

Pragma Academy

Smart Learning for Smart Asset Management



Root Cause Analysis



This practical course is aimed at the front-line teams who must be able to do basic root cause analysis on fairly straightforward problems, with a quick turnaround time. Although it is also based on the DMAIC steps, the main focus is on the problem definition, the cause-effect analysis and on verifying potential causes.

About this course

“If I had an hour to solve a problem, I’d spend 55 minutes thinking about the problem and 5 minutes thinking about the solution.” Albert Einstein

This course is aimed at front line operational problem solving where the problem can be solved by an individual or small team within a period of 1-14 days.

The image below shows the flow of each module, distinguishing between the LMS work, contact session work and the workplace assignments.



The contact sessions follow on the elearning sessions and are transformed into dynamic, interactive sessions focussing on real examples and application of knowledge.

Course Outcomes

At the end of this course learners will be able to:

- ✓ Explain the three categories of problems and how they are resolved in the world of maintenance
- ✓ Explain how the daily meeting structure facilitates and controls problem solving
- ✓ Explain the steps in the process of RCA
- ✓ Define problems clearly using the 5W1H technique
- ✓ Collect and interpret information to ensure fact-based RCA
- ✓ Identify possible causes of the problem without jumping to conclusions
- ✓ Verify and eliminate possible causes that are not feasible
- ✓ Apply cause-effect analysis to find the root causes of the problem
- ✓ Select, motivate and implement the best solution

Introduction to Root Cause Analysis (RCA)

Problems, Problems, Problems ...

- Understand the role of fault finding
- Explain how the daily meeting structure facilitates and controls problem solving
- Explain evaluation criteria and how it is used to classify problems
- Explain the steps in the DMAIC problem solving process

Define and Measure the Problem

- Define problems clearly using the 5W1H technique
- Collect and interpret information to ensure fact-based RCA

Analyse the Possible Causes

- Brainstorm possible causes without jumping to conclusions
- Verify and short list causes that are not feasible
- Apply the 5Why technique to create a cause and effect map and find the root causes of a problem

Improve and Control the Solution

- Select and motivate the best solution
- Set up an action plan to implement the solution
- Check if the solution works and make it sustainable





Who should attend?

- Artisans / Tradespeople
- Planners
- Foremen
- Shift supervisors
- Junior engineers



Format and duration

- Blended learning, with elearning and contact sessions
- 14 notional hours
Learners complete elearning modules and quizzes prior the contact sessions
- Formative and summative assessment through knowledge quizzes
- Workplace assignment



Take-home tools

- Workplace assignment allows for practical application and demonstration of knowledge



Certification

- Learners completing this training can obtain SAAMA CPD points.



RECOMMENDED PRIOR LEARNING

Fundamentals of Maintenance Management



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Public Training calendar 2020/2021



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