Geometric Dimensioning and Tolerancing for Mechanical Design

Training Programme by
Dream Catcher Consulting Sdn Bhd

17 - 18 Dec 18
Sandisk Storage Malaysia Sdn Bhd, Batu Kawan

303-4-5 & 303-4-6 Block B, Krystal Point
Jln Sultan Azlan Shah 11900 Sg Nibong Penang, Malaysia
http://dreamcatcher.asia
enquiry@dreamcatcher.asia
+604 640 7111 / 7112
+604 640 7110
Synopsis

SBL-Khas 4122

Geometric dimensioning and tolerancing (GD&T) is a system of symbols developed and used to communicate on a drawing how much a perfect design can deviate from the imperfect world of manufacturing. When properly applied, GD&T ensures the most economical and effective production of the part features. The global trend in technology and markets has resulted in a renaissance of GD&T. It is no longer considered an optional approach. Its present influence and use are mandated to fill the void of poor technical communication, which has persisted for many years.

This course will provide the participants with a practical and standardised understanding and interpretation of the symbology for GD&T as used in the cross-functional disciplines of design, production and inspection. This course places major emphasis on the symbology and concepts of GD&T in accordance with the ASME Y14.5M-1994 standard.

What You Will Learn

- Fundamental rules of dimensioning
- Principles and applications of tolerancing
- The concept and use of datums
- Various types of control specifications, namely form controls, profile controls, orientation controls, runout controls and position controls
- Theories and applications of MMC, LMC, and RFS

Who Should Attend

Design, Manufacturing, and Quality professionals new to GD&T or seeking to gain an empowering new standardised understanding of the terms, rules, symbols, and concepts of GD&T as prescribed in the ASME Y14.5M-1994 standard.

Prerequisite

Attendees should have basic engineering blueprint reading skills, awareness of 3D CAD geometry and working familiarity with machine part drawings.

Course Methodology

This course is conducted in a seminar room. Frequent classroom exercises augmented with the use of computer animations and PowerPoint presentations ensure a solid grasp of the fundamental concepts of GD&T. The emphasis is on understanding rather than on mundane learning.

Each participant will receive a set of course materials.

Course Duration
2 day(s), 9am - 5pm

Course Structure

Day 1

- Fundamental rules of dimensioning in engineering drawings
- General tolerancing principles and related principles
- GD&T and conventional dimensioning comparison
- GD&T modifiers and symbols
- Rule #1 and Rule #2
- Basic dimensions, virtual condition, inner & outer boundary, worst-case boundary, and bonus tolerance
- Form Controls: flatness, straightness, circularity, and cylindricity

Day 2

- Datums: planar datum system and datum targets
- Orientation Controls: perpendicularity, angularity, parallelism
- Profile Controls: profile of a line and profile of a surface
- Runout Controls: circular runout and total runout
- Location Controls: concentricity, symmetry and position
- Tolerance of Position Controls: MMC, LMC, and RFS basic theories and applications

Course Instructor(s)

Mr Yong Weng Keong

WK Yong is a certified HRDF Trainer with more than a combined total of twenty five years of Manufacturing, Design Engineering (R&D) and Quality Management Experience and as a competent tool maker. Some of the Companies that he had worked were National Semiconductor, Dynacraft International, Thomson Electronic (Bangkok), Rhombus Castor and Silitek Corporation.

WK Yong’s area of expertise are in the areas of Production, Operations, Design Engineering (R&D) and Quality Management, Production Planning and Control, Designing Engineering Drawing 2 & 3D, Geometric Dimensioning & Tolerancing and Productivity Improvement.

He is a QCC Leader for the project of quality and production yield improvement and was awarded by Sharp Roxy in the year of 2000. He performed the function of the QMR (Quality Management Representative) at Rhombus Castor.

He designs and supervises the fabrication of auto assembly machines (Hub & wheel) for the production lines, resulting in the improvement of the output by more than three times.

Experience in designing an inspection Jigs & Fixtures when he was working in Thomson
Electronic (Bangkok). Designed an auto glue dispensing machine system for IRETEX Packaging Industries Sdn Bhd for their paper board pallet line which improved the output and consistency of quality.

He has vast experience in conducting training program and he has coached and developed his subordinates or juniors in the companies that he has worked.

His background experience and knowledge in Manufacturing, Design Engineering and Quality Management strengthen his confidence for conducting his training programs.

He has the capability to provide training and consultancy in the areas of operations, manufacturing, Design Engineering and quality related modules. He is also able to conduct root cause analysis, FMEA, Control Plan, Poke-Yoke training program and it tools.
**Administrative Details**

**Programme Logistics**

**Duration:** 2 day(s), 9am - 5pm  
**Date:** 17 - 18 Dec 18  
**Venue:** Sandisk Storage Malaysia Sdn Bhd, Batu Kawan

Morning break, lunch and tea break will be provided throughout the course duration. Course Manual and Certificate of Attendance will be provided.

**Your Investment**

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<th>Type</th>
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<tr>
<td>Regular Fee</td>
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<td>RM2,200.00</td>
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<tr>
<td>Early Bird Discount</td>
<td>Saver Package ( 2 pax )</td>
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<td>Group Discount</td>
<td>Advantage Package ( 5 pax )</td>
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Additional cost may incur for customization or extra material request. Course fee is 100% claimable from PSMB (SBL scheme) in accordance to PSMB guidelines.

**3 Easy Steps to Register**

- **Phone** +604 640 7111 / 7112  
- **Fax registration form** to +604 640 7110  
- **Email registration form** to register@dreamcatcher.asia
Method of Payment

Crossed cheque / bank draft made in favour of DREAM CATCHER CONSULTING SDN BHD. Registration form together with payment to be couriered to:

Dream Catcher Consulting Sdn Bhd
303-4-5 & 303-4-6
Block B, Krystal Point
Jln Sultan Azlan Shah
11900 Sg Nibong
Penang, Malaysia

Payment must be received no later than 10 working days before the course commences. An undertaking may be accepted in cases where payment is delayed. However all payments must be made before the course commences. Closing registration date is 03-Dec-2018.

Refund and Cancellation

Fees will only be refunded in full for cancellation received in writing more than 10 working days prior to the commencement date. Substitute attendee(s) will be accepted at no extra charge.

Disclaimer

Dream Catcher Consulting Sdn Bhd reserves the right to change the instructors, date and to vary/cancel the programme should unavoidable circumstances arise. All effort will be taken to inform participants of the changes. Upon sending the registration form, you are deemed to have read and accepted the terms.

Enquiries

call us at +604 640 7111 / 7112 or email us at enquiry@dreamcatcher.asia
# Registration Form

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<tr>
<th>No.</th>
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**Total Amount**

*(Emails are required to ensure notification of any changes reach the participant)*

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**Submitted by:**

Company Name: ____________________________  
Company Address: __________________________  
Contact Person: ___________________  
Dept: ___________________  
Email: ___________________

*Please complete this form with an authorised signature below and fax to fax registration form to +604 640 7110 or email to email registration form to register@dreamcatcher.asia. Call us at phone +604 640 7111 / 7112 for any enquiry*

Authorised Signature: ____________________________  
Name: ___________________  
Dept: ___________________  
Designation: ___________________  
Date: ___________________

*Please print full name (authorised signature) if you submit via email*

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This registration is invalid without a signature. Payment must be made no later than 10 working days before the course commences. An undertaking may be accepted in cases where payment is delayed, however all payment must be made before the course commences. Participants who registered but did not attend will be invoiced accordingly. Fees will only be refunded in full for cancellation received in writing more than 10 working days prior to the commencement date. Substitute attendee(s) will be accepted at no extra charge.

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