



Quality-One International

Human Factors Course Outline

- Introduction to Human Factors
- What is Human Factors Engineering (Operator Error)
 - What is Operator Error?
 - Types of Errors Operators Can Make
 - Lapse-state
 - Mistake
 - Violation
 - Five Sources of Operator Error
 - Workstation Design
 - Ergonomics
 - Training and Work Instructions
 - Maintenance of Tools / Error Proofing
 - Cognitive / Attention / Concentration
 - Workshop: Five Sources of Operator Error
- Lapse-state Error
 - Alpha State
 - Repetitive activities
 - Lack of sufficient process operator stress
- Workshop: Lapse-state Error Example
- What is a Mistake?
 - Stress-induced
 - HALT (Hungry, Angry, Late, Tired)
- Workshop: Examples of Mistakes
- Violation Errors
 - Experience influence on operator performance
 - Lessons Learned impacts
- Workshop: Examples of Violation Errors
- Operator Error Problem Resolution (Best Practices)
 - Poka Yoke
 - 5S Methodology
 - Kitting
 - Signage, Visual Management and visual aids
 - Limitation of Use
 - Labeling principles
 - Cognitive improvement
 - Training improvements