



Training Course :

**Sizing , Selecting ,and Applying  
Process Control Valves**

Training Course For One Week In

**UAE , Dubai , Cityseason Suites  
Hotel**

Which Be Held As Under Details :



**Abar Solutions Petroleum Consultancy Invite Your Employee To Participate With Us In Special Training Course As Under Details :**

Course Name		Sizing , Selecting ,and Applying Process Control Valves			
Code	Period	Language	Start	End	Location
ICT 013	5 Days	Bilingual (Arabic & English)	13/08/2017	17/08/2017	UAE , Dubai , Cityseason Suites Hotel
			03/09/2017	07/09/2017	
			08/10/2017	12/10/2017	
			12/11/2017	16/11/2017	
			10/12/2017	14/12/2017	
			14/01/2018	18/01/2018	
			11/02/2018	15/02/2018	
			11/03/2018	15/03/2018	
			15/04/2018	19/04/2018	
			20/05/2018	24/05/2018	
			10/06/2018	14/06/2018	
22/07/2018	26/07/2018				

\*\* The Fees Includes : Lecturer , Training Material , Training Room With One Coffee Break Daily , Certificate Of Attendance In Last Day Training Course \*\*

**Course Description**

⇒ Extensive course materials provided contained useful information about valves/sizing and selection both theoretical and practical. You will gain a practical understanding of control valves, actuators, and positioner designs and their applications. The course also provides methods that can be used to identify specific valve problems and arrive at acceptable solutions within engineering tolerance.

**Course Objectives**

- ⇒ Compare various types of final control elements
- ⇒ Understand a typical valve operation in a control loop

- ⇒ Differentiate between various types of valves and the benefits of each
- ⇒ Compare rising stem to rotary style valves
- ⇒ Analyze a control system to determine control valve needs
- ⇒ Use ISA standards for control valve specification and selection
- ⇒ Size valves for any flow condition likely to be found in a process plant
- ⇒ Evaluate and select actuators for specific applications
- ⇒ Specify appropriate auxiliaries including positioners and I/P transducers
- ⇒ Design control valve installations that are safe and trouble-free

### Course Content & Outlines

#### ⇒ **Introduction:**

- Valve in Loop,
- Actuator,
- Positioner

#### ⇒ **Basic Valve Types:**

- Globe Valves,
- Ball Valves,
- Plug Valves,
- Butterfly Valves

#### ⇒ **Actuators:**

- Spring/Diaphragm,
- Piston,
- Vane,
- Scotch-Yoke,
- R & P

#### ⇒ **Comparison:**

- Rising Stem,
- Rotary Stem,
- Accessories,
- Positioner,
- I/P Converters

⇒ **Valve Performance:**

- Gain,
- Time,
- Trim,
- Special Needs

⇒ **Flashing/Cavitation & Noise:**

- Cause/Effect,
- Prevention,
- OSHA,
- Source and Abatement

⇒ **Installation:**

- Performance, Safety and Others

⇒ **Valve Sizing:**

- Valve sizing calculation Manual,
- Valve Sizing calculation Computer

⇒ **Specification and Selection:**

- Process Requirements,
- Other Considerations

⇒ **Maintenance and Troubleshooting Considerations:**

- Special Requirements,
- Diagnostic Tools

⇒ **Smart Valves:**

- Available Designs,
- Applications in Industry

⇒ **Test valves to evaluate performance factors**

⇒ **Size valves manually and with software**

⇒ **Specify valves, actuators, and auxiliaries for specific applications**

⇒ **Evaluate operation of valves with pneumatic actuators and positioners**

⇒ **Smart valve/positioner operation demonstration**