

Root Cause Analysis

INTRODUCTION

There will always be problems in the working environment, no matter which area, level or industry type. We all know that it is important to contain problems as soon as they occur or are discovered. However, what we generally see with problems are only the symptoms of the real problem. The root cause is rarely apparent.

Root Cause Analysis with corrective action is about getting to the true source of a problem and then correcting it for good. Why should you allow time and money being wasted over and over?

If your company has reoccurring problems leading to out of control situations that you just can't get to the bottom of, then you need a structured and scientific way to get to those root causes.

Your managers need to measure and solve the problems for good. With this workshop your employees will learn how to do this without spending weeks away from work in a classroom. They will be equipped to start working with others to eliminate reoccurring problems for good. Practical tools are provided on soft copy CD.



TRAINING OBJECTIVES

This course provides delegates with an understanding of the following:

- ✓ The different types of production and maintenance strategies.
- ✓ An understanding of the multiple types, effect and causes of failure – 12 wastes
- ✓ Apply RCFA, 5 Why and FMEA methodologies in failure investigation
- ✓ Think through the possibilities of physical root causes of a failure that go beyond a quick fix
- ✓ Recognise the presence of event chains leading to a failure and analyse causes behind the causes
- ✓ Verify or disprove contributing causes
- ✓ Identify actions or recommendations that will avoid a repetition of the failure or problem investigated,
- ✓ Create a fault tree of an incident
- ✓ Look for relevant evidence in a failure investigation or accident
- ✓ Trace and identify the causes of equipment failures and industrial accidents
- ✓ Spot high-risk situations and act to prevent problems,
- ✓ Understand the typical human factors and latency involved in failures and accidents
- ✓ The skills to determine the total value of a problem, to organize all of the information into a thorough analysis and to select the best solutions.
- ✓ A thorough understanding of the popularly used problem solving and analysis tools used to help determine the root cause:
 - Defect Check Sheet/ Defect Failure Totals
 - Fishbone (Ishikawa) diagrams.
 - Pareto Analysis – Severity of problems
 - Histogram and Tally Sheets
 - Scatter diagram and relationships charts
 - Simplified Statistical Process Control (SPC)
 - The 5-Why Analysis and advanced 5- Why
 - Systematic Thinking and Hard Logic
 - Comparative Analysis
 - Is- Is Not analysis
 - Timeline Analysis
- A practical step-by-step Root Cause Analysis Model is provided and delegates are taught how to create a list of possible permanent corrective actions once a root cause has been determined, how to choose the action to be deployed and then to validate that permanent solution.

WHO SHOULD ATTEND?

This Root Cause Analysis Workshop is designed for managers who are responsible for the failure and deviation investigation process including poor performance, low targets and other people issues, this course is not only about analysing accidents, safety and product defects.

It examines all wastes of time and money.

- These include, with some brief examples, but not limited to:
- Manufacturing/Production Management (Productivity issues) managers; foreman and supervisors
 - Quality Management/Quality Assurance/Quality Control (Complaints/returns, defects, reworks, specifications; hidden costs; defects and failure totals; customer rejects and complaints)
 - Engineering/Maintenance Management, foreman; supervisors
 - Human Resource Management
 - Logistics; Procurement and Transportation management
 - Other support groups like Information Technology; Industrial Engineering; Financial Management; Design/Planning and Production Planning & Control
 - Any Risk Management employees; ISO implementers; SHERQ officers

This course is theoretical as well as highly practical in its application and the above are only some examples. It can be particularly valuable to those newer to this field or those who wish to refresh their knowledge of root cause analysis and investigative techniques. It also assures the growth of your business when problems are resolved.

Course Duration: 3 Days

SAAMA Accredited: 3 CPD Points

Jaco Kleynhans E-mail: jaco@steptraining.co.za

Cell phone: 074 876 4437