



Technical Troubleshooting -&- Decision Making Value of Machine Troubleshooting

December 1-2, 2025 | 9 AM - 5 PM | Training Room 1, FMM Eastern

Introduction

The quality of your result is based on the quality of your decisions. In a failure analysis, we are very much concerned about the reliability of various functioning components in the systems, the system safety associated with production and ability of the system to function as planned.

Your best decisions are built on a sharp and focused ability to analyse situations, people and probabilities. Trouble-shooters are highly skilled workers but are becoming an increasingly rare breed in the workforce. Attending training courses are to possess valuable knowledge set, while the real troubleshooting skills are learned on the job over a long period of time from experienced maintenance personnel.

Objectives

- Understand concept of problem solving and decision making
- Understand how to define, and analyse problem
- Describe what makes an effective troubleshooting
- Collect evidence to review the fault symptoms
- Develop their ability to think "outside the box"
- Isolate the faulty component/system
- Understand how to make decision rationally
- Close out the problem effectively
- Review your performance go for continuous improvement



Who Should Attend?

- Managers
- Equipment Engineers
- Supervisors
- Maintenance Technicians





Course Outline

DAY 1

8.45 AM

Registration of Participants

9.00 AM

Module 1: Introduction to define & understand Problem Solving

- What is a problem?
- Be creative about your problem definition
- Turn problems into opportunities
- Steps in defining problem solving
- Are all "Decisions" really a "decision"?
- Do we "need" to solve problem?
- What is Decision Making
- How to problem differs from decision
- Team Exercise: Problem Solving in action

10.30 AM

Morning Tea Break

10.45 AM

Module 2: Failure Classification

- Identification of failures
- Sporadic failures
- Chronic failures
- Understanding the critical 6 losses
- P-F Curves
- Team Exercise: Prioritizing failures using P-F Curves

1.00 PM

Lunch

2.00 PM

Module 3: Creative Tool Kits & Techniques for Problem Solving

- Thinking out of the box
- Five why technique
- Fish bone diagram / Ishikawa / cause and effect

3.30 PM

Evening Tea Break

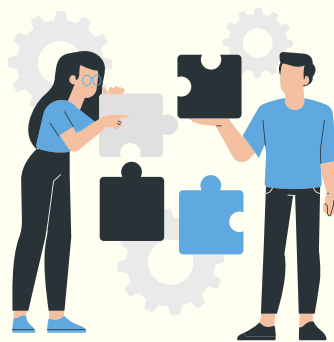
3.45 PM

Continue Module 3:

- The root cause analysis
 - Pareto Technique
 - Creative thinking
- Team exercise: Creating fish bone diagram/ ishikawa/ cause and effect diagram

5.00 PM

End of Program Day 1





Course Outline

Day 2

8.45 AM

Registration of Participants

9.00 AM

Module 4: Perform Root Cause Analysis

- Step 1: Observe or collect the relevant data
 - Data Gathering
 - Fact - finding
- Step 2: Analyze the data and look for relationship
 - Data analysis
 - Historical analysis
 - Think outside the box

10.30 AM

Morning Tea Break

10.45 AM

Continue Module 4:

- Step 3: Identify possible causal factors
 - 5 whys - Ask "why"?
- Step 4: Identify the root cause
- Step 5: Recommend and Implement solution

1.00 PM

Lunch

2.00 PM

Module 5: Review your decision and its consequences

- Maintenance "a reliability function"
- Importance of good decision making
 - 6 key points for effective decision making

3.30 PM

Evening Tea Break

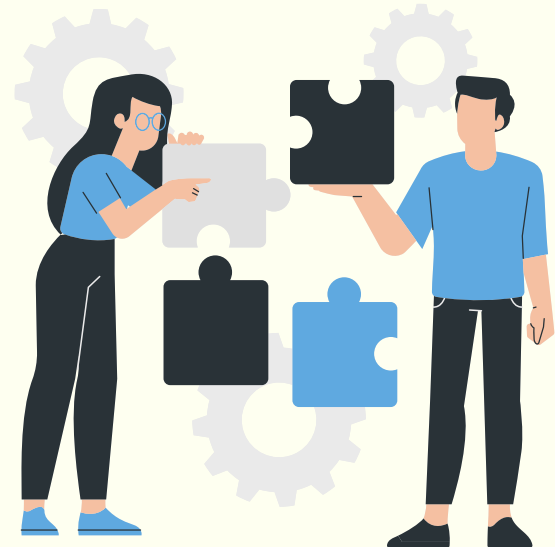
3.45 PM

Continue Module 5:

- Maintenance Strategies
 - Preventive maintenance
 - Predictive Maintenance
- Diagnostic Tools
 - Vibration
 - Thermography
- Developing SMART objectives

5.00 PM

End of Program Day 2





FMM INSTITUTE (475427-W)
EASTERN BRANCH

CENTER FOR PROFESSIONAL DEVELOPMENT



TECHNICAL TROUBLESHOOTING & DECISION MAKING VALUE OF MACHINE TROUBLESHOOTING

DEC 1-2, 2025 | 9:00AM - 5:00PM | TRAINING ROOM 1, FMM EASTERN

...ADMINISTRATIVE DETAILS...

HRD CORP CLAIMABLE COURSE DETAILS

- Training Provider : FMM Institute Eastern
- MyCoID : 475427W_EASTERN
- HRD Corp Programme No : **Provided upon registration**

DISCLAIMER

The FMM Institute reserves the right to change the facilitator, date and to vary / cancel the course should unavoidable circumstances arise. All efforts will be taken to inform participants of the changes,

REGISTRATION

- Upon **Faxing/Mailing** the completed **Registration Form** to FMM Institute, you are **deemed** to have read and **accepted** the terms and conditions. The **course** would also be **deemed as confirmed** unless informed otherwise.
- Will be based on First-Come-First served basis.

PAYMENT

- **Cheques** made in favour of "FMM Institute" should be forwarded to FMM Institute Eastern.
- For **HRD Corp claimable course**, an **attendance of 100% is a must**, in any case, **employers will be billed in full**.

Please tick accordingly:

- Fees: ☐ **FMM Member: RM 972.00/pax**
(inclusive of 8% Service Tax)
- ☐ **Non Member: RM 1,080.00/pax**
(inclusive of 8% Service Tax)

**Fees include course materials and
Certificate of Attendance**

CANCELLATION

- Must be writing with reasons.
- 7 days before the course - No payment charged.
- 3-6 days before the course - 50% payment charged.
- < 3 days before the course - Full payment charged.
- Participants who did not turn-up will be charged full payment.
- Replacements can be accepted at no additional cost.

ENQUIRIES & REGISTRATION

Ms Wan Hui/ Ms Elly
Email : wanhui@fmm.org.my/norelysya@fmm.org.my
Tel: 09-560 6554/ 5244

REGISTRATION FORM

Closing Date
Nov 20, 2025

Dear Sir / Madam, please register the following participant(s) for the above programme.

No	Name	Designation	I/C Number	Email	H/P No.
1.					
2.					
3.					

(Please attach a separate list if space is insufficient)

- ☐ We will **be claiming under HRD Corp Claimable Courses (SBL-Khas)** but full payment would be made to FMM Institute in the event that no disbursement from HRD CORP under any circumstances.
- ☐ We will **NOT BE CLAIMING under training grant from HRD Corp**. Payment will be made to account payee **FMM Institute** by cheque or bank transfer to **MAYBANK Account No. 5560-1106-3275**

Submitted by:

Name : _____ Designation: _____

Company : _____ FMM Membership No. : _____

Address : _____

Email : _____ Tel: _____ Fax: _____