

## INTRODUCTION

Metal casting is one of the oldest manufacturing process, which basically involves pouring molten metal into a mould cavity, where upon solidification it takes the shape of the cavity. Casting process facilitates manufacturing of casting in any complicated shape using different metals. Metal casting is a complicated process with many process variables. Defects in castings is a common occurrence, which is an unwanted abnormality in a metal casting process. There are many aspects to defects in a casting, but can be difficult to identify from the results as to what caused the defect. Some of the common defects being surface defects, material defects, cooling defects, moulding & pouring defects. Defects in castings may lead to an improper shape, weak casting and poor functionality. Some defects can be repaired while a few defects can be tolerated. It is a great challenge to work on casting defects and eliminate them. Hence one needs to have a clear understanding of the defects and their remedies.

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

## 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
  - Understand DFM requirements of casting in part design to avoid casting defects
  - Understand importance of casting simulation in trouble shooting of casting defects

## FEE PER PARTICIPANT (PER LOGIN)

**Rs. 5500/-**  
+18% GST

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

**USD 220/-**  
**Overseas Participants**

**Group Concession : 10% 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

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