Manufacturing Technology Training
An IMTMA initiative

Essentials of Process Planning for Machined Parts
Date : 25 to 26 November, 2024
Venue : IMTMA Technology Centre, Pune

INTRODUCTION

Process planning has high impact on Production Cost and Quality of a component. A Process Plan is a sequence of operations to produce a component as per dimensional and quality parameters specified in a drawing. An effective process plan shall often foresee and mitigate challenges in manufacturing of a component – in the planning stage itself. It minimises delays in New Component Development.

Process Planning is a complex process influenced by raw material input condition, type of machines, quality parameters, production volume, competence of operators and many more. Similarly, a process planner should have adequate knowledge about Materials, Machines, Work holding, Cutting Tools, Process capabilities, SQC etc.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a training on Essentials of Process Planning for Machined Parts. This programme will help in achieving customer satisfaction through "First Time Right" development of parts with consistent Quality and saving in time and cost.

FOCUS AREAS

- Understanding & implications of Quality parameters in Engineering Drawing
  - GD&T
- Adapting & optimising based on the machine to be used:
  - Construction and Features of the machines.
  - Power and Torque characteristics of the Spindle Motor
  - Types of Tools and Spindle Interface
- Fundamentals of Fixturing – Chucks and Fixtures
  - Location, Resting and Clamping principles.
  - Effect of these on Geometrical Quality parameters
- Cutting Parameters
  - Factors influencing selection of cutting parameters.
- Actual Hands-on practice of a process plan for:
  - Finish Precision Bores (Coaxial, Parallel, Perpendicular Bores)
  - Grooving (Precision, Deep or Face Grooves)
  - Finish Surface Milling (Flatness, Surface Finish)
  - Finish Turning

KEY TAKE AWAYS

- A 360 deg view of all the aspects of Process Planning
- Improved knowledge of features of the Machine and their impact on Process Plan
- Understanding of selection of Cutting Parameters
- Good knowledge of work holding and fixturing
- Hands on practice of creating a process plan for critical component features like precision Boring, finish Milling etc.

PARTICIPATION FEE

Rs. 10450/-
+18% GST
IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

USD 415/-
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. 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.

For Registration Contact

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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 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.