

Reliability Analytics - User

Course #1003

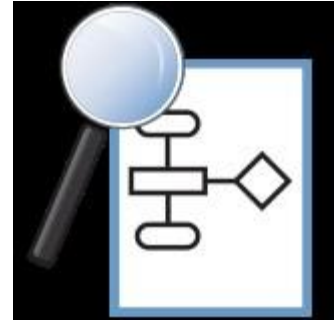
Course Details

Length: 1 day

Prerequisite: APM Framework - User

Benefits: You will learn the necessary knowledge and skills to utilize Reliability Analytics tools for the analysis of existing maintenance, design, predictive, and process data.

Audience: General Users, Implementers, Administrators



Overview

Optimizing Operations & Maintenance Strategies

Reliability Analytics provides tools that can help you analyze data, develop operational and maintenance strategies, and evaluate the effectiveness of those strategies over time.

Mining Reliability Data

You can query the data currently in your database to perform a number of analyses that will help you identify reliability problems.

Data Analysis

Once you have identified a reliability problem and built a query, you can apply Statistical Reliability methods. Wizards make it possible to quickly build analyses, including Growth, Weibull, Cost of Unreliability, and Production Analyses.

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Training Agenda

Introduction to Reliability

- Key terms
- Component Reliability Workflow

Identifying Bad Actors

- Using Pareto Analysis to identify bad actors
- Creating a Metric View

Reliability Analysis Queries

- What is a Reliability Analysis Query?
- Building a Reliability Analysis Query

Growth Analysis

- Building a Growth Analysis
- Viewing Growth Analysis Results

Weibull Analysis

- Weibull Distribution
- Building a Weibull Analysis
- Viewing Time to Failure Distribution Results
- Viewing Time to Failure Plots
- Viewing Time to Repair Distribution Results
- Calculating Failure Probability
- Preventive Maintenance Optimization
- Using the PM Optimization Tool

Cost of Unreliability Analysis

- What is a Cost of Unreliability Analysis?
- Building a Cost of Unreliability Analysis
- Viewing Cost of Unreliability Results
- Viewing Cost of Unreliability Plots
- Building and Viewing Cost of Unreliability Trend Plots
- Building a Probability Distribution
- Censoring Data
- Censoring Outlying Datapoints

Production Analysis

- Accounting for the Reliability of Operational Processes
- Production Analysis Data Model
- Creating a Production Analysis based on a Dataset
- Accessing Production Data
- Adding Production Lines, Demonstrated Lines, Process Reliability Lines, and Nameplate Lines
- Calculating the Cost of Lost Production
- Changing the Margin Currency or Margin Value
- Adding Breakpoints
- Ignoring Datapoints
- Adding Custom Lines
- Grouping Production Data
- Grouping data by Column Values
- Interpreting Production Weibull Results