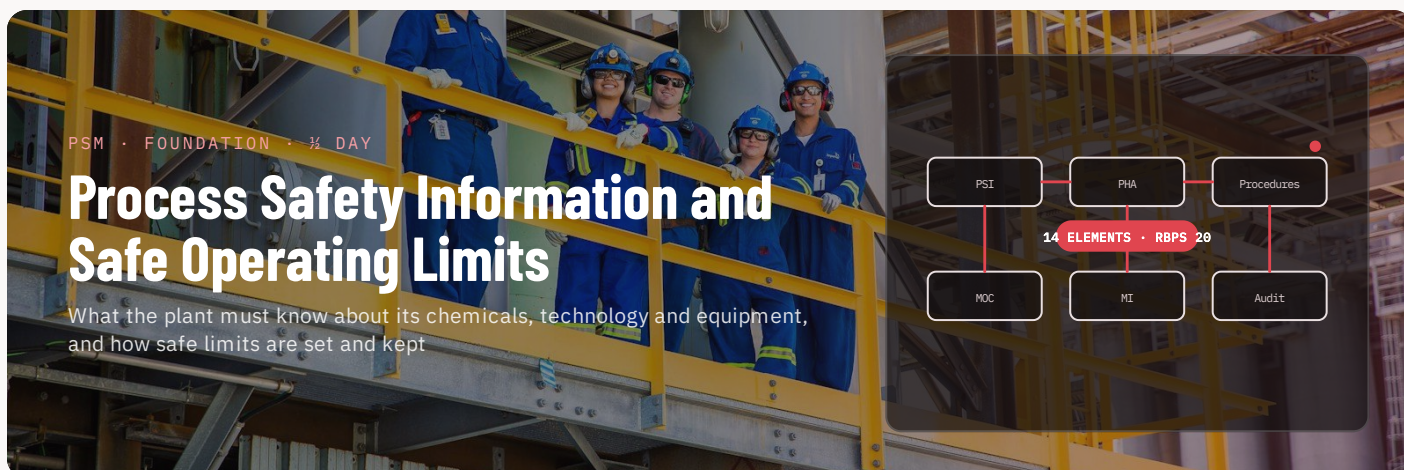




PSM · FOUNDATION · ½ DAY

Process Safety Information and Safe Operating Limits

What the plant must know about its chemicals, technology and equipment, and how safe limits are set and kept



DURATION
½ day

LEVEL
Foundation

FORMAT
On-site classroom · virtual instructor-led

LANGUAGE
English

MAX. PARTICIPANTS
16

1

PSI gap check on a live unit

3

limit types: design, safe operating, alarm

1

safe-limits table template

Overview

Every other PSM element depends on process safety information being complete, current and findable. This half-day course sets out the three PSI groups of OSHA 1910.119(d): chemical hazards, process technology and equipment design, then concentrates on the part that operators use daily, the safe operating limits table: how design limits, safe upper and lower limits, alarm settings and consequence-of-deviation statements are derived and kept consistent with the PHA, alarm database and procedures.

Learning outcomes

- List the PSI required for chemicals, technology and equipment and know where it lives on their site
- Derive safe operating limits from design limits with documented margins
- Write consequence-of-deviation statements that operators can act on
- Keep P&IDs, relief design basis and materials data controlled under MOC
- Check that PSI, alarm settings, procedures and PHA agree with each other
- Prepare PSI for an audit or PHA revalidation

Who should attend

Process engineers, technical authorities, PSM coordinators and document controllers; operations supervisors responsible for safe operating limits

Course outline

SESSION 1

PSI-related incidents · OSHA 1910.119(d) and RBPS process knowledge management · chemical hazard data and SDS limits · process technology: block flow, chemistry, inventories, safe upper and lower limits · equipment: codes, materials, relief design basis, P&ID control

SESSION 2

Setting safe operating limits: design limit, safe limit, alarm, normal envelope · consequence of deviation and integrity operating windows · consistency with PHA and alarm database · document control and MOC hooks · PSI gap check on a unit

Standards referenced

OSHA 29 CFR 1910.119(d) · CCPS Risk Based Process Safety
API 584 · ISA-18.2 · Seveso III Directive

Tools & exercises

Safe-limits table and PSI index templates provided; exercise on participants' own unit 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
None

CERTIFICATION
Certificate of completion

INSTRUCTORS
Practising engineers — TÜV HAZOP Leader, CCPS 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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