



Advanced Safety Management Methods Training Course

15 – 19 February 2027
Madrid

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Ref: 80_50007 **Date:** 15 – 19 February 2027 **Location:** Madrid **Fees:** 5700 Euro

Overview

Modern industrial enterprises encounter intricate sociotechnical challenges where routine compliance tracking fails to anticipate catastrophic events. The Advanced Safety Management Methods Training Course provides senior professionals with executive-tier methodologies to modernize protective frameworks through ANSI/ASSP Z10 architecture, bowtie barrier modelling, and human and organizational performance principles. Participants explore barrier integrity, operational drift diagnostics, and learning team facilitation to transform oversight from policing workforce infractions to fortifying systemic defenses. This course is delivered by Agile Leaders Training Center.

Who Should Attend

- Senior directors and department heads directing enterprise loss prevention strategies.
- HSE practitioners transitioning toward strategic barrier integrity and governance roles.
- Plant superintendents and technical leads overseeing high-consequence industrial facilities.
- Organizational effectiveness advisors introducing human performance methodologies into core procedures.
- Corporate assurance auditors evaluating systemic control effectiveness beyond baseline compliance.

Departments and Industries

This programme serves technical leaders and governance specialists across complex, high-consequence industries.

- Corporate HSE and Loss Prevention Directorates
- Asset Integrity and Operational Reliability Divisions
- Continuous Improvement and Organizational Performance Groups
- Energy Extraction, Refining, and Chemical Processing Enterprises
- Heavy Manufacturing, Primary Metallurgy, and Utilities Infrastructure

Learning Objectives

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

- Deploy ANSI/ASSP Z10 architecture to align occupational health and safety with business strategy.
- Construct bowtie barrier models that isolate threats, critical controls, and degradation factors.
- Facilitate operational learning teams to uncover latent conditions and operational drift.
- Design leading indicator scorecards that monitor barrier health rather than lagging incident counts.
- Apply human and organizational performance principles to engineer resilient workplace safeguards.
- Establish non-punitive event learning protocols that foster robust psychological safety.

Course Agenda

Day 1: ANSI/ASSP Z10 Alignment and Systems Governance

- Strategic integration of the ANSI/ASSP Z10 standard across enterprise functions
- Transitioning from compliance checklists to systems-based governance models
- Leadership engagement models that reinforce psychological safety and barrier stewardship
- Establishing accountability pathways without punitive blaming mechanisms
- Defining resource allocation for critical control verification

Day 2: Bowtie Barrier Modelling and Threat Identification

- Foundations of bowtie methodology: top events, threats, and consequences
- Differentiating preventive barriers from mitigating barriers across facility workflows
- Identifying barrier degradation factors and maintenance decay pathways
- Integrating critical control verification into routine plant walkthroughs
- Evaluating barrier health using quantitative and qualitative data inputs

Day 3: Human and Organizational Performance Integration

- Core concepts of human and organizational performance principles in high-consequence tasks
- Distinguishing error precursors, latent organizational weaknesses, and operational drift
- Designing context-driven error tolerance into mechanical and procedural safeguards
- Deploying learning team facilitation following complex near-miss events
- Transforming incident investigations into systemic organizational learning cycles

Day 4: Leading Performance Indicators and Assurance Dashboards

- Moving beyond injury rates toward proactive barrier strength metrics
- Formulating predictive indicators for critical control degradation
- Developing executive governance dashboards that visualize systemic vulnerability
- Conducting internal assurance assessments using ANSI/ASSP Z10 audit rubrics
- Closing feedback loops between frontline realities and boardroom governance

Day 5: Continual Improvement and Resilience Mastery

- Embedding continuous adaptation into corporate policy updates and business reviews
- Facilitating management reviews focused on systemic capacity and fail-safe designs
- Aligning organizational learning discoveries with capital expenditure planning
- Formulating a tailored five-day implementation roadmap for site-level rollout
- Capstone presentation of executive barrier control strategies

Practical Exercises

Participants undertake applied exercises designed to embed advanced governance methodologies into field execution.

- Suggested activity: Map a severe process event into a complete bowtie model identifying critical barrier degradation factors.
- Suggested activity: Conduct a simulated learning team debrief to diagnose operational drift in a permit-to-work scenario.
- Suggested activity: Formulate a balanced assurance dashboard utilizing five leading indicators of barrier integrity.
- Suggested activity: Benchmark an existing workplace governance manual against ANSI/ASSP Z10 architectural requirements.

FAQs

How does this course differ from conventional regulatory compliance workshops?

While standard workshops emphasize regulatory minimums and reactive incident logging, this curriculum focuses on advanced frameworks like ANSI/ASSP Z10, bowtie barrier modelling, and human performance theory to engineer proactive systemic resilience.

What analytical tools are introduced during the sessions?

Participants master bowtie risk diagrams, barrier decay tracking matrices, learning team inquiry guides, and leading indicator dashboard blueprints.

Are technical prerequisites required to participate?

There are no formal prerequisites, though the curriculum is calibrated for senior practitioners, managers, and directors already familiar with basic industrial workplace concepts.

Conclusion

Graduates return to their organizations equipped with modern governance tools to identify vulnerability, manage critical barriers, and foster a robust learning culture. By integrating ANSI/ASSP Z10 frameworks with human performance insights, leaders safeguard personnel and secure long-term operational vitality.