Manufacturing Technology Training
An IMTMA initiative

Certified Specialist in Root Cause Analysis
Date : 18 to 19 June, 2026
Venue : IMTMA Technology Centre, Pune

INTRODUCTION

Fundamental to any continuous improvement program is the ability to determine the root cause of an effect. Root cause is the fundamental, underlying reason for a problem. The approach should be “Don’t put a bandage on a problem; fix the issue permanently”.

Root cause analysis involves - deploying methodologies to understand the root cause(s) of a problem and verify the same. 8D and A3 problem-solving are universally deployed approaches that are structured to identify and verify the root cause in a scientific manner.

This course will enable participants to understand root cause analysis as a procedure for ascertaining and analyzing the causes of problems in an effort to determine what can be done to solve or prevent them occurring again. RCA potentially leads to saving of time, money, and resources.

Keeping this in view, IMTMA is organizing an Training program on **“Certified Specialist in Root Cause Analysis”.** This course is designed to provide participants with an in-depth understanding of how to analyze a system to identify the root causes of problems thro **“Learning By Doing”** methodology.

FOCUS AREAS

- Understand the basics of problem-solving.
- What is Root Cause Analysis?
- Tools/Techniques used in problem solving approach
- Concept of Y=f(x).
- Sources and types of variation

8D problem solving methodology using a case study

D0 – Implement ERA (Emergency Response Action)

- Prepare for 8D
- 8D Process Flow

D1 – Establish the Team

- Select the Team
- Map the stakeholders
- Framework for Success of the Team

D2 – Define the Problem

- Tips to write a Problem Statements
- Is/Is not Analysis
- Process Mapping

D3 – Develop Interim Containment Action

- Process of making a containment plan
- Containment Actions

D4 – Root Cause Analysis

- Techniques to identify the root cause analysis (Brainstorming, seven QC tools)
- Validate the Root cause (Techniques)

D5 – Identify Permanent Containment Action

- Error Proofing
- Selecting the Solution

D6 – Implement Permanent Containment Action

- Develop Corrective action
- Obtain stakeholder approval on PCA

D7 – Define and Plan Preventative Action

- Use an FMEA – Risk Assessment
- Control plans

D8 – Congratulate the team

- Appreciating team members

A3 problem-solving methodology using a case study

- Describe the objectives of A3 problem solving report
- Characteristics of A3 Problem Solving
- Explain the A3 problem solving process
- Provide a deeper insight into various sections of A3 problem solving report and the application of key tools to complete those sections like
    - Forming a Problem Statement
    - Seven QC tools for Analysis
    - Stakeholder Management before implementing Countermeasures
    - SMART goals
    - Solution Selection
- Know the key points to consider and exit gate questions before completion of each section of A3 problem solving report
- Using a case study, complete an A3 problem solving report

KEY TAKE AWAYS

At the end of this program, the participants shall be able to:

- Enhance problem-solving effectiveness by providing a model for in-depth analysis of problem situations.
- Apply the concept of Y=f(x).
- Know Tool kit required to complete an A3/8D problem solving report.
- Apply A3/8D problem-solving on the shop floor.
- Propagate systematic way of problem solving
- You will have the necessary skills required to become an adept A3/8D practitioner, prepared to lead and facilitate effective problem-solving activities and teams.

PARTICIPATION FEE

Rs. 4999/-	Rs. 2500/-	Rs. 999/-	USD 200/-
+18% GST	+18% GST	+18% GST	**Overseas Participants**
IMTMA Members/ Micro Companies/ Individuals/ IMTMA Non Members/ Others	**Professors**	**Student**	

Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

PARTICIPANT PROFILE

This course is targeted for people from, engineering personal, production personnel, entry-level graduates and those who would like to enter into the field of Operational Excellence. It will also benefit managers and quality supervisors from machine tool, automobile and auto ancillaries, toolrooms, aerospace and general engineering.

FACULTY

This programme will be conducted by, IMTMA Subject Matter Expert.

He is a distinguished Engineering and Management Consultant and Corporate Trainer with over 30 years of experience in the manufacturing sector, particularly serving MSMEs across India. He specializes in Business Strategy, Lean Manufacturing, TPM, Operational Excellence, and Project Management.

He has held senior roles at notable companies such as Tata Motors, Raymond Group, Hi-Tech Gears, Varroc Engineering. He holds a Mechanical Engineering degree from BITS and a PGDBM, along with certifications in Lean Six Sigma and Lean Manufacturing by the Ministry of MSME, GOI. He is also a seasoned trainer and a visiting faculty at esteemed institutions.

He has a wide experience in design and implementation of Low-Cost Automation in manufacturing and has successfully executed many such projects.

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REGISTRATION : Prior registration for participation is necessary. Number of participants is limited and will be accepted on ‘First Come First Serve’ basis. A Certificate of participation will be issued to participants.
Important Information : Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.