

## **Control valve (Types, selection and sizing) Z IPC-08 Z**

### **Duration**

Three days 18 Hours

### **Who should attend?**

Instrument, Mechanical design and maintenance engineers, Technical support engineers and supervisors.

### **Language**

Arabic , English

### **Overview**

The course helps the participants to be familiar with control valve terminology in terms of location and function of the seven basic components:-

- Body Trim (plug guide and seat)
- Valve stem
- Bonnet
- Packing gland
- Yoke
- Actuator

### **Topics**

- Identify different types of control valves :-
- Sliding-stem valves
- Rotary shaft valves
- Understand control valve flow characteristics types :-
- Quick opening
- Linear
- Butterfly
- Ball
- Equal percentage
- Understand valve actuator types / functions :-
- Spring loaded
- Piston actuator
- Hydraulic actuator
- Electric actuator
- Understand valve positioned principles :-
- Function
- Types



- Able to carry out control valve sizing :-
- Liquid flow
- Gas flow
- Vapour flow
- Perform control valve body services :-
- Packing lubrication
- Bonnet mounting
- Bellows seat replacement
- Calibration
- Identify valve problems and troubleshooting :
- shut-off leakage
- Overheating
- Range-ability
- Noise and erosion
- Cavitations