

PIPING & VALVES COURSE

About the course :

The oil or gas extracted from wells is transported through pipelines. Due to ever rising demand in oil and gas throughout the world different companies are trying to stretch as much as they can to meet the requirements. Hence, the need for technically viable engineers is increasing day by day. Keeping in mind this program is designed to provide a broad overview of onshore as well as subsea pipeline engineering from designing to construction.

Who should attend?

Anyone looking to gain a complete overview of pipeline engineering, including:

- a. Students / Graduate engineers (chemical/mechanical)
- b. Conversion engineers switching disciplines or industries
- c. Managers and supervisors responsible for pipeline
- d. Experienced diploma holders (chemical/mechanical)

Duration:

3 Days, 6hours/day (from 9:00am to 3:00 pm).

Course outlines :

- Select the most appropriate pipe specification and material for moderate duties
- Make Full design for the Pipe Diameter Fluid Velocity & Friction
- Make Full Design For the Pump.
- Make Full Selection For the Pump From Different Catalogues.
- Match the selected pipe with the most appropriate fittings
- Create a design which represents a cost effective solution to single pipeline systems for moderate duties
- Design the most cost effective pipe work system for the conveyance of any type of fluid
- Design pipe work systems which have more than one outlet

- Define the causes of water hammer, calculate its transient values and offer appropriate actions which will reduce or eliminate its occurrence
- Define the procedures necessary to install, test and commission a piping system
- Gas & oil Pipe Line Operation
- Suggest appropriate protective coatings for pipe work systems
- Calculate the life cycle cost for a pipe system
- Knowing How to Draw the Pipe Line on the Software like Cad & Revit.
- Selecting the Proper Valves from Different Types of Valves.

MAIN TOPICS:

- International and national Standards and Specifications
- Pipe manufacturing methods & materials
- Pipe fittings and their application
- Jointing systems
- Pipeline profiling and hydraulic gradient
- Pressure, static, friction and velocity head
- Calculating Total Dynamic Head
- System head curves and their practical application
- Introduction to cost-effective pipe sizing
- System head curves
- Pipeline profiling
- Behavior of liquids other than water
- Compound pipelines
- Designing suction and delivery pipe work systems
- Water hammer: Calculation and prevention
- Installation testing and commissioning of pipelines
- Coatings and other protection procedures
- Life cycle costing for pipe work systems
- Trouble shooting and remedial action

Please Note:

The precise content may change on the day depending on the specific needs of the delegates.