

## **“CONTROL VALVE MAINTENANCE” TRAINING COURSE**

### **Overview**

This 4- day course details the functioning of valves and actuators and how they are installed and calibrated. It emphasizes installation, troubleshooting, parts replacement, and calibration of control valves, actuators, positioners and digital valve controllers. Students spend over 50% of their time in hands-on workshops.

Those who complete this course will be able to:

- Correctly perform installation procedures
- perform basic troubleshooting
- Properly apply and calibrate, positioners and digital valve controllers
- change valve trim, gaskets and packing

***Covered topics include the following:***

### ***2-day practical course :***

- ✓ *Major Loop Components and Their Functions*
- ✓ *Typical process control application: three phase separator*
- ✓ *Standards and symbols*
- ✓ *Valve body material and “end connections “*
- ✓ *Basic valve types and valve characteristics*
- ✓ *Guidelines for valve and actuator selection*
- ✓ *Trim types, material and selection*
- ✓ *Packing types and application Positioners types and application, I/P converter*
- ✓ *Special accessories (booster, SOV, trip valves...)*
- ✓ *Basic Component Symbols*
- ✓ *Bench Set and Stem Connection*
- ✓ *Accessory Selection and Configuration*
- ✓ *Severe Service Considerations*
- ✓ *Troubleshooting Basics*

### ***2 -day workshop: control valve complete overhaul***

# **Practical exercises**

**-1- valve body/ actuator disassembly : Fisher 2 " ED 667/40**

**-2- Trim inspection and replacement: Fisher EZ 1 ½ " & Fisher ED balanced trim 2**

**-3- Packing replacement :**

**-4- Actuator Bench set**

**-5- Positioner installation and configuration "hart communicator" : Fisher DVC6000**