

PRESSURE SAFETY VALVES - OVERVIEW, MAINTENANCE, TESTING AND TROUBLESHOOTING

| | | | |
|--------------------|---------------------------|---------------------|------------|
| Start Date: | 27/07/2026 | End Date: | 31/07/2026 |
| Categories: | Engineering & Maintenance | Venues: | Madrid |
| Formats: | In Person | Instructors: | |

OVERVIEW

This course provides comprehensive technical insight into the functionality, maintenance, and safety role of pressure safety valves (PSVs) in process industries. Emphasis is placed on valve selection, inspection, testing procedures, and troubleshooting techniques to prevent system overpressure.

OBJECTIVES

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

- Understand the function and types of pressure safety valves.
- Inspect and maintain PSVs in compliance with international codes.
- Conduct bench testing and in-service verification.
- Diagnose and resolve operational faults.
- Ensure PSV reliability for process safety assurance.

COURSE OUTLINE

1- Introduction to Pressure Safety Valves and Standards
2- Valve Selection, Installation, and Sizing Principles
3- Maintenance and Inspection Procedures
4- PSV Testing Methods and Troubleshooting
5- Case Studies and Best Practices

TARGET AUDIENCE

All Supervisory Levels, Instrumentation engineers, mechanical engineers, plant technicians, HSSE professionals, and maintenance supervisors.

METHODOLOGY

Hands-on valve maintenance demos, fault simulation labs, real-world testing exercises, and group troubleshooting sessions.

CONCLUSION

Participants will be capable of ensuring pressure safety through correct installation, testing, and troubleshooting of PSVs across various applications.

DAILY AGENDA

Day 1: PSV Design and Function

Understand PSV operating principles, standards (API/ASME), and component functions.

Day 2: Installation and Sizing

Review sizing calculations, blowdown settings, installation positions, and inlet/outlet configurations.

Day 3: Inspection and Maintenance

Execute maintenance schedules, parts inspection, and servicing routines.

Day 4: Testing and Calibration

Conduct bench and in-situ tests using calibration rigs and compare results to standards.

Day 5: Troubleshooting and Case Studies

Analyze failure cases such as seat leakage, lifting delays, chatter, and improper set points.

For more information, please contact us:

Email: info@gatewayconsulting.com | Phone: +96522968641

<https://gatewayconsulting.com>