

## INTRODUCTION

Gears and gear drives are the key components of all kinds of vehicles, machine tools, aircrafts, household appliances, elevators, escalators, earthmoving equipment as well as a broad variety of industrial equipment. This list where gears are used doesn't just stop. Today the designers are facing challenges surrounding increase in lifetime, efficient power transmission and noise emission, while the size and weight of gear drives is constantly reduced. In an effort to meet all these challenges, gear makers have to ensure the products manufactured are of great quality and consistent in their performance that the application requires. Hence, the accuracy of gears is crucial for achieving the above functional demands.

Thus measurement of gears is of decisive importance for gear production wherein proper understanding of Gear Metrology and Measurement is required for accuracy and quality, to ensure lower overall cost of manufacture by controlling rejects and scrap. Proper understanding of the state-of-the-art metrology can result in significant reduction if the measuring uncertainty associated with gears, standards and instruments.

Keeping this in view, IMTMA is organizing a one day training program **on Gear Metrology and measurement methods**.

## FOCUS AREAS

- Introduction to Gear Terminology
- Basic concepts for gear measurement
- Definitions of terms
- Size measurement & form measurement
- Single and Double flank composite inspection
- Run out characteristics
- Gear Measuring Machines & Instruments
- Introduction to other standards like AGMA, JIS, etc
- Gear Quality Classification – As per ISO / DIN standards
- Advancements in Gear Metrology

## KEY TAKE AWAYS

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

- Understand the various gear inspection parameters and their importance
- Learn about tools and instruments for gear measurement
- Know about latest advancements in the field of Gear metrology
- Optimise your process for reducing cost of poor quality in Gear manufacturing

## PARTICIPATION FEE

**Rs. 5000/-**  
+18% GST

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

**USD 200/-**  
**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** .

**Mr. Kothari** is 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 organizations like Premier Ltd., Pune, a pioneer and a renowned machine tool company in India since 1944. He is an accomplished professional having wide exposure in Application Engineering of Machine Tools , Gear Cutting Machines, Gear manufacturing, Machining Centers and Vertical Turn-mill Centers. He has experience in Techno-commercial Sales and Marketing, New Part Development, Part Programming, Machine Tryouts, Design & Development of Tooling & Work Holding Fixtures on various machines.

### For Registration Contact

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