

# Geometric Dimensioning and Tolerancing (GD&T) for Inspectors/CMM Programmers

## 3-Day Seminar

(~24 hours of instruction; 2.4 CEU's)

### Course Description

This three-day course is an advanced GD&T course designed specifically for those who must operate, program, or interpret the output of measuring and inspection devices.

### Objectives

1. Review the concepts of the ASME Y14.5 Standard
2. Expand the participants' knowledge of GD&T Concepts and the "language" of the ASME Y14.5 Standard as it pertains to inspection techniques and practices
3. Gain confidence in using the ASME Y14.5 Standard
4. Recognize measurement software, hardware, and philosophy strengths and weaknesses
5. Develop work-arounds to overcome measurement devices weaknesses

### Benefits/Reasons to Attend

If you are responsible for inspecting, this course is for you. This course is a continuation of education in the ASME Y14.5 Standard. In this program, we focus on the application and interpretation of GD&T as it pertains to measurement devices.

### Program Outline

The program begins with an in-depth review of GD&T theory and principles, then continues with a practical evaluation of measurement philosophies and capabilities, as well as their pitfalls.

### Subject matter covered (as a minimum):

- Introduction - Objectives, review of AGI GD&T "Rememberalls"
- CMM operation – concepts, philosophy, practice, and misconceptions
- CMM software – what is being calculated per the ASME Y14.5 Standard and what is not
- Datum Features of Size and Datum Shift
- Review of the Datum at Virtual Condition Rule
- Work-arounds for the shortcomings
- Review of actual prints (participant and instructor supplied) with time permitting

### Who Should Attend

This program is designed for those responsible for operating, programming and interpreting the results from a measuring device. The class content is **not** specific to any particular CMM software package or device manufacturer. Students receive **FREE** course materials, to which they will refer often!

### Prerequisites

Fundamentals of GD&T or equivalent experience and a strong working knowledge of GD&T and measuring techniques.

*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.*