Engineering Drawing Requirements:

How to Interpret Engineering Drawings One-Day Workshop

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

Learn geometric dimensioning and tolerancing from the experts. One of ETI's qualified instructors will come to your site to conduct a hands-on workshop on engineering drawing requirements. We provide training at locations around the world, and all of our workshops can be customized to include your drawings and parts.

ETI's training and materials were developed by Alex Krulikowski, the noted GD&T educator, author, and consultant. He has a degree in industrial vocational education and more than 30 years of industrial experience putting GD&T to practical use on the shop floor. Alex is a member of the ASME Y14.5 Committee on Dimensioning and Tolerancing and served as chairman of the Y14.41 Committee on Solid Model Dimensioning for six years, so he's an expert on how to teach GD&T's application as prescribed by the standards. He has helped more than 60,000 students learn GD&T through his textbooks, self-study courses, computer-based training software, and online learning center.

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

Correctly interpreting engineering drawings has a direct impact on the final product. ETI's one-day Engineering Drawing Requirements course explains how to correctly interpret drawings, will improve a student's understanding of drawings, and will result in more effective communication on the job.

Who Should Attend

This workshop is designed for anyone who interprets engineering drawings: product, manufacturing, and quality engineers; inspectors; machinists; production personnel; purchasing agents; etc.

Workshop Highlights

Working with engineering drawings involves analyzing, making decisions, and processing data. The Engineering Drawings Requirements workshop is based on practical applications of print interpretation. It will give you a better understanding of the view representation, dimensions, tolerances, and symbols used on prints.

This hands-on workshop is based on ASME standards and common industry practices. It contains a series of goals and objectives and includes numerous practice problems. If pre-arranged, your company drawings can be used in the workshop exercises.

Each workshop participant receives:

- An *Engineering Drawing Requirements* textbook
- A *GD&T Ultimate Pocket Guide*
- Class handouts
- An official certificate of completion

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www.etinews.com

Call 1-800-886-0909 to enroll today.

Engineering Drawing Requirements One-Day Workshop

Course Highlights

The one-day Engineering Drawing Requirements workshop is based on practical applications of drawing interpretation. Topics covered include:

Engineering Drawings
Engineering drawings
CAD
Purpose of engineering drawings
Importance of engineering drawings
Standards used on engineering drawings
ASME Y14.100
Types of engineering drawings
Layout drawings
Assembly drawings and inseparable assembly drawings
Detail assembly drawings
Detail, monodetail and multidetail drawings

Drawing Formats
Drawing sheet sizes
Drawing zones
Title blocks
Revisions blocks
Angle of projection
Engineering drawing units
Parts lists
General, local, and flag notes
Drawing scale
Multi-sheet drawings

Line Conventions and Lettering
Line types on drawings
Functions represented by line type
Hierarchy of line types
Lettering

Drawing Views
Orthographic projection
Projection systems
Single view and multiview drawings
Detail, auxiliary, and assembly views

Drawing Sections
Eight types of section views
Conventional vs. true geometry
Revolution of features
Sectioning of assemblies

Dimensioning and Tolerancing
Practices for metric and English unit dimensions
Expressing tolerance
General tolerances
Definitions
Implied and coaxial relationships
General symbols and abbreviations
Thread, gear, and spline representation and specifications
GD&T standards and symbols
Uses of GD&T

Surface Texture
Surface texture standards
Definition of surface texture
ASME surface texture symbols

Weld Symbols
Weld specifications
Common weld types and joints

Receive a complete GD&T education.
We have a series of workshops that add up to a total GD&T education:

- Engineering Drawing Requirements
- GD&T Fundamentals
- GD&T Advanced Concepts
- Tolerance Stacks
- Statistical Tolerance Stacks
- GD&T One-Day Overview

Provide your management with a half-day overview of GD&T.
ETI also provides a half-day executive overview of geometric dimensioning and tolerancing.

Understand the difference between the ASME and ISO standards.
If you do business internationally, we can train your employees in the differences between the ASME and ISO standards.

Understand the fundamental definitions, concepts, and methods from the new ASME Y14.41-2003 Standard.
The Y14.41 Standard establishes requirements for preparing, organizing and interpreting 3D digital product images. ETI's Solid Model Tolerancing course explains the ASME Y14.41 Standard and how to apply it in your organization.

Students who attend our workshops walk away with more than knowledge. They gain on-the-job skills because our materials are performance-based, and each workshop approaches the subject from a design perspective.

To receive more information about our onsite workshops information—or to request a custom quote package—contact a GD&T account executive at 1-800-886-0909, or email sales@etinews.com.

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