Manufacturing Technology Training
An IMTMA initiative

# Surface Finishing - Measurement and Improvement
**Date : 21 to 22 November, 2024**
**Venue : IMTMA Technology Centre, Pune**

## INTRODUCTION

Improving the performance, extending the life, and enhancing the appearance of materials used for engineering components are fundamental and increasingly important--concerns of quality assurance work force in any industry. The technique adopted for achieving this is through surface finishing/engineering process.

As per ASTM surface finishing/engineering is defined as "treatment of the surface and near-surface regions of a material to allow the surface to perform functions that are distinct from those functions demanded from the bulk of the material." These surface-specific functions include protecting the bulk material from hostile environments, providing low- or high-friction contacts with other materials, serving as electronic circuit elements, and providing a particular desired appearance.

In many instances, it is either more economical or absolutely necessary to select a material with the required bulk properties and specifically engineer the surface to create the required interface with the environment, rather than to find one material that has both the bulk & **surface properties** required for the job.

This training course is intended to impart basic knowledge on various surface finishing technique which helps the participants in selecting appropriate process of surface finishing and also to assess the quality of treated product for its usefulness for intended application.

## FOCUS AREAS

- Basic Metal finishing.
- Terms & various  definition.
- Applicaion&process Properties.
- Various process with latest Advance technique s.
- Process limitations,& Process Trouble shooting.
- Process & System Automation.
- Quality Assurance
    - Qualitative Lab Analysis.
    - Process control periodical maintenance
    - Quality Documents.
    - Quality Inspection Instruments.
    - Various defects and its probable  causes and remedies.
- Process safety
    - Safety
    - Process precautions
    - while handling &storing hazardous
    - Chemicals.
    - Cyanide Antidotes.
- Effluent plants.
- Manual and automatic requirements for the destruction of toxic chemicals like cyanide and Chrome with chemical reaction Interpretation.

## KEY TAKE AWAYS

**After undergoing the programme, the participants will be able to –**

- How finish depends on speed-feed
- Inserts to get improved finish
- Features / demo of surface finish measuring device
- Customized surface finish measurements with SPMs
- New Technology in Surface Finish Measurement

## PARTICIPATION FEE

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

**USD 418/-**
**Overseas Participants**

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

## PARTICIPANT PROFILE

This programme will benefit practicing engineers involved in the functions of Design and Development, Process Planning, Product Engineering, Application engineering, Quality Assurance, R&D, Manufacturing, Servicing etc., In order that the participation is effective and beneficial, it is recommended that participating companies depute a multi-disciplinary team of 2 or 3 people from the above functions

## FACULTY

This programme will be conducted by **Mr. Avinash Barve**

**Mr. Avinash Barve** is an industry expert in Surface Finishing & Application Technology. He is a professional electroplating Technologist & has about 40 years' experience in the field. As a Consultant, he has an impressive list of Customers with OEMs & MNCs on his list. He has been in the Consulting & Training field for the subject for over 10 years & has delivered special courses as well as in-house courses for industry in India.


### 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.