

Hands-on training in Programming & Operation of CNC Turning Centres

Date: 25 to 29 October, 2021

Venue: IMTMA Technology Centre, Pune

INTRODUCTION

CNC machines have become the order of the day in every manufacturing industry. These applications are wide spread in mass production units, batch production as well as tool room industries. Thorough understanding of Programming and Operation of the CNC machines is a must in order to realize the maximum output.

This programme will address the Programming and operation of CNC turning centres in detail including finer aspects like control of dimensions, surface finish and optimization of machining parameters. The procedure for safe running of the machine would be dealt along with autonomous maintenance practices. The participants will be trained hands-on in CNC turning centre with real time machining

FOCUS AREAS

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- Elements of CNC Turning Centre and different modes in the machine.
- G codes and M codes applicable to CNC Turning Centre.
- Structure of a CNC Programme for CNC Turning Centre.
- Work and tool set up; measuring tool offsets in x and z axes.
- Programming using canned cycles od turning, grooving, threading and drilling.
- ISO system of tool designation.
- Dimensional control in cnc turning centre, correction of wear offset for achieving tolerances.
- Selection of tools and machining parameters.
- CAM programming usage and advantages.
- Autonomous maintenance principles procedure and check points.
- Hands-on training in the machine for:
 - Understanding modes and screen navigation.
 - Work and tools set up in the machine.
 - Measuring work and tool offsets.
 - MDI commands and JOG movements.
 - Programme entry and simulation.
 - Machining exercises involving different cycles.
 - Measuring dimensions on the machine and control.
- · Autonomous maintenance check points.

KEY TAKE AWAYS

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

- 1. Learn Programming and Operation of CNC Turning Centre
- 2. Do work set up and tools set up in CNC Turning Centre
- 3. Carry out inspection and dimensional control of parts on the machine
- 4. Select tools and optimise machining parameters for improving productivity

PARTICIPATION FEE

Rs. 10000/-+18% GST

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

Rs. 11000/-+18% GST **IMTMA Non Members/ Others**

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

PARTICIPANT PROFILE

This programme will benefit Machine shop engineers, technicians as well as fresh engineers aspiring to learn CNC Turning Centre programming and operation.

A Basic knowledge on machining operations is essential.

FACULTY

This programme will be conducted by industry experts from IMTMA Technology Centre.

For Registration Contact

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Contact Address

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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