



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), enhance the MTBF (Mean Time Between Failure) 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 a 5 days online training on Effective Maintenance towards Zero Down Time (ZDT) - Electrical Aspects of CNC Machines.

The training will be delivered on line with interaction and exercises on circuit diagram study. Live video demonstrations on CNC machines will be there to support the presentations.

FOCUS AREAS

- Anatomy of CNC machines – Overview of various sub-systems of CNC Turning and Machining Centres
- Systematic approach to diagnostics and problem solving
- Circuit Diagram study – Electrical circuits
- Circuit Diagram study – Hydraulic, Lubrication and Pneumatic sub systems
- Maintenance aspects in CNC controllers
- Typical problems in Electrical and Electronic sub-systems; Safety aspects; Alarm messages, Alarm History and Operations History
- Maintenance aspects of drives and encoder
- CNC memory data backup
- **Live video demonstration on CNC Machines**

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. 9000/-
+18% GST

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

FACULTY

This programme 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 operation.

For Registration Contact

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