

INTRODUCTION

Dimensional Inspection assess the Geometric characteristics of Parts & Products to assure their compliance with Design requirements and verifies the accuracy of product features that can decide reliability and functionality of the product / production. Engineers & Technicians involved in manufacturing processes and measurement applications need to have sound knowledge in proper selection, application, and care of typical measurement systems. Best practices in dimensional metrology need to be followed for obtaining reliable measurements.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 3 day programme on **Hands-on Training in Dimensional Metrology** from 04-06 July at Bangalore

FOCUS AREAS

- Fundamentals of Precision measurement
- Types of Data- Variable vs Attribute
- Laws of metrology - Abbes Law and Comparators law
- Measurement of GD&T parameters
- References and standard gauges
- Gauge blocks
- Surface plates
- Cylindrical masters
- Optical flats and parallels
- Proper use and applications of Basic “Hand” Tools – mechanical and digital type
- Calipers
- Micrometers
- Indicators – Plunger and Lever type
- Types, Selection and proper use of Attribute gauges
- Cylindrical
- Thread
- Radius
- Pneumatic Gauges – working principle and selection criteria
- Common applications of pneumatic gauges
- Introduction to Advanced Measurement Systems
- Surface roughness tester
- Video measuring system
- Roundness tester
- Coordinate Measuring Machines (CMMs)
- Need of calibration of Measuring instruments & Gauges

KEY TAKE AWAYS

- After undergoing the programme, the participants will be able to -
1. Develop awareness, knowledge and skills necessary for the reliable measurement application / assessment of measurement quality
 2. Evaluate correct measuring methods / comparative measurements
 3. Get Hands-on practice in handling various measuring instruments
 4. Have overview of advanced measuring systems including CMM

PARTICIPATION FEE

Rs. 13500/-

+18% GST

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

USD 540/-

Overseas Participants

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

PARTICIPANT PROFILE

- This programme is applicable to anyone who wishes to learn the basic tools and techniques required for reliable measurement.
- This will benefit Engineers, technicians, machinists, toolmakers, etc involved in Quality Assurance / Quality Control, Production, Manufacturing Engineering, Design and R&D functions of manufacturing industries.
- The programme will be practical-oriented with hands-on practice in various measuring instruments. Participants would be encouraged to raise questions and solicit feedback from the expert faculty.

FACULTY

This programme will be conducted by Industry Experts from **IMTMA Technology Centre**, Bangalore

For Registration Contact

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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.