Datum Schemes for GD&T

Course Description

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.

Course Outline

1. Statement of the Problem
2. Fundamental Datum Concepts
3. Selective Review of ASME Y14.5 - 2009
4. Datum Boundary Modifiers
5. Part Restraint vs. Part Constraint
6. Common Datum Features
7. Datum Target Applications
8. Special Datum Applications
9. Common Datum Problems
10. Preventing Dimensional Problems

Key Course Objectives

✓ Review recent changes to ASME Y14.5 – 2009.
✓ Identify degrees of freedom constrained by datum features.
✓ Identify datum problems prior to manufacturing.
✓ Interpret the impact of datum boundary modifiers.
✓ Select most appropriate datum features in the right order.