Production Operations Risk Assessment Training Course

4 – 8 January 2027
Addis Ababa

AGILE LEADERS
Training Center

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Ref: 1269_224432 **Date:** 4 – 8 January 2027 **Location:** Addis Ababa **Fees:** 4500 Euro

Overview

Production Operations Risk Assessment Training Course is a one-week course for production managers, process engineers, maintenance leaders, and operational-risk specialists who need a Production Operations Risk Assessment File. The course connects production risk assessment, process failure analysis, control effectiveness, residual risk monitoring, and operational risk ownership across manufacturing and processing environments. Participants convert failure scenarios into prioritized treatments and measurable indicators. Agile Leaders Training Center frames production operations risk assessment as a disciplined operating decision process.

Who Should Attend

- Functions responsible for production performance and operating decisions
- Teams responsible for process engineering and production-system design
- Functions responsible for maintenance strategy and equipment reliability
- Teams responsible for quality controls and process conformity
- Functions responsible for operational risk, assurance, and control monitoring

The course assumes participants already manage or analyze production processes and leaves out introductory enterprise risk and basic occupational safety instruction.

Departments and Industries

The course supports departments and industries that assess process, equipment, human, and interface risks in production operations.

- Production, operations, and process-engineering functions
- Maintenance, reliability, quality, and technical assurance teams
- Operational risk, internal control, and performance functions
- Manufacturing, food processing, and pharmaceutical production organizations
- Energy processing, utilities, and industrial service companies

Learning Objectives

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

- Analyze production objectives, boundaries, and risk tolerances
- Apply risk techniques to production failure scenarios
- Use PFMEA and bow-tie analysis to prioritize exposure
- Evaluate barrier adequacy and control effectiveness
- Build treatment ownership and residual-risk decisions
- Diagnose changes and indicators requiring escalation

Course Agenda

Day 1: Production Risk Context

- ISO 31000:2018 Production Risk Context Map
- Production Process Boundary and Interface Diagram
- Operating Objective and Risk-Tolerance Matrix
- Risk Source and Failure-Scenario Register
- Production Risk Stakeholder RACI

Day 2: Failure Scenario Assessment

- IEC 31010:2019 Technique Selection Matrix
- IEC 60812:2018 Process FMEA Worksheet
- Failure Cause, Mode, and Effect Chain
- Bow-Tie Threat and Consequence Model
- Production Risk Ranking and Uncertainty Record

Day 3: Controls and Treatment Decisions

- Preventive and Detective Barrier Map
- Control Design and Operating-Effectiveness Test
- Risk Treatment Option Comparison Matrix
- Production Control Ownership Register
- Residual-Risk Acceptance Decision Record

Day 4: Change and Risk Monitoring

- Production Change Risk-Impact Assessment
- Leading and Lagging Risk Indicator Set
- Control Degradation Trigger Thresholds
- Risk Escalation and Response Workflow
- Periodic Production Risk Review Calendar

Day 5: Production Risk Assessment Practice

- Exercise: Process Boundary and Failure-Scenario Review
- Exercise: PFMEA and Bow-Tie Risk Prioritization
- Exercise: Barrier Adequacy and Treatment Selection
- Exercise: Residual-Risk and Indicator Escalation Decision
- Capstone Exercise: Production Operations Risk Assessment File

Practical Exercises

The course uses suggested activities that connect production scenarios with causes, effects, barriers, treatment owners, and monitored exposure.

- Suggested activity: map interface risks in a food-processing line.
- Suggested activity: apply PFMEA to a packaging-equipment failure scenario.
- Suggested activity: test barrier effectiveness for an energy-processing interruption.
- Suggested activity: set residual-risk ownership and indicators for a production change.

FAQs

Who should attend production operations risk assessment training?

Production operations risk assessment training suits professionals responsible for production, process engineering, maintenance, reliability, quality, controls, or operational risk. It assumes experience managing or analyzing production processes.

How does production operations risk assessment differ from enterprise risk training?

Production operations risk assessment focuses on process boundaries, failure scenarios, equipment and interface risks, barriers, treatments, and operating indicators, while enterprise risk training addresses organization-wide strategic, financial, and governance risks.

Which techniques support production operations risk assessment?

Production operations risk assessment can use process mapping, scenario analysis, PFMEA, bow-tie analysis, risk matrices, barrier testing, treatment comparison, residual-risk records, and risk indicators.

How should production risk controls be evaluated?

Production risk controls should be evaluated for design, implementation, operating consistency, evidence, ownership, dependencies, degradation triggers, and their effect on likelihood, consequences, and residual exposure.

How is residual production risk monitored?

Residual production risk is monitored through assigned owners, leading and lagging indicators, control-degradation triggers, change assessments, escalation thresholds, treatment status, and periodic reviews.

Conclusion

The course integrates production context, failure analysis, risk ranking, barrier evaluation, treatment decisions, change assessment, and monitoring. Participants take back a Production Operations Risk Assessment File linking scenarios to causes, effects, controls, owners, residual exposure, and indicators. The file creates a traceable basis for operational risk decisions and review.