classes are designed for individuals with varying ranges of experience in the field of Instrumentation. The Advanced manufacturing Institute offers the only training of this kind and scale in the state of Florida. All classes are taught with a portion of hands-on-training utilizing our in-house Process Training Unit (PTU). Using our unique training format, individuals can not only apply theory taught in the classroom via our PTU, but students can share experiences and problems they have encountered in the field with others in the industry from different plants and factories. This open discussion training format is ideal in refining employee's technical skills.

Courses and descriptions

Fundamentals of Instrumentation (4 days)

- Instrumentation measurement theory
- Read and understand piping and instrument drawings
- Perform set up and configuration of basic instruments
- Apply safe trouble shooting techniques for instrument control
- Perform proper installation of instrumentation
- Introduction to Flow, Level, Pressure, Temperature, and Liquid Analysis

Flow School- Course 1 (2 Days)

- Recognize a broad variety of flow technologies and understand the strengths and limitations
- Work with instrumentation specialists to specify the best type of level technology for a variety of applications
- Set up and commission flow instruments from differential pressure transmitters to Coriolis flow meters
- Use on-board and pc-based tools to verify the health of the instrument and its signals

Flow School- Course 2 (2 Days)

- Install instruments properly (wiring and sensor location)
- Configuration of devices via local interface, PC, & HART
- Demonstrate competency in programming, operating, and troubleshooting Flow technology.
- Understanding Differential Pressure Transmitters, Ultrasonic Flow Meters, Thermal Dispersion Flow Meters, Vortex Shedding Flow Meters, Electromagnetic Flow Meters, Coriolis Flow Meters, and Volumetric vs. Mass Flow

Level School- Course 1 (2 Days)

- Recognize a broad variety of level technologies and understand the strengths and limitations of each
- Work with instrumentation specialists to specify the best type of level technology for a variety of applications
- Set up and commission level instruments from point level switches to radar gauges
- Use on-board and pc-based tools within instruments to verify the health of the instrument and its signals
- Diagnose and correct problems with capacitance, ultrasonic and radar level systems

Level School- Course 2 (2 Days)

- Install instruments properly (wiring and sensor location)
- Configuration of devices via local interface, PC, & HART
- Diagnosis of envelope curves using proper software
- Make practical changes to level measuring device filters for process problems
- Take an in depth look at each level measuring technology and review proper configuration, calibration, and troubleshooting procedures

Pressure and Temperature Calibration School (2 Days)

- Recognize a broad variety of temperature and pressure technologies and understand the strengths and limitations of each
- Identifying the best type of pressure and temperature technologies for a variety of applications
- Use commonly accepted communications tools to set up and verify the health of the instrument and its signals
- Discuss temperature and pressure technologies and review proper configuration, calibration, and troubleshooting procedures for each.

Liquid Analysis (2 Days)

- Understand the need for analytical procedures
- Provides a broad understanding of numerous analytical technologies
- Gain an in-depth understanding of conductivity, chlorine, and pH monitors
- Learn analytical concepts applicable to virtually any manufacturing equipment

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