

Geometric Dimensioning and Tolerancing (GD&T) Trilogy

Three courses make up this ***GD&T Trilogy***[™], providing a value focus that can be customized with your products and product designs. We encourage real-life examples from within your company to explore opportunities to improve your products and processes.

A Basic Course in GD&T

Industry uses GD&T to specify contractual requirements. Unfortunately, many people within industry have a flawed or incomplete understanding of the subject. Our basic course builds competence to correctly apply and interpret the rules, definitions, principles, and symbols per the American National Standard, ASME Y14.5 – 2009, in only two days! This course provides a common language to improve communication, so set-up requirements and tolerance zones are clearly understood by all.

If you fixed communications in your company, how many of your problems would go away overnight?

Datum Schemes for GD&T

Many problems we face in industry, especially dimensional concerns, have faulty datum schemes as their root cause. Datum schemes must be explicit, functional, and repeatable. If any of these requirements are not met, financial loss occurs.

This mid-level two-day course begins with a fast-paced review of the basics, so you can bring your GD&T skills in line with the 2009 standard. Our primary focus is on datum strategies for assemblies and the detail components that comprise them. We teach you to spot datum problems and resolve these issues during product development.

Tolerancing Strategies with GD&T

Tolerancing strategies are rarely taught in engineering programs. Designers and engineers are left to fend for themselves, frequently pulling past design practices forward, whether there is a rational basis to do so or not.

This advanced three-day course combines tolerancing concepts with statistical methods. We examine part tolerances, fixture tolerances, gage tolerances, assembly tolerances and the interactions between them. Tolerance stacks are evaluated via worst case analysis and a variety of statistical techniques. Strategies for robust design capitalize on operational definitions of GD&T to minimize loss to society.