



Operational Excellence Masterclass (OE)



Introduction:

This comprehensive course includes the work processes and the business systems needed to coordinate and achieve maximum production plant and equipment performance. You will find out how to institute the vital practices and systems to achieve maximum life-cycle profits from your operating plant and equipment.

Who Should Attend?

OE champions, Maintenance managers, engineers & planners, reliability and maintenance engineers, facilities and utilities managers, top level maintenance technicians, operations and production managers & engineers, plant engineers, design engineers, reliability engineers & technicians, operators, safety engineers, risk engineers, CMMS and spare parts personnel, safety engineers and anyone who is involved in reliability engineering strategies or methodologies to include design engineers for capital projects engineers

Course Objectives:

By the end of this course delegates will be able to:

- The candidates will be able to have all the information, knowledge, techniques and tools they need to take their business to Operational Excellence success. There are simple concepts that they need to know and understand which bring you world class production.

Course Outline:

Physics of Failure

- Component Distress
- Deformation and Degradation
- Physics of Failure (PoF)
- Failure Rates

Reliability

- Definitions
- Modeling
- Distributions
- Process Variation

Risk

- The True Risk Equation
- Risk Modeling
- Operating Risk Reduction

Cost of Failure

- Defect and Failure Total Cost
- Reactive Breakdown
- Proactive Reliability
- Series Arrangements

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- Parallel Arrangements
- Properties of Series Systems

Human Error

Human Factors

Controlling Human Error

Life Cycle

Maximizing ROI

Profit Optimization

Least Operating Costs

Reliability Improvement

- Component Reliability
- Standardization
- Systemization

Operating Risk Identification

- Process Mapping
- Defect Identification
- Downtime Costing

Operating Risk Selection

- Risk Rating
- Risk Response Rating
- Equipment Criticality

Risk Control Planning

- Risk Strategy Selection

- Risk
- Cost Calculator
- Confirming Risk Reduction

Risk Control Introduction

- Improving Process Design
- Work Quality Assurance
- Organization Structure

Operating Risk Monitoring

- Operation Performance Measure
- Selecting KPIs
- View Process Stability

Risk Continual Elimination

- Failure Prevention Cycle
- Root cause Analysis
- Precision Maintenance

Business Risk Reduction

- Design Operational Excellence into Operating Processes
- Selecting Useful Quality Controls
- Document the Correct Ways

Stress to Process Model

- Machine Health Creation Process
- Supporting Business Processes
- Introducing the Right methods

Life Cycle Risk Reduction

- Key Life Cycle Decisions
- Totally Optimized Risk
- Gauge Likely Profit Improvement

Operational Risk Reduction

- Failure Factors Analysis
- Risk Reduction Strategy Selection
- Economic Maintenance Selection

Machinery Risk Reduction

- Reliability Growth Cause Analysis
- Reliability Maintenance Standards

Making Changes

- Change Management
- Map the Improvement Journey
- People Working Together