Manufacturing Technology Training
An IMTMA initiative

Programmable Logic Controller (PLC) - Basic Programming and Troubleshooting
Date : 26 September, 2025
Venue : IMTMA Technology Centre, Pune

INTRODUCTION

The Programmable Logic Controller or the PLC is the most important component of an Automation System and no equipment can be thought of functioning without a suitably designed and programmed PLC. This makes it imperative for all the maintenance staff across the globe to be conversant with the basic functionality of the PLC and its associated troubleshooting.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organising a training on **PLC - Basic Programming and Troubleshooting**

FOCUS AREAS

- Brief History of PLC
- Advantages of PLC over RLC
- Input and Output Elements
- Basic Hardware of a PLC
- Basic PLC programming and troubleshooting

KEY TAKE AWAYS

After undergoing the programme, the participants will be able to:-

- Description of Input Elements, Symbols and their working (Mushroom Push Buttons, Proximity switches and their types, Limit Switches, Push Buttons, Pressure Switches, Float Switches, Temperature Switches (Thermostats), Reed Switches, Toggle Switches, Selector Switches etc.)
- Description of Output Elements, Symbols and their working (Relays, Contactors, Solenoids, Lamps and Buzzers)
- Description of Control Panel Elements, Symbols and their working (Contactors, OLRs, MCBs, DIN Rail, Cable Trey, Exhaust Fans, Illuminated Push Buttons)
- Logic Gates
- Introduction to PLC Structure and Hardware
- Description of PLC Scan
- PLC Ladder Structure and the working principle of a PLC
- Introduction to PLC Programming
- Troubleshooting of problems related to PLC

PARTICIPATION FEE

Rs. 6600/-
+18% GST
IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

USD 260/-
Overseas Participants

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

PARTICIPANT PROFILE

Maintenance Managers, Engineers, Supervisors and Technicians involved in Maintenance, Process Control and Improvement activities. The training is equally suited for all those Engineering students who wish to make their career in Automation.

FACULTY

This programme will be conducted by **Mr. Shacheendra Bapat**

Mr. Shacheendra Bapat is a B.E. in Electronics and Telecommunication from Pune University and an industry expert with over 30 years of experience in Automotive Manufacturing industry. He has conducted several training programmes on Automation, Maintenance, Safety and Productivity related subjects. Mr. Bapat is former Asst. General Manager – Manufacturing and Head of Maintenance at GM's Talegaon Vehicle Assembly Plant.

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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.