GEOMETRIC DIMENSIONING AND TOLERANCING (GD&T)

Quality Tools & Techniques

Objectives

Participants will be able to understand drawings with GD&T symbols. Case studies and hands-on exercises using specially selected drawings allow participants to use and apply the information learnt in the course. Participants may also bring company drawings for interpretation during live case studies.

Duration

3 days | 9am – 5pm | 21 hours

Who should attend

Technicians and Engineers in the areas of design, manufacturing and quality control who need to specify, interpret and apply geometric tolerances.

Course Fees

Member: S$1,284.00
Non-Member: S$1,439.15

All fees stated are inclusive of Registration Fee & 9% GST

Award of Certificate

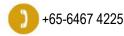Certificate of Completion will be issued to participants who have attended at least 75% of the course.

Please refer to this URL
https://www.sqi.org.sg/courses/
or QR Code for soft copy and updated training schedule

SQI INTERNATIONAL

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Course Contents

Introduction to GD&T
- Why GD&T?
- Problem with Traditional Methods
- "Square" vs "Cylindrical Tolerance Zone

Essential Concepts of GD&T
- Feature, Feature of Size, Location Dimensions
- Basic Rules
- Virtual Conditions
- Bonus Tolerances

Datums
- Datum Reference Frame
- Datum Precedence
- Datum Target
- Feature of Size Datum
- Applications

Form
- Flatness & Applications
- Straightness & Applications
- Circularity & Applications
- Cylindricity & Applications
- Case Studies

Orientation
- Perpendicularity & Applications
- Parallelism & Applications
- Angularity & Applications
- Case Studies

Position
- True Position & Tolerance of Position
- Symmetry & Applications
- Composite Positioning
- "Zero" Positioning
- Calculation of Optimal Positional Tolerance
- Conversion of Conventional Tolerance to True Position
- Case Studies

Runout and Concentricity
- Concept of Multiple Centreline
- Circular Runout and Applications
- Total Runout and Applications
- Concentricity and Applications
- Case Studies

Profile
- True Profile
- Types of Profile Tolerance
- Coverage of Profile Tolerance
- Profile of a Line & Applications
- Profile of a Surface & Applications
- Co-planarity Applications using Profile
- Location Control using Profile
- Orientation Control using Profile
- Case Studies

Exercises
- Final Revision
- Hands-on Exercises

Membership Application

Register membership online at **www.sqi.org.sg/membership-join/** or contact us to get the membership application form.

Membership Categories:
~ Organisation membership
~ Individual membership

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SQI is a World Partner of the American Society for Quality (ASQ); and a Board Member of both the Asian Network for Quality (ANQ) and the World Alliance for Chinese Quality (WACQ).