Good process control having the best knowledge of instrumentation and automation devices.

Understand the fundamental principles of loop control (loop elements, signal transmission, signal processing, control commands); Be familiar with different control principles; Understand PID control; Understand discrete control (ON/OFF, Gap control...); Understand the fundamental principles of various types of actuators; Be familiar with loop checking procedures.

**Target Group**
operators, foremen, engineers from the oil industry, petrochemical, refinery, food industry, etc.

**Duration**
1 day (8 hours) - one hour training session it's equal with 45 minutes

**Content**
- Loop control basics – control principles, loop configuration, loop elements, signal transmission, signal processing, control commands
- PID (Proportional-Integrative-Derivative) control – basic understanding of process signal to process command conversion
- ON/OFF, Gap control principles
- Electrical actuators (working principle and basic construction)
- Pneumatic actuators (working principle and basic construction)
- Presentation of loop checking procedures

**Methods**
- Theory: The course will be presented using exposure explanation (e.g. power point presentation, sample images, video files...), free discussions on the real life situations, case study
- Practical: PC based PID control loop simulation

**Competences acquired**
- Understand how control is achieved in industrial applications
- Understand working principle and basic construction of different types of actuators
- Be familiar with loop checking procedures

**Trainer**
has high specialization and rich experience in both Adult Training and theoretical and practical activity in the field of Control and Instrumentation – Loop checking

**Date / City**
N/A

**Contact**
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