

# Gear Manufacturing - Hobbing and Shaping Processes Date: 29 to 30 April, 2025

Venue: IMTMA Technology Centre, Pune

#### INTRODUCTION

The Automotive, Agricultural, Defence and Railway industry is undergoing continuous change due to increased customer demand as well as improvement in production norms. Gears and Gear drives are an important component of all kinds of vehicles, machine tools, aircrafts, household appliances as well as a broad variety of industrial equipment, which play key role in transmission of power. Gear manufacturing is a complex activity, involving multiple manufacturing processes. Hence a good understanding about the various gears manufacturing processes and controlling of the parameters is essential, in order to meet the growing demands for better productivity and quality of gears.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a training programme on "**Gear Manufacturing** - **Hobbing and Shaping Processes**". The topics will covered in depth with focus on actual case studies.

#### **FOCUS AREAS**

- Introduction to Gear Terminology
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- Gear Manufacturing Processes
- Gear Hobbing
  - Different methods of hobbing
  - Process parameters
  - Work set up and Hob set up methods
  - Process optimization and productivity improvement
  - Cutting Tools required for hobbing
  - Industry Examples
- · Gear Shaping
  - Working Principle
  - Different methods of shaping
  - Process parameters
  - Work set up and Cutter set up methods
  - Process optimization and productivity improvement
  - Cutting Tools for Shaping
  - Industry Examples

#### **KEY TAKE AWAYS**

After undergoing the programme, the participants will be able to:

- Gain an overview of gear hobbing and gear shaping manufacturing processes
- Understand process parameters & optimize gear manufacturing processes for hobbing and shaping operations.

### PARTICIPATION FEE

Rs. 10450/-

+18% GST

IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others USD 415/-Overseas Participants

Group Concession: 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

## **FACULTY**

This programme will be conducted by **Mr. Vishwajit Kothari,** a Mechanical Engineer by profession, has more than 25 Years of experience in the machine tool industry and in gear manufacturing. He has worked with organisations like Premier Ltd., Pune, a pioneer and a renowned machine tool company in India since 1944.

#### **For Registration Contact**

Nagraj Hamilpure Programme Coordinator 9881616902 n.hamilpure@imtma.in

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

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION

12/5, D-1 Block, MIDC, Chinchwad, Pune-411019 Board Line: +91 7066030531 / 532



**REGISTRATION:** Prior registration for participation is necessary. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.