

Enhancing Efficiency and Quality: The Essentials of Process

Planning for Machined Parts Date: 17 to 18 August, 2023

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 an online 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
 - o 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 Tool 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:
 - o Finish Precision Bores (Coaxial, Parallel, Perpendicular Bores)
 - Grooving (Precision, Deep or Face Grooves)
 - o 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 workholding and fixturing
- · Hands on practice of creating a process plan for critical component features like precision Boring, finish Milling etc

PARTICIPATION FEE

Rs. 9500/-

+18% GST

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

USD 380/-Overseas Participants

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

FACULTY

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

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