Training - Instrumentation and Process Control

ICP-EN-P | Face-to-face only | 5 days

This course provides a good overview of instrumentation and control systems and facilitates communication with experts

Level
Skilled

Public
Junior engineers and technicians from process industries

Objectives
Attendees will be able to implement the following skills:

- Read and understand a P&ID
- Identify the technology used for field instrumentation

Pedagogical & technical resources

- 50% of practice on mini process skids with industrial equipment
- Illustration of process control using dynamic simulators (IndissPlus de CORYS)

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites
No prerequisites are necessary to follow this course

Responsable
IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

INSTRUMENT LOOPS — 0.5 day

Function, constitution, signal types. Tag naming conventions and symbolization.

SENSORS & TRANSMITTERS — 1.5 days

Technologies to measure and detect the pressure, temperature, level and flow.
Working principles. Selection criteria according to process needs.

CONTROL VALVES & ON/OFF VALVES — 1 day

Technologies and working principle.

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Specification criteria.
Accessories: limit switches, solenoid valves, positioners...

PROCESS CONTROL — 1.5 days

Controller role and performance criteria.
ON/OFF and PID controller.
Conventional control schemes: split-range, cascade, ratio, override, feed forward.
Introduction to advanced process control.

CONTROL & SAFETY SYSTEMS — 0.5 day

Role, architecture and functions of a Distributed Control Systems (DCS). Separation of control and safety systems.
Introduction to Safety Instrumented Systems (SIS).

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

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