

# € TRAINING

Pipeline Construction & Maintenance  
Planning & Management Best Practices



# Pipeline Construction & Maintenance Planning & Management Best Practices

## Introduction:

Pipeline systems for the oil and gas industry play an important role in modern industrial operations. The purpose of this training course is to present the basic characteristics of efficient operation of pipelines in various engineering applications. This training course will cover the interaction of pipelines with flow moving equipment, i.e. pumps and compressors, and technical characteristics of operation of pump and compressor stations. The delegates will be introduced to the main points of inspection and testing according to relevant API standards. They will also develop familiarity with methods of cleaning and other maintenance activities, including necessary repairs as prevention of failures. The program will include several workshops with real problems from industrial practice which will enable discussions and exchange of experiences.

## Course Objectives:

At the end of this course, the participants will be able to:

- Identify basic principles of safe operation & efficient maintenance of pipelines for various industrial applications
- Develop deep understanding & familiarity with the practical aspects of operation and maintenance activities
- Illustrate the concepts discussed and be provided with the necessary experience in applying them
- Use & follow the guidelines & best industrial practices related to operation, control, inspection & testing of pipelines

## Targeted Audience:

- Process, chemical and mechanical engineers working in petrochemical and process industry, including oil refineries and gas production companies where operation and maintenance of pipelines are high importance
- The operation, technical service and maintenance professionals from various processing plants involved in everyday operation, control, inspection and maintenance of pipelines
- Engineers and consultants dealing with the planning of new production lines and retrofitting plants and introducing new technologies
- Technical professionals responsible for the maintenance and repair of equipment

## Course Outlines:

### Unit 1: Pipeline Preparation:

- Pipeline code and standards
- Preliminary survey
- The flow of fluid in pipelines

### Unit 2: Multiphase Flow:

- Two-phase
- Flow pattern maps
- Flow system

- Troubleshooting

### Unit 3: Gathering System and Pipeline Design:

- Gathering system
- Pipeline configuration
- Pipeline design
- Location classification

### Unit 4: Pipeline Construction and Testing:

- Pipeline construction
- Hydrostatic test
- Corrosion considerations

### Unit 5: Pipeline Operation, Inspection, Maintenance, and Integrity:

- Pipeline operation
- Coating monitoring and inspection
- Pigging
- Integrity management