Applied Geometrics, Inc.
GD&T: Theory to Reality
www.GDandT.com

Print Reading for Industry

2-Day Seminar

(~16 hours of instruction; 1.6 CEU's)

Course Description

Explore the importance of engineering drawings in industry and cultivate an in-depth understanding of the creation, duplication and interpretation of such drawings. Take away an appreciation of drafting principles using a curriculum with in-class exercises designed for maximum student engagement.

Objectives

1. Introduce participants to print reading
2. Learn drafting principles and print reading procedures to increase clear communication
3. Decipher title blocks, materials, notes and drawing changes
4. Introduce participants to the American Society of Mechanical Engineers (ASME) Y-14.5 standard's language
5. Explore specialized print reading examples. Student prints welcome

Benefits/Reasons to Attend

This course discusses the basic elements of a print and introduces the concepts and principles students must master to successfully interpret engineering drawings. Topics include principles of shop sketching, basic review of shop mathematics and use of common measuring tools.

Program Outline

Part 1 - **Introduction to Print Reading**
- Prints: The Language of Industry
- How to read the Steel Rule

Part 2 - **Drafting and Print Reading Procedures**
- The Alphabet of Lines
- Freehand Technical Sketching
- Orthographic Projection Views
- Lettering and Dimensioning of Freehand Sketches
- Auxiliary Views
- Detail and Assembly Drawings
- Shop Mathematics Review
- Measurement Tools
- Dimensions and Tolerances
- Section View
- Pictorial Drawings

Part 3 - **Title Block, Materials, Notes and Drawing Changes**
- Title Block
- List of Materials
- Drawing Notes
- Drawing Change Systems

Part 4 - **Machining Specifications**
- Geometric Dimensioning and Tolerancing (GD&T)
- Thread Representation and Specification
- Specifications and Callouts for Machining Processes
- Gears, Splines and Serrations

Part 5- **Specialized Print Reading**
- Reading Numerical Control Documents
- Precision Sheet Metal Prints
- Welding Prints
- Plastic Parts Prints
- Instrumentation and Control Drawings

Who Should Attend

Anyone who needs to read and understand print specifications

Prerequisites

No prior knowledge of drafting or drawing is assumed.

AGI is dedicated to continuing service. Our concern is that the individuals we teach actually retain that which their companies and we have worked so hard to present. This is precisely why we offer, for each participant of any AGI seminar, access to an ASME GDTP Senior certified instructor who will be available to answer follow up questions after the course via e-mail or phone.

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