Course Outline

WORLD CLASS MAINTENANCE MANAGEMENT

Learn from the best

Introduction

Performing a periodic Maintenance Technical Audit is vital to remain cost effective and operationally efficient. Such type of audit for building, infrastructure and production facility becomes an indispensable survival strategy employed by every well-discerning organization. It is a tried and tested tool for containing the costly exposures to all operations-related risks, while also boosting your competitive edge through heightened awareness and compliance to global standards, state regulatory statutes and known best practices.

Target Audience

Maintenance managers, maintenance engineers, PM specialists, line leaders, Supervisors, Facilities Managers. There is also an advantage to having representatives from operations, production control and stockroom to understand Maintenance

Duration

2 days long. 14 hours total.

Course Schedule

Time	Day 1	Day 1
9a.m - 10a.m	Introduction and Module 1	Recap and Module 5
10a.m - 12p.m	Module 2	Module 6
12p.m-1p.m	Lunch	Lunch
1p.m-3p.m	Module 3	Module 7,8
3p.m-5p.m	Module 4 & Summary	Module 9 & Q&A

Course Outline

Day 1

Introduction to Maintenance

1. How assets can generate value for your organization
2. What are your assets and which ones are you going to actively manage?
3. Ensuring your assets support your organization's objectives
4. The key asset management stakeholders and understanding their needs
5. The Model of Excellence for Asset Strategy
6. Concept of Life Cycle Costing
7. Why the study of Life Cycle Costing is important?

Understanding Equipment Failures

Get data about the cost of downtimes

1. The Truth About Machinery and Equipment
2. Is It Really Possible to Eliminate Breakdowns on our Equipment?
3. Types of Failure Patterns
4. Six major Equipment Losses
5. What are the Six Big Losses? (Develop Countermeasures for Losses)
6. Strategies for Zero Breakdowns

Management of Maintenance KPI's

1.Most Common Mean Time Indicators
2.Understanding Mean Time Between Failure (MTBF)
3.Understanding Mean Time to Failure (MTTF)
4.Overall Equipment Effectiveness (OEE)
5.Conducting an OEE Loss Analysis (Benchmarking of OEE)
6.How to improve OEE?
7.Benefits of Calculating OEE
8.What Affects the OEE Losses?
9.OEE is a Diagnostic Metric
10.Benchmarking of OEE

Addressing Basic Equipment Condition

Determine the value of maintenance

1. Importance of Going Back to the Basics
2. Cleaning, Proper Lubrication and Tightening of Bolts
3. Step 0: Getting Ready.
4. Step 1: Initial clean up and inspection of machines.
5. Step 2: Eliminating Contamination and Inaccessible Areas

- Taking counter measures for sources of problems.

6. Step 3: Develop Standards for Cleaning, Lubrication and Inspection
7. Role of Operators in Establishing Basic Equipment Condition
8. Plan continuous improvement activities

Day 2

Understanding Preventive Maintenance

Use effective technologies tools -1

1. Types of Maintenance Strategies
2. Break down Maintenance
3. Total Productive Maintenance
4. Preventive Maintenance Definition and Objective
5. The importance of implementing a PM program
6. What Preventive Maintenance Activities Includes?
7. Feasibility of Using Preventive Maintenance for Age-Related Failures
8. Limitations of Using Preventive Maintenance
9. Establishing schedules
10. Breaking a facility into logical parts
11. Selecting Preventive task

Understanding Predictive Maintenance

Use effective technologies tools-2

1. Predictive Maintenance Defined
2. Start using predictive tools
- Vibration analysis
- Tribology
- Thermographic or infrared temperature monitoring
3. The technical feasibility of on-condition tasks
4. Categories of on condition techniques
5. On-condition task and some pitfalls
6. Understanding the P-F Interval and Importance of determining Potential Failures
7. Potential failures and on-condition maintenance
8. How to determine the P-F Interval
9. When on-condition tasks are worth doing
10. Selecting Predictive tasks

Maintenance Planning and Control

1.Maintenance work flow process
2. Work requests and work orders
3. Work planning and scheduling
4. Backlog management
5. Resource management
6. Spare Parts Management Explained
7. Importance of Physical Inventory and Systems Inventory
8. Problems and Issues on Spare Parts

Failure Mode Analysis (FMA)

1.What is Failure Mode Analysis (FMA)
2. Using 80/20 principle for Equipment Selection
3. Chosen Component - Review failure modes history
4. List root causes of failure modes; the cause of occurrences
5. Assign optimized maintenance task, frequencies and standards
6. Five Why Technique
7. Fish Bone Diagram / Ishikawa/ Cause and Effect (4M-6M)
8. Team Exercise: Creating Fish Bone Diagram / Ishikawa/ Cause and Effect diagram

Computerized Maintenance Management Software

1.Purpose, application and role of CMMS in Maintenance Management
2. Getting Started with Maintenance Dashboards
3. Why you need a Maintenance Dashboard Total Assets.
4. Indices with other analytics
5. Establish your Maintenance Baseline

About Elite Indigo

Elite Indigo Consulting provides corporate training to the semiconductor and manufacturing industries. With a humble beginning of one founding member with passion and desire to share his 20 years of experiences in Smart Manufacturing for global manufacturing facilities, now, we have a strong and competent team of 20 members, all aligned with company mission, vision and core values.

Our Mission

"Transform Data into Insights - Leap Forward"

Our Vision

Be a Global Trusted Advisor in the Areas of Skills Development, Consultancy & Software Solutions specialising in Semiconductor & Manufacturing industries.

Our Core Values