Manufacturing Technology Training
An IMTMA initiative

Heat Treatment - Metallurgy and Processes
Date : 10 to 11 August, 2026
Venue : IMTMA Technology Centre, Bengaluru

INTRODUCTION

Heat Treatment is a core manufacturing process carried out under controlled application of temperature and atmosphere to optimize certain physical and mechanical properties of metals/alloys. Heat treatment is an enabling process that can improve product performance by increasing its strength or other desirable characteristics such as machinability, formability, ductility, etc. The process of heat treatment has a major bearing on the quality of the end product and finds a wide application in many industries such as Automobile & Auto Components, Dies & Mould, Machine Tools, Aerospace, General Engineering and so on.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organising a 2 day programme on **"Heat Treatment- Metallurgy and processes"**

FOCUS AREAS

- Basics of Ferrous Metallurgy, Iron/Iron carbon equlabriam diagram and TTT diagrams
- Basic bulk Heat treatment processes Annealing, Normalising, Hardening, Quenching, Tempering,
- Surface hardening like, Case Carburising Nitriding, Induction Hardening
- Hardenablity of steal and its importanace
- Techniques of distortion control
- Common failures and remedies

KEY TAKE AWAYS

With a proper understanding of the standard, one can derive the following benefits in the entire product realisation cycle.

- Understand Ferrous Metallurgy and its Importance in Heat Treatment
- Understand Metarllurgcal changes during Heat Treatment
- Learn about various bulk heat treatment, Surface Heat Treatments methods and specific applications of each process
- Understand common problems encountered in heat treatment and remedies

PARTICIPATION FEE

Rs. 4999/-	Rs. 2500/-	Rs. 999/-	USD 200/-
+18% GST	+18% GST	+18% GST	
IMTMA Members/ Micro Companies/ Individuals/ IMTMA Non Members/ Others	**Professors**	**Student**	**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 Designers, Production Engineers involved in Heat Treatment processes (In?house / Subcontracted), Quality & Inspection engineers from Automobile & Auto ancillaries, Die & Mould, Machine Tools, Aerospace, General Engg., Defense & Railway units and other related Manufacturing industries.

FACULTY

This programme will be conducted by, IMTMA Subject Matter Expert.

He is currently associated with IMTMA as a faculty member, following his retirement from his full-time role at the organisation. He brings with him over 32 years of rich experience, including 16 years in the industry and 16 years in academics and training.

A postgraduate in Metal Casting Science and Engineering from UVCE, Bengaluru, He has held various positions in both ferrous and non-ferrous foundries prior to joining IMTMA. He possesses in-depth knowledge of foundry operations and has successfully provided practical solutions to a wide range of foundry-related challenges.

During his career, he has delivered specialized training programs in the metal casting domain to more than 300 engineers from various manufacturing organizations across India. In addition, he has also taught metal casting topics to postgraduate engineering students, contributing significantly to industry-oriented technical education.

For Registration Contact

Shruthi GS
Programme Coordinator
8660307740
shruthi@imtma.in
Back End Operations
9742626488
enquiry@imtmablr.com

Contact Address

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION
@ BIEC, 10th Mile, Tumkur Road, Madavara Post,
Bangalore - 562 123
Tel : 080-66246600
Fax : 080-6624-6658

imtmatrainning.67038796@hdfcbank

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.