

INTRODUCTION

Understand the role of GD&T in the reduction of manufacturing cost and lead time as well as enhanced product reliability. Thorough knowledge of GD&T – the essential link, connecting the functional departments in the manufacturing industry – is a must for engineers. Many times lack of proper understanding/misconceptions about GD&T lead to depriving the true benefits of GD&T in terms of enhanced reliability of the product, saving in manufacturing cost, reduction in lead time, etc. Learn the fundamentals of GD&T in detail with application examples.

Keeping this in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organising a 2 days training programme on "**Geometric Dimensioning and Tolerancing (GD&T) in Design through Manufacturing**".

FOCUS AREAS

- Tolerance, types of tolerances, why tolerance is required?
- History, Introduction and understanding the need for GD & T
- Fundamental rules of GD&T per ASME - Rule1 and Rule2
- Coordinate vs Geometric tolerancing
- Definitions of Terms and Symbols: Feature, FOS, FCF, MMC, LMC and RFS
- DRF thro definition of datums and DOF restrained by primary, secondary and tertiary datums
- Calculation of bonus tolerance per MMC / LMC
- Five groups of GD&T parameters - Form, Orientation, Location, Run out and Profile
- Form tolerances and applications
- Straightness
- Flatness
- Circularity
- Cylindricity
- Orientation tolerances and applications
 - Parallelism
 - Perpendicularity
 - Angularity
- Location tolerances and applications
 - Position
 - Concentricity
 - Symmetry
- Run out tolerances and applications
 - Circular run out
 - Total run out
- Profile tolerances and applications
 - Profile of a line
 - Profile of a surface
- Learn to Interpret above through Case Studies and Exercises
- Inspection Methodology for GD&T Parameters

KEY TAKE AWAYS

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

- Understand the concepts of GD&T features and correctly interpret GD&T symbols in Engineering Drawings
- Learn about using tolerances at RFS, MMC and LMC conditions and Calculate Bonus tolerance.
- Gain a practical insight into inspection of GD&T features using conventional methods, Co-ordinate MeasuringMachine and functional gauges.
- Implement GD&T controls for a new project with proper selection of datum features.

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

PARTICIPANT PROFILE

This programme will be a Mid Level one and participants are expected to have knowledge of Engineering Drawing as a pre requisite.

This programme will benefit Managers, Engineers and Supervisory Personnel involved in the functions of Product Design, Process Planning, Production, and Quality Assurance from Machine Tool, Automobile & auto ancillaries, Tool Rooms, Consumer Durables, Aerospace, Defence & Railway establishments, General Engineering and other Capital goods manufacturing industries.

Participants are encouraged to bring their drawings for discussion and problem solving.

FACULTY

This programme will be conducted by **Mr. Raghavendra Haresamudram N,**.

Mr. Raghavendra Haresamudram N, is an expert metrologist, look forward to work with an innovative organization, where I can contribute with new ideas and improve the products / processes and services to drive customer delight. Having worked with various organizations & teams across geographies, I bring a wealth of knowledge not only in technical aspects but also Working with people across cultures.

For Registration Contact

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