



Engineering Staff College of India
Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachibowli, Hyderabad – 500 032.TS, India



And

Accurate Sales & Services Pvt Ltd, Pune

Management and Technology Division

Continuing Professional Development Programme on
Advance Training
On
GEOMETRIC DIMENSIONING & TOLERANCING (GD&T)
03-04 July 2019



(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

Understanding and application of Industrial Metrology assumes high importance as the Industry is progressing to high precision accuracy and automation at a very fast pace. Comparison and measurement against the intended dimensions and standards have led to many advances in the Measurement Technologies.

The present program aims at creating the knowledge base and engineering application for practicing personnel and managers in the field of Precision Engineering.

OBJECTIVES

The biggest world-wide challenge of any manufacturing Industry is of understanding the engineering drawing and applying same in manufacturing & measurement. Hardly people know that same drawing can be interpreted differently for different purposes; used for the purpose of product function or feedback to the manufacturing. The best example is GD&T POSITION TOLERANCE. It is used for the product function while manufacturing team need different output if TRUE POSITION is out of tolerance to apply correction on machine.

COURSE COVERAGE:

Understand what dimensioning and tolerancing is.

- Key terms used in geometric tolerancing.
- Modifiers and symbols used in geometric tolerancing.
- Understand Rule #1 and Rule #2.
- Understand the concepts of basic dimensions and bonus tolerance.

Form Controls.

- Flatness & Applications
- Straightness & Applications.
- Circularity & Applications
- Cylindricity & Applications.

Datum & Datum System

- Understanding the datum system
- Datum Targets
- Six degree of freedom
- Precedence of Datum

Location Controls

- Position - Introduction & Applications
- Position - RFS/MMC/LMC
- Position - Special Applications
- Concentricity & Applications
- Symmetry & Applications

Orientation Controls

- Perpendicularity & Applications
- Angularity & Applications
- Parallelism & Applications

Runout Controls.

- Circular Runout & Applications
- Total Runout & Applications

Introduction to Profile & Applications

- Profile of a Surface
- Profile of a Line

METHODOLOGY

Methodology of the programme includes class room Sessions with Lecture/discussion with audio visual aid, benched marked video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences, etc. All the sessions will be interactive demanding active participation from all the members. Case Method of Instruction (CMI) will be the main method of instruction.

COURSE ADVISOR & RESOURCE PERSON, FACULTY:

Mr Momin AY



Mr. Momin is Industry expert faculty having rich experience more than 25 years in CMM and Gauge Manufacturing company M/s. **Accurate-** India. Certified International Trainer from Aukom Germany for Aukom Level 01, 02, 03 and GD&T. Trained more than 1000 PROFESSIONALS in GD&T. Worked closely with more than 2000 industries especially in Auto, Engineering, and Aerospace Sector. Extensive frequent travel in subject concern all over India as well abroad to Germany, Italy, France, Austria, China, Trained more than 2000 people in 3D Coordinate Measuring Machine.

The faculty consists of experts from industry, research establishments and academia besides that from ESCI.

TARGET PARTICIPANTS All the professionals including Technician, Engineers, and Managers who use Mechanical Engineering Drawings will be benefitted from this professional development programme

- Engineers from Mechanical, Automobile, Aerospace and Defence Industries
- Quality Control and Quality Assurance Engineers and Professionals
- Engineers from Shop floor, Design, Manufacturing, Testing and Quality Assurance agencies
- Personnel from Research and Development, Manufacturing, Production and Maintenance set ups

- Scientists working in Research Laboratories, Engineers and Professionals from Governments, Private sector and Public Sector Undertakings (from product, process and service sectors), and Professors of various NIT's, Universities and Engineering colleges will find the programme useful.

BENEFIT TO THE PARTICIPANTS:

The participants will be benefited with deeper knowledge of Metrology and its application in the field of Engineering, Manufacturing and Quality control processes. The course will facilitate understanding of correct and good practices and help avoid common mistakes made in precision measurement practices. Exposure to variety of instruments & equipment and advances in the field of measurement and calibration would add value to the organization through its participants of the course.

PROGRAMME VENUE, DATES & TIMINGS

Venue: Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachibowli, Hyderabad. 500032. TS, India.

Dates

03-04 July 2019

Timings

On the first day Registration will commence at 0900 h. On all other days the programme timings will be from 09.45-17.15 Hrs with breaks in between for tea and lunch.

COURSE DIRECTOR



Gp Capt (Retd) BS Phillora BE (ETC), AE (L), MMS (DS), M Phil, FIE, Chartered engineer (India) Certified Lead Auditor ISO 9001: 2015
Dean of Studies ESCI &
Sr. Faculty, Management & Technology Division, ESCI

COURSE FEE

₹ **8,000/- (Non-Residential Fee)** per participant. Fee includes, course material, course kit, lunch, twice tea / coffee and snacks (Forenoon & Afternoon during the actual days of training programme).

- In case any participant wishes to avail this programme as a residential programme then a twin-sharing/single AC accommodation as per availability, with breakfast, & Dinner during the programme duration can also be provided at an additional cost of Rs 1000 per day. ESCI will also provide complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)

Goods and Service Tax @ 18% is to be paid extra over and above the training fee. PAN Card No AAATT3439Q; **GST No. 36AAATT3439Q1ZV.**(Under commercial training or coaching services).

Programme fee is to be paid in favour of "IE (I)-Engineering Staff College of India" in the form of demand draft payable at Hyderabad at par cheques payable at any Bank Branches.

Alternatively, the payment may be made by Electronic Fund Transfer (EFT) to ESCI - **SB A/c No.0432104000039631 with The IDBI Bank Ltd., Gachibowli Branch, Plot No. 2-53/2, JNIBF, IIIT Junction, Gachibowli, Hyderabad-500032 by RTG's/ NIFT / IFSC Code No: IBKL0000432. ESCI PAN No. is AAATT3439Q.** While using EFT/ Draft method of payment, kindly forward a covering letter giving details on the names of the participants, Title and the programme schedule so that proper accounting can be done.

REGISTRATION:

Online registration shall be available on ESCI website. ([URL:www.escihyd.Org](http://www.escihyd.Org))

To register, manually please send your nominations giving details of name, designation, contact address, email address, mobiles no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to:

Head, Management & Technology Division

Engineering Staff College of India
Old Bombay Road, Gachibowli,
Hyderabad 500 032, TS, India

Phone: Direct 040 6630 4111, 6630 4112 & 6630 4105

Fax : 040 66304103 & (91)309935227

Email: mt@escihyd.org,

For Registration Please Contact:

Hyderabad:

Mr. LV Rao
Programme Manager,
Land line 040 66304105
Mob: 0 9949145865

Pune:

Ms. Smita Bhosale
Mob. No. 9970001686
Ph.: 020-66039254
Email: sales@accuratesaies.co.in

CERTIFICATION

A certificate of participation will be awarded to each participant on conclusion of the programme.

GENERAL INSTRUCTIONS:

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of outstation participants, ESCI will facilitate pick-up and drop from Airport / Railway Stations / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participant directly to the Cab.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- Well-developed Information Centre and Internet facilities are available to the participants.

Nominating authorities are requested to kindly send the contact details of the participants while sending their nomination letter. This will help us in making necessary administrative arrangement for them.