



INTRODUCTION

The program Control system for CNC Machine Tool is essentially designed and structured to meet the needs of all practicing engineers, particularly from Electrical and Electronics background, engaged in the areas of Design, Assembly & Interfacing, and Testing and Service of CNC machine tools. Program provides insight into the working of a closed loop system with all major constituents of the CNC control Viz: NC, PLC, Drives and Feedback elements covered and explained in detail.

FOCUS AREAS

- Introduction to machine tools
- Evolution of machine tools
- Fundamentals of CNC systems and CNC architecture
- Power elements as switching devices
- AC spindle and feed drives
- Four quadrant operation
- Spindle motor characteristics
- Block diagram of closed loop system
- Regenerative braking
- Section of 6 pole synchronous servo motor
- Variable frequency drives
- Monitoring circuits used in drives
- Real time requirements for a digital drive interface
- Grounding of all machines

KEY TAKE AWAYS

- Refresh CNC fundamentals
- Selection of CNC system and motor optimization
- Understand easy Interfacing of CNC
- Select hardware based on space, location and reliability
- Make a selection on less hardware with greater reliability
- Diagnose a fault faster
- Fine tune a CNC parameter for improved performance

FEE PER PARTICIPANT (PER LOGIN)

Rs. 2000/-

+18% GST

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

USD 60/-

Overseas Participants

FACULTY

This programme will be conducted by **Mr. TK Venkatesh**.

Mr. TK Venkatesh comes with 4 decades of rich experience in the CNC Machine Tools domain. After his graduation in Electronics & Communication Engineering, he had served HMT for 24 years in Design & Development of CNC Machine Tools of different types as well as Automation systems. He was General Manager - Servicing at AMS for 15 plus years supporting all the customers in India as well as overseas. He had played a lead role in Reliability Improvement program of CNC Machine Tools at AMS and IMTMA - ACMA Task force for bench marking of electrical systems of CNC Machine Tools.

For Registration Contact

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