
Process Safety Management (PSM)





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Process Safety Management is a five-day senior HSE course delivered by Mars Training Centre UK across its international centres in London, Dubai, Doha and Muscat — for managers, engineers and HSE leaders accountable for major-accident hazards in oil and gas, petrochemicals, chemicals, pharmaceuticals and other process industries.

Occupational safety and process safety are different disciplines. Slip-trip-fall metrics tell you nothing useful about whether your plant is one human error or one isolation failure away from a catastrophe. The major incidents of the last forty years have repeatedly shown that organisations with excellent personal-safety records can still suffer catastrophic process-safety failures. Process safety management exists specifically to manage those low-frequency, high-consequence risks.

Across five focused days you work through the elements of a credible process safety management system, drawing on the published frameworks used across the industry. You examine real major-accident cases, practise hazard-identification and risk-assessment techniques, and leave with a personal action plan for strengthening process safety in your own operation.

What You Will Learn

- Distinguish process safety from occupational safety and explain why each requires its own management approach.
- Describe the major elements of a credible process safety management system.
- Apply structured hazard-identification techniques including HAZID and HAZOP.
- Analyse a major-accident scenario using bow-tie methodology and layers-of-protection thinking.
- Evaluate the integrity of safety-critical equipment, barriers and management controls.
- Diagnose the leading and lagging indicators that signal process safety drift.
- Lead a process safety review of an operating asset using a structured framework.
- Communicate process safety risk to senior leadership and the board.
- Design corrective actions that address management-system causes, not just technical fixes.
- Build a personal action plan for raising process safety maturity in your organisation.

How You Will Benefit

You will leave with a working command of the major elements of process safety management, the technical vocabulary to engage with engineers and regulators on equal terms, and a Mars Certificate of Completion.

Your organisation will gain a leader who can challenge process safety performance credibly, sharper boardroom conversations about major-accident risk, and a deeper bench of staff capable of leading process hazard reviews.



Who This Programme Is For

The course is designed for HSE directors, managers and advisers in process industries; plant, operations and site managers; process and technical safety engineers; maintenance and integrity managers; risk and assurance managers responsible for major-accident hazards; senior project managers leading process-plant capital projects; and regulatory inspectors. The seniority floor is senior engineer, supervisor or HSE adviser level and above, with operational experience in a process environment.

The week opens with process safety concepts and the lessons of history, moves into structured hazard identification and risk assessment, then into safety-critical equipment, barriers and bow-tie analysis, before turning to the human and organisational factors where most major accidents originate, and closing with the process safety maturity ladder and a personal action plan.