

Mastering Manufacturing Process: Optimization through right selection of Cutting Tools and Cutting Parameters in Milling

**Applications** 

Date: 19 to 23 February, 2024

Venue: IMTMA Technology Centre, Pune

#### INTRODUCTION

Milling and hole making operations are an integral part of all metal cutting operations. While using a precision machine tool such as a CNC Machining centre for complex milling and hole making operations, selection of the right cutting tools for the operations is equally critical to producing quality machined parts. Selection of the right cutting tools can result in optimization of cycle time, reduce risks of errors in machining, manage tool costs better and result in the production of a high-quality part.

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

This programme will address the programming and operation of CNC Machining centres in detail including finer aspects like control of dimensions and optimization of machining parameters. The participants will be trained hands-on in production CNC machines with real time machining exercises.

Keeping this in view, IMTMA is organising 5 days training programme on Mastering Manufacturing Process: Optimization through right selection of Cutting Tools and Cutting Parameters in Milling Applications.

#### **FOCUS AREAS**

- CNC Machine Technology CNC Machining Centre
- Machining Mechanics
- Introduction to Manufacturing Processes
- Machining operations • Understanding of Tool Nomenclature and cutting parameters
- Essentials of Process Planning
- Selection of cutting tools for milling and hole making operations
- Programming and operation of CNC Machining centres.
- Cycle time calculation of Milling operations.
- Demo of sample component machining on CNC Machine

### **KEY TAKE AWAYS**

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

- Understanding of various manufacturing processes
- Knowledge on selection of right tool for required applications.
- Understanding of cutting parameters
- Understanding of programming and operation on CNC Machining centres
- Learn about a systematic approach to prove the first component in CNC Machine
- Learn about Machining Process optimization and validation for effective CNC machining.
- Understanding the best practices in the CNC machining area through the right methodology

## PARTICIPATION FEE

Rs. 12000/-+18% GST **IMTMA Members/ Micro Companies/ IMTMA Non Members/ Others** 

Rs. 8000/-+18% GST Individuals/ Educational Institutions / **Students** 

USD 480/-**Overseas Participants** 

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

## **FACULTY**

This program will be conducted by Mr. Yuvaraj Patil, Mr. Sushant T, and Other Industry Experts.

Mr. Yuvaraj Patil is a mechanical engineer having more than 15 years of experience in CNC Machine Shop & Tool Room. He has worked with various companies - ASB International, Videocon, Menon & Menon and PARI. Additionally, he has 8+ years of experience in training engineers in CNC Machining area with hands-on practice.

Mr. Sushant T is an expert in machine tool manufacturing, try-out and proving with 6+ years of experience in NPPL, Super Auto India Ltd. He has worked in Quality assurance and Product development.

# 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 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