

Fundamentals of GD&T 2009 Two-Day Workshop

Based on ASME Y14.5-2009



Course Developer: Alex Krulikowski, President of Effective Training Inc.

Learn GD&T from the experts. Professionals across the globe turn to ETI for training in geometric dimensioning and tolerancing. ETI's president, Alex Krulikowski, has helped more than 60,000 students learn GD&T through his textbooks, self-study courses, computer-based training programs, and online learning center. Now you have the opportunity to learn GD&T in a course developed by Alex at an ETI public workshop.

Learning to interpret and apply GD&T properly will help you and your company:

- Save money at the design stage
- Enable global sourcing
- Reduce drawing errors
- Increase productivity
- Increase part tolerances
- Assure that mating parts will assemble
- Eliminate scrap
- Improve inspection accuracy

About the Course

If you have a basic understanding of mechanical drawings, we can teach you the terms, rules, symbols, and concepts of GD&T as prescribed in the ASME Y14.5-2009 Standard.

You'll get an in-depth explanation of geometric symbols, including each symbol's requirements, tolerance zones, and limitations. The class includes a comparison of GD&T to coordinate tolerancing; an explanation of tolerance zones; Rules #1 and #2; form and orientation controls; tolerance of position; runout and profile controls. Throughout the class, you'll hone your newly acquired skills with hundreds of practice problems. This complete course in GD&T fundamentals is the most thorough and comprehensive training on the market.

Westland, Michigan

April 16-17
October 8-9

Who Should Attend

This workshop is a valuable tool for individuals who create or interpret engineering drawings: product and gage designers; process, product, and manufacturing engineers; supplier quality engineers; CMM operators; buyers/purchasers; checkers; inspectors; technicians; and sales engineers.

Workshop Highlights

The workshop is based on a series of goals and objectives. It includes numerous practice problems and in-depth coverage of dimensioning and tolerancing. You will learn the benefits of GD&T and leave with the ability to interpret GD&T on drawings. CEUs will be awarded for successful completion of the course.

Each workshop participant receives:

- A copy of *The Fundamentals of GD&T Based on ASME Y14.5-2009*, by Alex Krulikowski
- The *Ultimate GD&T Pocket Guide - ASME Y14.5-2009*
- An official certificate of completion
- Continental breakfast, morning and afternoon snacks

PLUS

- A 30-day pass to the Fundamentals of GD&T (1994) web training (\$159 value)



Quantity discounts available.

ETI offers a 10% discount on three or more registrations. Call 1-800-886-0909 for more information.



www.etinews.com

Enrollment is limited to 15 seats. Call 1-800-886-0909 or visit our website to register, today.

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Course Agenda and Highlights

Introduction

The importance of standards on drawings
Dimensions, tolerance, and notes used on drawings
Coordinate tolerancing and GD&T
General dimensioning symbols

GD&T Fundamentals

Key GD&T terms
GD&T symbols and modifiers
GD&T rules
Worst-case boundary, virtual condition, bonus tolerance

Form Tolerances

Flatness tolerance
Straightness tolerance
Circularity (roundness) tolerance
Cylindricity tolerance

The Datum System

Datum system
Applications of datum targets
Size datum features (RMB)
Size datum features (MMB)

Orientation Tolerances

Perpendicularity tolerance
Angularity tolerance
Parallelism tolerance

Location Tolerances

Position tolerance introduction
Position tolerance - RFS and MMC
Special applications of position tolerances
Position tolerance calculations

Runout, Concentricity, and Symmetry Tolerances

Circular and total runout tolerances
Concentricity and symmetry tolerances

Profile Tolerances

Profile tolerance - basic concepts
Profile tolerance applications

Final Exam

Closing comments

Do you have GD&T questions?
Bring your drawings to class
and get the answers!

Complete 2012 ETI public workshop schedule:

Advanced Concepts of GD&T (ASME Y14.5M-1994) 2-Day: March 28-29, September 19-20

ASME Y14.5 1994 to 2009 Update 1-Day: May 17

Engineering Drawing Requirements (ASME Y14.100-2004) 1-Day: May 16

Fundamentals of GD&T 2-Day:

1994 Standard: March 26-27, September 17-18

2009 Standard: April 16-17, October 8-9

Fundamentals of GD&T for Inspectors (ASME Y14.5M-1994) 2-Day: May 14-15

ISO Geometrical Tolerancing (ISO 1101:2004) 2-Day: April 18-19, October 15-16

Solid Model Tolerancing (ASME Y14.41-2003) 1-Day: May 18

Statistical Tolerance Stacks 1-Day: April 25, October 12

Tolerance Stacks 2-Day: April 23-24, October 10-11

Visit www.etinews.com for more details, pricing, and registration information.



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Call 1-800-886-0909 or visit our website to enroll today.