ASSET PERFORMANCE MANAGEMENT

METHODS MAINTENANCE STRATEGY DEVELOPMENT

Discover how to analyze failure data by going further than just MTBF. Linking the Weibull distribution to the logical Reliability Centered Maintenance (RCM) approach, this class will provide a justified outcome to maintenance strategies that can be implemented through to preventative maintenance documentation. By utilizing software to logically follow the step-by-step pathway to optimized maintenance strategy development the course will drive excellent asset performance at low cost and risk.

Format

Duration: 15 hours **Schedule:** 2 Day(s) **Delivery:** Classroom

Who should attend

Reliability engineers, project engineers, maintenance analysts, maintenance supervisors, design engineers, plant performance engineers, RCM team members

Objectives

- Develop logical, justified maintenance strategies following the Reliability-Centered Maintenance (RCM) approach.
- Leverage powerful reliability software to optimize your plans in a simulated environment leading to effective plan implementation.
- Analyze and utilize failure data to drive improvement.
- Deliver successful outcomes and meet business objectives through quantifying and calculating business benefits and risk reduction.

Program Outline

Day 1

- Analysing failure data. Utilizing MTBF & MTTR and explaining the flaws.
- Introducing the Weibull distribution and its benefits for Reliability data analysis. The importance of analysis at a failure mode level and applying the corresponding Weibull shape.
- Practical exercises analysing failure and suspensions data with Weibull. How to analyse with limited failure data. How to be more efficient with failure analysis.
- Introducing the RCM methodology approach for maintenance optimization.
- How to justify maintenance by linking through Business Goals & Asset Strategies.
- Identifying system boundaries, functional analysis & failure mode definitions.
- Applying failure consequences for cost & risk, and failure frequencies. Analysing the Run-To-Failure strategy.
- Inspections, predictive maintenance & preventative choices. Understanding P-F intervals.

Day 2

- Learning by doing exercises; understanding the complexities of calculating maintenance justification without computers.
- Building an RCM model from scratch. Performing task optimization as a group, identifying the optimal strategy & intervals, and justifying the reasons.

- Grouping of tasks to create maintenance plans.
- Preparing for implementation; load sheet into CMMS creation and preventative maintenance instruction documents.

Day 3 (Optional)

- Further learning by doing exercises, add complexity. Building an RCM model from scratch. Performing task optimization as a group, identifying the optimal strategy & intervals, and justifying the reasons. Showing the comparison of cost & risk.
- Importing failure data, creating Weibull sets, linking to the RCM model.

Languages

- English
- Spanish
- Portuguese
- Chinese

Next Steps:

RBD101 - Improving Plant Availability using Reliability Block Diagram