

Metal Casting Technology-Processes DFM Quality and Cost

Considerations
Date: 20 to 21 August, 2024

Time: 1340 Hrs to 1700 Hrs (Online Mode)

### INTRODUCTION

To create metals into useful products, there are several different methods such as casting, powder metallurgy, forging and machining. Among these, one of the oldest process is metal casting, which involves pouring molten metal into a mould cavity, upon solidification, the metal takes the shape of the cavity. The versatility of this process is, any complicated shape can be cast using different metals.

Knowledge of metal casting is very important to design engineers and casting buyers. Design engineers have to decide on the type of casting process to be adopted to manufacture a part and incorporate DFM requirements of casting without compromising his design intent. Post the design, buyers would have to identify right foundry and work out a competitive price. Under such circumstances, knowledge of casting processes, capability and limitations of processes, cost estimation and casting inspection would be handy.

Keeping this in view, IMTMA is organizing an online training on Metal Casting Technology - Processes, DFM, Quality and Cost Considerations.

#### **FOCUS AREAS**

- Important casting processes:
  - Sand casting
  - Shell moulded casting
  - Investment casting
  - o GDC
  - o HPDC
  - Centrifugal casting
  - Squeeze casting
- Capabilities and limitations of all casting processes
- DFM of casting
- Casting defects and remedies
- Casting cost estimation
- Importance of casting simulation

### **KEY TAKE AWAYS**

- After undergoing the programme, the participants will be able to -
- Understand various casting processes
- Incorporate DFM requirements of casting in part design
- Carry out casting cost estimation
- Understand importance of casting simulation in NPD
- Understand casting defects and its remedies

# FEE PER PARTICIPANT (PER LOGIN)

Rs. 7500/
+18% GST

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

Members/ Others

USD 300/-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  $\mathbf{Mr.}$  Ganapathi  $\mathbf{K}$   $\mathbf{N}$ .

Ganapathi K N, is the Director Training of IMTMA Technology Centre having 16 years of industrial and 14 years of academic 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. At IMTMA, his role is to develop and introduce new programs for enhancing competitiveness of industry.

## **For Registration Contact**

Shruthi GS
Programme Coordinator
9886331231
shruthi@imtma.in

Back End Operations 9742626488 enquiry@imtmablr.com **Contact Address** 

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION

Plot 249F, Phase IV, Udyog vihar, Sector - 18, Gurgaon - 122015 Tata no- +91-124-6463101 Tel : 0124 4014101 - 04 Fax : +91-124-4014108

