

Defects Analysis and Trouble shooting of Die Cast (PDC) parts Date: 26 to 27 February, 2025

Time: 1340 Hrs to 1700 Hrs (Online Mode)

### INTRODUCTION

High pressure die casting is often the process of choice because of its cost effectiveness and superior quality. The process produces components that have tight dimensional tolerance, good and consistent surface finish and near net shape. This enables manufacturers to make cost-effective small volume runs and is also cost competitive for large production runs. Aluminium die cast components have the property of being very light weight with significant mechanical properties and are used extensively in the automotive industry.

However, defects are the real challenges for any die casting industry and the quality of a foundry can be increased by minimizing the casting defects during production. Industry's margin (profit) lies in rejected parts! Hence all the casting industries have a need address these issues on priority.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organising a training programme "Defects Analysis and Trouble shooting of Die Cast (PDC) parts".

### **FOCUS AREAS**

- Recap of PDC process Types, applications
- Defects in PDC parts What, Why and How?
  - o Surface defects
  - Laminations
  - Gas porosity
  - Blisters
  - Flow porosity
  - Shrink porosity
  - o Heat Sinks
  - Leakers
  - Erosion / cavitation etc
  - Bending / warping etc.
- Case studies from Industry
- Defect Analysis and elimination
- DFM How product design prevents and / or eliminates some of the defects.

### **KEY TAKE AWAYS**

At the end of the program, a participant shall:

- Identify Die-casting defects
- Understand root cause of defects
- · Procedures for controlling defects
- · Application of the right problem solving tools
- How to implement with sustained gains
- Horizontal deployment across similar parts
- Standardising the implemented method and change in Control plan
- Understand the importance of involving die designers during product design.

## 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 programme will be conducted by **Mr Padmanarayanan**, a technology professional with over 5 decades of high quality experience in the areas of High pressure die-casting, gravity diecasting, Low pressure diecasting, SMED, Setting up tool rooms, productivity improvement and rejection reduction. During his professional career, he was associated with several companies such as Sundaram Clayton, Semoc Electric, Columbia Wheel manufacturing, Eqic Dies and moulds, Rapsri Engineering Industries, Dietech India, AR Die Casts, Hyderabad Engineering Industries, and Endurance Technologies.

He possesses over 60 certifications in areas such as Six sigma, Cost of quality, TQM tools, Understanding benchmarking methods, Time management, Quality management and several other areas.

## **For Registration Contact**

Digvijay Nath Pandey Programme Coordinator 7349067391 digvijay@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

