Best Technology Soultions **(BTS)**

Training Program

Piping Systems Mechanical Design And Specification

Training Program

Introduction:

This course for engineers and piping system designers reviews the key areas associated with the design of piping systems for oil and gas facilities. The course is focused on four areas: codes and standards, pipe materials and manufacture, piping components, and piping layout and design. Applicable piping codes for oil and gas facilities: pipe sizing calculations, pipe installation, and materials selection are an integral part of the course. The emphasis is on proper material selection and specification of piping systems.

Who Should Attend?

Mechanical engineers, facilities engineers, plant engineers, pipeline engineers, draftsmen and piping system designers who are involved in the design of in plant piping systems for oil and gas facilities

Course Objectives:

By the end of this course delegates will be able to:

- Apply piping codes and standards
- Enhance their knowledge on sizing and laying out piping systems in various types of facilities

- Specify proper components for process and utility applications
- Compare alternative material solutions
- Process steelmaking and pipe manufacture
- Use Joining methods and inspection techniques
- Know about key considerations for flare and vent systems

Course Outline:

- Piping codes and standards
- Pipe materials and manufacturing
- Valves and actuators
- Welding and nondestructive testing
- Line sizing basics (single phase and multiphase flow)
- Pipe and valve material selection
- Piping layout and design
- Manifolds, headers, and flare/vent systems
- Nonmetallic piping systems
- Operations and maintenance considerations