

Root Cause Problem Elimination™

Course Description and Outline



Introduction/Overview of the Course

At IDCON we have named our process for problem solving Root Cause Problem Elimination™ instead of the more commonly used Root Cause Failure Analysis. It is our belief that Root Cause Problem Elimination better describes the desired results of a Root Cause process. Root Cause Failure Analysis indicates the desired outcome is to analyze the root cause of a failure. The desired outcome should be the elimination! We also believe 80 to 90% of all problems can be eliminated by training and implementing basic problem solving methods for the frontline organization.

Course Objectives/Benefits to Participant

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

- Explain and demonstrate the process to others
- Apply a critical thinking approach to RCPE
- Collect, organize and effectively present RCPE findings at the plant
- Correctly implement cost effective problem elimination solutions

Training Method

Using best practice experience and interactive examples and studies, the instructor will lead the students through the RCPE process.

Recommended Attendees

Anyone who is involved in maintenance and operations should attend this class. This course is designed to teach a simple, easy to apply method for frontline, operations, planners, supervisors and managers. No software needed!

Course Outline

1. Introduction. Participants will learn:

- The RCPE approach
 - Why RCPE?
 - The How-Can Diagram
 - The technical and the human aspect
 - Troubleshooting
 - Pointing to Prevention
- Beliefs on RCPE
 - The reactive environment

2. Finding and Prioritizing Problems: Participants will see and discuss:

- Pictorial representations of “problems” in plants

3. RCPE Process and Workflow: Participants learn:

- Triggers
 - Types
 - Adding the Trigger to the “How-Can” diagram
 - Do failure codes work?
- Problem Statement
 - What’s the problem, really?
 - Writing a problem statement rooted in fact
- Data Collection
 - How to do it
 - When to do it
 - How to ask the questions
- Causes
 - Why, “why” isn’t the question
 - Cause and effect
 - Level of detail
 - Adding possible causes to the “How-Can” diagram
 - Process of elimination

4. Problem solving and thinking tools: Participant will learn:

- How timelines assist the process
- Division and deduction
- How similar objects investigations help
- Creative and critical thinking
- How to avoid the RCPE traps
- Logic and critical thinking
- When there is more than one possible cause

5. Implementing RCPE in your plant: Participants learn:

- Who should be doing RCPE
- How to run an RCPE meeting

6. Eliminating the Problem: Participants will learn:

- The questions to ask about the problem solution
- Executing the solution to the problem
- Reporting

IDCON In-house Training and On-site Implementation Support

IDCON can customize any of our training courses for your plant and provide the coaching and implementation support to ensure your organization really uses the processes to garner the best results.

IDCON Training and Consulting Services

- Leadership and Organization
- Reliability and Maintenance Assessments
- Planning and scheduling improvement
- Preventive Maintenance/Essential Care and Condition Monitoring
- Operator Essential Care
- Materials and Spare Parts Management
- Root Cause Problem Elimination™
- Improving equipment data and technical database
- Shutdown Turnaround Optimization Program