

Engineering Materials and their selection - Key to Successful Design

Date: 27 to 28 October, 2025

Time: 1340 Hrs to 1700 Hrs (Online Mode)

INTRODUCTION

Engineering design depends on materials that are shaped, joined and ?nished by processes. Design requirements de?ne the performance required of the materials, expressed as target values for certain design-limiting properties. Perhaps one of the most important tasks that an engineer may be called upon to perform is that of materials selection with regard to component design. Inappropriate or improper decisions can be disastrous from both economic and safety perspectives. Therefore, it is essential that the engineers become familiar with and versed in the procedures and protocols that are normally employed in this process.

Understanding materials, their properties and behaviour is fundamental to engineering design, and a key application of materials science. Understanding the procedures for material selection in mechanical design is very important in order to ensure that the most suitable materials for a given application are identified from the full range of materials available.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organising Webinar on" **Engineering Materials and their selection - Key to Successful Design**".

FOCUS AREAS

- Importance of Materials
- Types of material and its basic properties
- Ferrous alloys, its properties and applications
- Highlights of few nonferrous alloys
- Importance of Material selection
- Method of material selection

KEY TAKE AWAYS

After undergoing the programme, the participants will get

- Understand importance of Material
- Understand various ferrous and nonferrous alloys
- Recognize alloys and its properties
- Application of various ferrous and nonferrous alloys
- Understand importance of material selection
- Understand method of material selection process

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 currently associated with IMTMA as a faculty member, following his retirement from his full-time role at the organisation. He brings with him over 32 years of rich experience, including 16 years in the industry and 16 years in academics and training.

A postgraduate in Metal Casting Science and Engineering from UVCE, Bengaluru, Mr. Ganapathi has held various positions in both ferrous and non-ferrous foundries prior to joining IMTMA. He possesses in-depth knowledge of foundry operations and has successfully provided practical solutions to a wide range of foundry-related challenges.

During his career, he has delivered specialized training programs in the metal casting domain to more than 300 engineers from various manufacturing organizations across India. In addition, he has also taught metal casting topics to postgraduate engineering students, contributing significantly to industry-oriented technical education.

For Registration Contact

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