

INTRODUCTION

CNC machines are real Mechatronic systems, having electrical and electronic circuits interacting with mechanical actuators / sub systems. Diagnostics and root cause analysis is an important aspect of maintenance, which is most often ignored. Often the roots of a mechanical problem is in the electronics area and that of an electronic problem lies elsewhere. Thorough understanding of the CNC machine circuit diagram, Ladder diagram and CNC parameters is needed to find and fix the root cause to minimize MTTR (Mean Time To Repair) and effective planning of PMBF(Preventive Maintenance Before Failure) towards zero down time. Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing an online training on Effective Maintenance towards Zero Down Time (ZDT) - Electrical Aspects of CNC Machines.

FOCUS AREAS

1. Anatomy of CNC machines – Overview of various sub-systems of CNC Turning and Machining Centres
2. Systematic approach to diagnostics and problem solving
3. Circuit Diagram study – Electrical and electronic circuits
4. Circuit Diagram study – Hydraulic, Lubrication and Pneumatic sub systems
5. Maintenance aspects in CNC controllers
6. Typical problems in Electrical and Electronic sub-systems; Safety aspects; Alarm messages, Alarm History and Operations History
7. Maintenance aspects of drives and encoder
8. CNC Parameters setting
9. CNC memory data backup
10. Live Video Demo of Do's and Don'ts in CNC controllers

KEY TAKE AWAYS

1. How to carry out preventive and break-down maintenance of CNC machines
2. Identifying faults in various components of CNC machines
3. How to report faults correctly to the manufacturer
4. Sub systems and circuits of CNC machines

FEE PER PARTICIPANT (PER LOGIN)

Rs. 10000/-
+18% GST

**IMTMA Members/ Micro Companies/ Individuals/
Educational Institutions / Students/ IMTMA Non
Members/ Others**

USD 300/-
Overseas Participants

Group Concession : 20% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company

FACULTY

This program will be conducted by **Mr. Ramadas R. Nambi**.

Mr. Ramadas R Nambi is an industry expert with over 30 years of experience in the area of CNC control systems, CNC machines, Industrial robots & Unmanned operations. Presentations will be accompanied by practical demonstrations and case studies. The workshop will be highly interactive where participants will be able to discuss specific problems in maintenance and solicit feedback from the expert faculty.

For Registration Contact

Vinaykumar S
Programme Coordinator
8147559749
vinay@imtma.in
Dhananjay Talmale
9767164221
ghananjay@imtma.in

Contact Address

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION
Plot 249F, Phase IV, Udyog vihar, Sector - 18,
Gurgaon - 122015
Tata no- +91-124-6463101
Tel : 0124 4014101 - 04
Fax : +91-124-4014108



REGISTRATION : Prior registration with an online advance payment is must. Number of participants is limited and will be accepted on ‘First Come First Serve’ basis. A Certificate of participation will be issued to participants.