

RootCause Works

OVERVIEW

- Increasing machine and equipment availability
- Reducing waste and rejects
- Improving quality
- Reducing operating costs
- Maximizing change over time
- Reducing downtime

The above are all important objectives in achieving organizational effectiveness and thus being competitive in the market place. Organizations need troubleshooters who apply thinking skills to solve problems. Proficient thinking skills avoid unnecessary and expensive fixes by using a step-by-step thinking approach to detect, analyze, solve and prevent problems.

AIM

RootCause Works equips troubleshooters with powerful tools to solve and prevent problems by identifying, describing, analyzing and fixing problems, and then ensuring that they do not recur.

WHO SHOULD ATTEND

Supervisors and key technical staff of Engineering, Maintenance and Manufacturing Divisions.

METHOD

RootCause Works is a three-day workshop which is competency based with many case exercises and a large portion of the time dedicated to own-job applications.

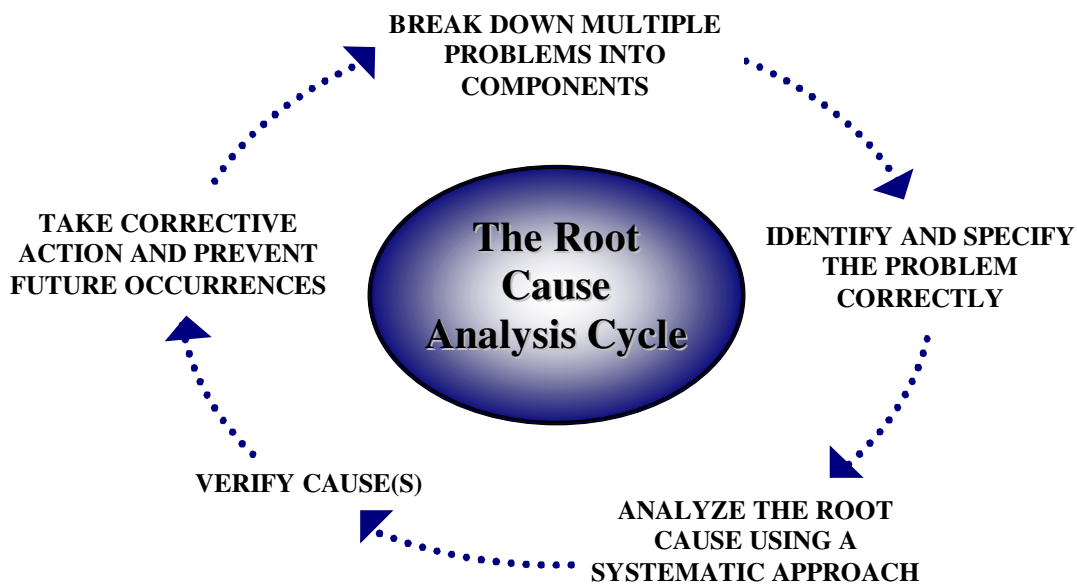
METHODOLOGY

WHAT IT IS

Troubleshooting consists of three main components:

- Breaking multiple problems down into actionable components.
- Seeking the true cause of a problem.
- Preventing future problem occurrences.

The troubleshooter has a thinking job. Improved quality of thinking will result from a systematic problem solving approach directed at specific goals. The following diagram explains a typical procedure.



A unique learning experience with a lifetime of application

ROOTCAUSE WORKS OBJECTIVES

- Reduce absenteeism and build team spirit.
- Improve operational efficiency.
- Increase productivity.
- Enhance quality and service practices.
- Reduce costs and especially recurring costs.
- Decrease downtime and set-up time.
- Create safer manufacturing facilities.
- Improve problem solving and problem prevention capabilities, both individually and in teams.
- Raise the effectiveness of cross functional and self managed teams.
- Decrease scrap and waste.

Tools and Techniques

RootCause Works revolves around three fundamental principles, namely:

- finding cause,
- taking action, and
- problem prevention.

FINDING CAUSE

Learn how to find true cause.

WHAT IT IS

Finding cause steps, help troubleshooters to recognize problems accurately and find the true cause. By prioritizing problems, describing them in detail, and identifying and testing possible causes, the true cause is proved before expensive fixes are undertaken. **Troubleshooters ask sharp, probing questions to gather pertinent information.** They differentiate between types of problems and ask specific questions to gather information.

WHAT YOU WILL LEARN

- Determining the problem statement by identifying one object and one fault.
- Describing the problem factually by answering a specific set of questions.
- Organizing and evaluating the unique answers to the questions.
- Identifying differences and changes to lead you to the true cause.
- Testing the possible causes and verifying them in practice.

CHECK YOUR THINKING

To utilize the concept of systems thinking to “close the loop” on problem solving thinking.

WHAT IT IS

The best troubleshooters think past the immediate problem. RootCause Works participants learn to look for other damage created by the cause. During the search for the true cause they also learn to check critical assumptions and to anticipate problems that a fix may create.

WHAT YOU WILL LEARN

- You will learn how to ask very specific questions such as:
 - * What other damage should be considered?
 - * Where else could this solution be helpful?
 - * What are the risks and opportunities associated with the solution?
- Identify the potential problems that this fix could create.
- Identify the high risk ones.
- Develop the likely causes of each potential problem.
- Generate preventive actions that will reduce the probability of the likely cause occurring.

SPECIAL FEATURES AND LEARNING DESIGN

- The RootCause Works learning design is competency-based, with many case exercises and a large amount of time dedicated to own-job application.
- RootCause Works uses the “learn – practice - apply” design with a major emphasis on transfer of skills to the work place.
- Concept briefings introduce and explain individual ideas in a group setting that encourages participation.
- Case practice provides opportunities to use the skills as they are learned. Cases are based on real production situations to stimulate discussion and focus participants on the use of specific skills.
- Four structured own-job application exercises are built into the workshop. Each own-job application has an illustrated introduction to stimulate discussion and focus participants on the use of specific skills.

THE BOTTOM LINE

- Employees learn to solve problems rather than complaining about them.
- RootCause Works provides organizations with a means for their employees to participate more effectively in the operation of a plant or facility.
- A unique aspect of RootCause Works is its emphasis on application to real job concerns. Immediate results come from the progress employees make on their job problems, such as the following:
 - * One *utility* identified design deficiencies through the RootCause Works process resulting in innovative solutions of 18 million savings in one year.
 - * A *diamond mine* produced savings in excess of 10 million in 1 year through the RootCause Works application on rock breaking.
 - * A *uranium mine* used RootCause Works to achieve 1,6 million savings in the Engineering Division within 6 months.
 - * A *textile company* projected a profit situation within 1 year of introducing RootCause Works.
 - * In a *beverage bottling company* machine down time was reduced by 16% in the packaging department.
 - * In one year a *manufacturing company* reduced a major reject rate by 50% by improving press tooling.
 - * Machine malfunctioning rectification reduced rejects by 21% in a *paper manufacturing company*.
 - * A *motor manufacturing company* reduced their maintenance cost by at least 12% in one year.

CONCLUSION

Using RootCause Works skills, workers can find the cause of a problem and recommend or implement a solution to fix it. Its strong emphasis on avoiding problems provides organizations with the means to keep operations running smoothly and forms the basis of continuous improvement.

THE RESULT

The result is a thinking workforce who has the ability to identify and troubleshoot problems proactively. This will enable management to allow problem solving to take place at the coalface where it matters most reducing frustrations to both working groups.