

Reliability Centred Maintenance

Overview

Good maintenance planning improves equipment and overall Plant performance. Using Reliability Centred Maintenance, or RCM, we can determine exactly what maintenance we need to do and when to do it. There is no need to base our work entirely on what the equipment vendor says or custom and practice. There is a logical process available, which will help us achieve the required level of equipment and Plant availability, at the optimum maintenance cost.

Using RCM, we can achieve significant improvements in uptime and costs, better safety and environmental results and enhanced reputation. This translates directly into increased profitability, both in the short term and in the long term. Improved Technical Integrity also improves staff morale and productivity.

Objectives

The course will align the skills of participants for a systematic understanding and application of the RCM process. It will also align the objectives of operators and maintainers.

Key learning points

At the end of the course participants will be able to:

- Define the operating context
- Define failure in terms of performance standards
- Carry out Failure Mode and Effects Analysis or FMEA
- Appreciate the physical nature of failure
- Understand how failures are distributed in real life and why it matters
- Carry out Failure Characteristics Analysis or FCA
- Determine the correct maintenance tasks to mitigate against failure
- Bundle tasks into Preventive Maintenance Routine
- Eliminate unnecessary maintenance work and costs

Duration

- Half day Management overview.
 - The Role of Management for successful RCM implementation.
- 3 day training course in RCM methodology.
- 2 day supplementary workshop on a case study to embed learning
- 1 day supplementary course on RCM Facilitation skills.
- 1-day workshop in basic RCM techniques for operators / technicians.

RCM software for administration of the RCM analysis process is available.

Attendees

The course is targeted at all levels of the organisation.

Users have achieved

- Uptime improvements of up to 2%
- Maintenance cost reductions of up to 50%
- Improved Plant designs by applying RCM during design

The EML difference

The courses are dynamic, reflecting the workplace experience of the attendees, and at least 50% participative. They are based around the facts that we remember:

10% What we read

20% What we hear

30% What we see

50% What we see and hear

70% what we discuss with others.

80% What we actively do

90% What we explain to others

Our training operates in the last three areas.

Students of RCM learn to focus on why equipment fails, before deciding on the right tasks to carry out. The right timing of these tasks is crucial to getting costs under control. This explains why RCM application brings such dramatic results.

The courses provide a overview to Management and structured process for performance improvement to those closer to the action.

Does it work?

The Airlines achieved a ten-fold drop in fatalities within 10 years. Oil&Gas firms have also improved uptime and cut costs, s have Utilities and Food companies. You can see why it works, because it is so logical.