

Defect analysis and troubleshooting of casting

Date: 22 to 23 May, 2025

Time: 1340 Hrs to 1700 Hrs (Online Mode)

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. 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 training 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

At the end of the program, the participants shall 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. 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 $\mathbf{Mr.}$ $\mathbf{Ganapathi}$ \mathbf{K} $\mathbf{N,}$

Mr. Ganapathi K N, is presently working as an advisor Training at IMTMA, having 16 years of industrial and 18 years of academic/training experience. He is a mechanical engineer with post graduate in metal casting science and engineering. Prior to IMTMA, Ganapathi has worked at various capacity in manufacturing companies. He has expertise in GD&T, Stack-up Analysis, Engineering Materials, Metallurgy, Metal casting and heat treatment processes. He has carried out many specialised program on GD&T, metal casting technologies, Metallurgy and heat treatment for industries. He has also taught these topics to post graduate engineering students.

For Registration Contact

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