

## INTRODUCTION

Plastic design is the backbone of the plastics manufacturing industry. Plastics play a vital role for Mechanical Engineers, as they are closely related to Consumer, Medical and Automotive Product Industries, where plastics have replaced many other materials due to its numerous benefits.

Proper plastic design is very important before tooling is made can save exponential costs later in the product cycle. Nowadays in the automotive industry, many plastic parts are used for better efficiency, low cost and many other factors. Wide usage of plastics in engineering and commodity products has made it necessary for engineers to understand materials and select right materials for any application. This training enables engineers and designers to design plastic products with right understanding.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing an online training on **Design and Processing of Plastic Parts**.

## FOCUS AREAS

### Day 1

Day one focuses on understanding of plastic material, type of plastic and how to select a right material for a given application. Material selection dictates the manufacturing process, design choices, product requirements, environment, manufacturing methods and processes.

- Types of Plastic Materials
- Selection of right material for various applications

- Plastics Processing
  - Moulding machine
  - Injection mould

### Day 2

Day two further explores choice of plastic conversion processes, and deep dive in to Design for manufacturing (DFM) guidelines for plastic components, understanding of injection moulding process and Basics injections molds design and common defects found in moulded components.

- Design for Manufacturing (DFM) of plastic Parts
- Injection Moulding process
- Mold design fundamentals

## KEY TAKE AWAYS

**After undergoing the program, the participants will be able to have an overview of:**

- Understand the basics of plastic materials
- Selection of right material for any specific application
- Apply the DFM guidelines of Plastic part design in product design
- Trouble shoot the cause of plastic part defects and failures

## FEE PER PARTICIPANT (PER LOGIN)

**Rs. 6000/-**  
+18% GST

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

**USD 240/-**  
**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 delivered by **Mr. Ramesh Srinivasa Rao**.

**Mr. Ramesh Srinivasa Rao** is an experienced mechanical design engineer professional with 35+ years of work experience in the field of plastics, plastics testing, precision components, and product design. He has been responsible for mechanical design services across the Automotive, Medical, Industrial, process and consumer electronics verticals. He built, trained, and managed teams of 250 + engineers in Plastics, Injection Molds, Dies, and Die Casting Die, New Product Design, Industrial Design, Packaging, Testing, and Reliability. Currently holds seven US patents, two on medical products and four on interconnects. Handled complex projects and managed engineering operations worldwide. Previously worked for L&T Technology Services, Molex, Flextronics, National, etc.

### For Registration Contact

**Nagraj Hamilpure**  
**Programme Coordinator**  
9881616902  
[n.hamilpure@imtma.in](mailto:n.hamilpure@imtma.in)

### 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

