Manufacturing Technology Training
An IMTMA initiative

Design of Gears & Gears Boxes
Date : 17 to 18 September, 2026
Venue : IMTMA Technology Centre, Pune

INTRODUCTION

This course is structured with an introduction to elements of Gear box and more focused towards Industrial applications.

Introduction to types of gears, gear profiles, gear standards being a part of the curriculum.

Introduction to design input for gearbox design, conceptualization gear layout, sizing of gears and shafts, calculations on gears, bearing selection, seals, keys and standard parts used in gear box.

Keeping this in view, IMTMA is organising a training program on **Design of Gears & Gears Boxes.**

FOCUS AREAS

DAY-1

- Gear Applications & Types
- Gear Nomenclature
- Gear Tooth Forms
- Spline Nomenclature
- Gear Quality Classification
- Basics of Gear & Gear box Design

DAY-2

- Gear Manufacturing Methods (Hobbing/Shaping/Broaching/Shaving/Grinding/Honing)
- Material & Heat Treatment of Gears (Current trends)
- Gear Cutting Tools (Hobs/Shaper Cutters/Shaving Cutters/Broaches/Grinding Worms)
- Fixtures & Work holding for Gear manufacturing
- Gear Cutting & Finishing Machines
- New Generation Gear Cutting (Skiving/Dry Hobbing/Rotary Broaching)
- Gear Quality & Inspection (Macro & Micro Geometry, Errors, Gear Graphs)
- Composite & Cumulative Errors, Pitch Errors, Gear Tooth thickness, Crowning, Reliefs

KEY TAKE AWAYS

- Complete knowledge on gearbox design
- Selection of motor for gear box
- Gears and gear design
- Shaft design and sizing
- Gear box design and sizing
- Manufacturing drawings of gears and shafts
- Systematic design approach

PARTICIPATION FEE

Rs. 4999/-	Rs. 2500/-	Rs. 999/-	USD 200/-
+18% GST	+18% GST	+18% GST	**Overseas Participants**
IMTMA Members/ Micro Companies/ Individuals/ IMTMA Non Members/ Others	**Professors**	**Student**	

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

PARTICIPANT PROFILE

This programme will benefit Gear design engineers; management involved with the design and manufacture of gearing type components; metallurgists and materials engineers; laboratory technicians; quality assurance technicians; furnace design engineers; and equipment suppliers

FACULTY

This programme will be conducted by, IMTMA Subject Matter Expert.

He is a distinguished Independent Engineering and Management Consultant and Corporate Trainer with over 30 years of experience in the manufacturing sector, particularly serving MSMEs across India. He specializes in Business Strategy, Lean Manufacturing, TPM, Operational Excellence, and Project Management.

He has held senior roles at notable companies such as Tata Motors and Raymond Limited. He holds a Mechanical Engineering degree from BITS and a PGDBM, along with certifications in Lean Six Sigma and Lean Manufacturing by the Ministry of MSME, GOI. He is also a seasoned trainer and visiting faculty at esteemed institutions.

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

imtmatrainning.67038796@hdfcbank

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.
Important Information : Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.