

# Surface Plating and Protection Technology **Date: 14 October, 2025**

Venue: IMTMA Technology Centre, Bengaluru

#### Last date for registration 07 October 2025

### INTRODUCTION

In today's manufacturing scenario, shortage of raw material & power, meeting quality with consistency in quality norms and increasing pressure to reduce costs are the order of the day. Besides these business challenges, surface finish, an important manufacturing process contributes significantly to the costs. During finishing of parts, Surface plating techniques such as 'Electroplating, application' is possibly the most troubled issue. Lack of knowledge in Surface plating and protection technology leads to high rework and rejection rates in-house & as well as from outside vendors. Hence it is important to follow the right techniques to achieve surface finish of acceptable quality.

Future of Indian Industry appears bright, and the demand for INDIAN products is expected to grow exponentially. To grab global opportunities, better quality will be the key. Hence this training program is aimed at educating and upgrading the existing workforce on latest plating techniques, which is going to be the need of the hour.

Keeping this in view, Indian Machine Tool Manufacturers' Association is organising a training program on Surface Plating and Protection Technology.

#### **FOCUS AREAS**

- Introduction to Electroplating
- Need for electroplating and the various aspects of this process
- Pre-treatment and surface cleaning processes
- Various types of electroplating such as Zinc plating, Nickel plating, Copper plating, Tin plating, Silver & gold plating and Chrome plating, Anodizing, (Conventional & Hard), Electro-less Nickel (Auto catalytic processes), Electro-polishing, Black oxidizing, Parkerizing & Phosphating. Galvanizing. Pickling & Passivation
- Quality and process controls in various processes and standards covering consistency norms, defects, quality test, process control, root cause analysis and ASTM standards.
- Safety and environmental issues covering Regulations, environmental controls in the industry, Safety aspects in manufacturing and application in Plating shop and Disposal issues (as per pollution control boards norms)

#### **KEY TAKE AWAYS**

- Understand the fundamentals of Electroplating Technology & methods to get the best output
- Understand correct process sequence and the SOPs involved
- · Learn how to ascertain quality of electroplated products
- How to reduce rejection rates and rework in electroplating shop

#### PARTICIPATION FEE

Rs. 6600/-+18% GST IMTMA Members/ Micro Companies/ Individuals/ **Educational Institutions / Students/ IMTMA Non Members/Others** 

**USD 260/-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. S.S. Avadhani,

Mr. S.S. Avadhani is a former Scientist-E from CMTI, Bangalore with 37 years of experience in the field of surface treatment, material characterisation and quality control. Mr. S.S. Avadhani was one of the key faculties at CMTI during his 37 years of his tenure to handle various topics. He delivered lectures on topics such as GLP, UOM, method validation, surface engineering etc., at industries both in India and Abroad.

# **For Registration Contact**

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# Contact Address

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