

### INTRODUCTION

Metal casting is one of the oldest manufacturing processes, which basically involves pouring molten metal into a mould cavity, whereupon solidification it takes the shape of the cavity. Beauty of this process is, any complicated shape in any metal can be casted.

Metal casting is a complicated process with many process variables. There are numerous opportunities for things to go wrong in a casting operation, resulting in quality defects in the product. A casting defect is an undesired irregularity in a metal casting process. Some defects can be tolerated while others can be repaired, otherwise, they must be eliminated. It is a great challenge to work on casting defects and eliminate them.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 2-day program on "Defect Analysis and Troubleshooting of Casting Defects".

**Special Offer:** Participants will be provided **FREE ACCESS** to **IMTMA Elearning** course on <u>"Heat Treatment"</u> towards continual learning and upskilling. Access will be valid from 4 - 14 Jan' 2022.

#### **FOCUS AREAS**

- Introduction to Metal casting
- Important casting processes like sand and Die casting
- Gating and risering system
- Importance of Pattern system
- Various Casting defects and remedies for Ferrous as well as Non Ferrous materials
- DFM of casting to avoid casting defects
- Importance of casting simulation in trouble shooting of defects
- Case studies on defects analysis and troubleshooting

# **KEY TAKE AWAYS**

- After undergoing the programme, the participants will be able to -
  - Understand various casting processes
  - Understand gating and risering system to trouble shoot casting defects
  - Understand pattern and its importance in defect prevention
  - Understand various casting defects and its remedies
  - $\circ$  Understand DFM requirements of casting in part design to avoid casting defects
  - $\,\circ\,$  Understand importance of casting simulation in trouble shooting of casting defects

# FEE PER PARTICIPANT (PER LOGIN)

Rs. 4500/-

+18% GST IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others USD 180/-Overseas Participants

Group Concession : 20% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company

# FACULTY

This Program will be conducted by Mr. Ganapathi K N.

Ganapathi K N, is an Advisor of IMTMA having 16 years of industrial and 16 years of academic/Training experience. He is a post graduate in metal casting science and engineering from UVCE Bengaluru.

Prior to working at IMTMA, Mr. Ganapathi has worked at various capacity in both Ferrous and nonferrous foundries. He has thorough understanding of all foundry operations and has experience of providing solutions to the foundry problems. He has also imparted specialized training on metal casting domain to more than 300 engineers across manufacturing companies in India. He has also taught metal casting topics to post graduate engineering students.

#### **For Registration Contact**

Contact Address

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#### INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION

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**REGISTRATION**: Prior registration with an online advance payment is must. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.