



# Asset Criticality & Risk Assessment

---

## Course Overview

Organizations will never achieve Operational Excellence without identifying mission critical equipment and assessing the risks associated with the operation and environment in which it functions. Industry surveys indicate more than 70% of organizations do not believe their asset hierarchy is accurate yet do believe the strategies they have in place are enough to address risk. The quality of information that feeds into strategic decision making plays a vital role in implementing effective asset management across their lifecycle. Without accurate, up-to-date information, decisions are more likely to be based on gut feel, compromising the decision's integrity.

Asset Criticality & Risk Assessment is a 3-day concentrated interactive workshop leading the attendee through the processes of identifying critical equipment, risks associated with critical assets, review and development of maintenance strategies to mitigate risk, and spare parts management.

Through our interactive and adult learning techniques, attendees will participate in application exercises, scenario discussions, case studies, and networking opportunities. Regardless of your level of expertise, you will gain the understanding of how industry "Best in Class" are utilizing Asset Criticality and Risk Assessment to achieve Operational Excellence and how this knowledge can be used as leverage in your organization.

## Learning Objectives

- **Understand** the two ISO standards regarding risk and asset management
- **Determine** asset criticality using a criticality matrix
- **Define** your plant taxonomy and asset hierarchy
- **Learn** how to conduct a FMEA & FMECA
- **Evaluate** current maintenance strategies and improvement opportunities
- **Establish** critical spares strategies and materials management best practices



## Course Format

This course will be held in a highly interactive workshop format with case studies and real-world examples.

The material has been designed using Adult Learning Methodology that believes the ideal ratio for optimum learning and retention is 60%/40%:

60% - blended combination of discussion, practical exercises, simulations, and case studies

40% - material/slides

Participants will engage in interactive exercises and discussions throughout the course to ensure the material is not only taught, but can also be applied. Limited class size (15-20 participants) is strictly enforced to enhance individual learning experiences and interaction with the instructor and other participants.

## Course Outline

- Risk & Asset Management
- Understanding Asset Criticality
- Asset Hierarchy
- Asset Criticality Process
- Asset Criticality Matrix
- FMEA/FMECA
- Maintenance Strategies
- Materials Management

## Takeaways

- Understanding ISO Standards
- Criticality Tool
- FMEA/FMECA
- Strategy Roadmap
- Certificate of Attendance
- Training Manual
- Worksheets/Exercises
- Contact Information of Instructor for Support

## Who Should Attend

Asset Criticality & Risk Assessment was designed for individuals participating in or aspiring to the following:

### By Job Title:

- Engineers
  - > Mechanical
  - > Electrical
  - > Production
  - > Project
- Procurement
- HSE Advisors
- Operations Managers and Supervisors
- Maintenance Managers, Supervisors, Planners & Schedulers
- Key Operations Supervisors
- Materials Management Managers/Supervisors
- Key Maintenance Support Assistants
- Other Stakeholders

### By Sectors:

- Bio Pharmaceutical
- Facilities
- Food and Beverage
- Manufacturing
- Mining
- Oil & Gas Upstream & Downstream
- Petrochemical/Chemical
- Power Generation
- Utilities & Transportation