

Reliability Centered Maintenance

Purpose

The purpose of this course is to give technical and supervisory personnel the knowledge to decide when to use RCM instead of other methods to develop preventive maintenance tasking. The course includes a hands-on exercise performing RCM analysis on a common system.

Objectives

At the completion of this course you will:

- Have conducted an FMECA of a simple system
- Have developed a planned maintenance regime for that system using RCM principals
- Have gained the knowledge to apply these techniques to individual pieces of equipment in your organization.

Description

This is a four day course. It involves extensive hands on work by the student. Actual application of the principals discussed will be done to a simple system of the students choosing during the class. The course can be modified to place more emphasis on either FMECA or RCM as desired.

Content

Introduction To Reliability Centered Maintenance

Historical Perspective

Purpose

Benefits

Maintenance Strategies

Fundamental Maintenance Strategies

How To Select Strategies For Individual Equipment And The Overall Plant

Theory And Principals

Reliability Theory

Wear And Failure Mechanisms

Failure Data

Preventive Maintenance Process

Basic Maintenance Tasks

Task Selection

RCM Method

Information Collection

System Identification & Partitioning

System Analysis

Periodicity

Cost Effectiveness

RCM Example

Hands On Analysis Of A System (Bicycle, Swimming Pool Filtering,
Domestic Hot Water, Heating System, ...)

Industrial Examples

Implementation

Developing The Initial Program

Cost Justification

Measuring Program Effectiveness

Summary & Wrap-Up

