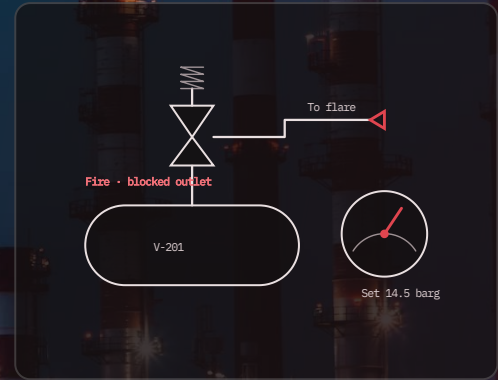


RELIEF SYSTEMS · INTERMEDIATE · 1 DAY

PSV Validation and Relief Register Workshop

Checking existing relief devices against current process conditions and building a register that holds up



DURATION
1 day

LEVEL
Intermediate

FORMAT
On-site classroom · virtual instructor-led

LANGUAGE
English

MAX. PARTICIPANTS
16

Your

own relief register and PSV data sheets

10

validation checks per valve

1

gap list ready for MOC

Overview

Most relief valves on a mature unit were sized for a process that no longer exists. This workshop takes the participants' own PSV data sheets, P&IDs and current operating envelopes and runs each device through a structured validation: is the governing scenario still the governing scenario, does the installed orifice still pass the load, and do the inlet and outlet lines still meet the code. The output is a gap list with prioritised actions and a register format that an auditor can follow from scenario to calculation.

Learning outcomes

- Reconstruct the design basis of an existing relief device from drawings, data sheets and operating data
- Re-screen overpressure scenarios after revamps, debottlenecking and set-point changes
- Check installed capacity against recalculated loads for vapour, liquid and fire cases
- Verify the 3 % inlet loss rule, built-up and superimposed back pressure and bellows limits
- Rank findings by risk and route them through MOC and the inspection plan
- Structure a relief register that links PSI, PHA, calculations and inspection history

Who should attend

Process and pressure-equipment engineers responsible for the relief register; inspection engineers; PSM coordinators covering PSI and mechanical integrity

Course outline

MORNING

Why validation programmes exist: incidents and audit findings · relief register as process safety information · reconstructing the design basis · scenario re-screening on a changed unit · capacity checks in CeraVent

AFTERNOON

Inlet and outlet line verification · chattering and back-pressure findings · rupture disc and combination device checks · risk-ranking the gap list · register format, MOC and inspection interface · workshop on participants' own valves

Standards referenced

API 520 Part I & II · API 521 · API 576 · API 510
OSHA 29 CFR 1910.119(d) and (j) · ASME BPVC Section VIII

Tools & exercises

Validation calculations and register templates in CeraVent, working on the participants' own valve data

What's included

- ✓ Course manual and slide pack
- ✓ Software access for the course
- ✓ Post-course Q&A with the instructor
- ✓ Exercise and case-study pack
- ✓ Competency quiz and certificate
- ✓ Templates used in the exercises

PREREQUISITES

Relief sizing basics (TR-C01 or equivalent experience)

CERTIFICATION

Certificate of completion

INSTRUCTORS

Practising engineers — TÜV HAZOP Leader, CCPSC and IEC 61511 Functional Safety certified — with 200+ years of cumulative plant experience.

Book this course or build a custom curriculum

On-site at your plant or virtual · in-house groups · competency assessment included

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