



PD767

Pressure Relief Devices: Design, Sizing, Construction, Inspection and Maintenance

Day One

- History of pressure relief devices, definitions, and common terminology
- Requirements of codes and standards such as ASME, API, NBIC, and EN
- Comparison between American and European Code for pressure relief devices
- Types of pressure relief devices such as pressure relief valves, safety relief valves, safety valves, and rupture disks
- Materials for pressure relief valves, rupture disks, and bill of materials
- Design fundamentals for components, testing, and marking
- Manufacturing as per code requirements, test laboratories, and capacity certification
- Sizing and selection of PRDs for single phase flow based on ASME, and API Code
- Videos on various types of pressure relief devices

Day Two

- Sizing and selection workshop; calculations of orifice areas, and selection of pressure relief devices
- Safety valves for power boilers, and heating boilers
- Pressure relief devices for pressure vessels, and nuclear systems
- Pressure relief valves for power piping, and process piping
- Safety Valves per EN ISO 4126-Part 1
- Bursting disc safety devices per EN ISO 4126-Part 2
- Pilot operated safety valves per EN 4126-Part 4
- Pressure relief devices for non-ASME systems such as vacuum systems, and compressed gas systems
- Pressure relief devices for pneumatic systems, and hydraulic systems

Day Three

- Handling and storage of pressure relief devices
- Installation of inlet piping, discharge piping, and vent piping
- Maintenance procedures, types of maintenance, testing, and trouble shooting



- Inspection, authorized inspectors, types of inspection, records, and reports (NBIC and API)
- Repairs and alterations, records and data maintenance, and National Board “VR” certification program
- Shop testing, test media, test stands, test reports, and testing facilities
- A video on pressure relief valve installation