

Statistical Tolerancing Stack analysis

(Calculators required)

Course Overview;

This course can be used to analysis an actual assembly, and to recommend improvements that will help reduce costs by increasing part tolerances using root sum squared tolerances. The course aims to insure that delegates understand modern machining and inspection, and therefore will enable them to tolerance for a competitive advantage.

Delegates will be required to perform actual calculations and will therefore require calculators.

Duration;

1 Day, usually between 9am and 4:30 pm.

Course Content;

Introduction

- Dimensioning
- Statistics

The Tolerance Model

- Different types

Types of tolerances

- Part tolerance
- Assembly tolerances
- Worst case tolerances
- Geometrical tolerances

Tolerance analysis

- Tolerance allocation
- Tolerance analysis

3 σ Tolerance

- Good parts
- Bad parts

Root Sum Square

- Introduction
- Application
- Limitations

Process Tolerances

- Introduction
- Basic concepts

Risk Assessment

- Introduction
- Basic concepts

Dimensional Management

- Introduction
- Basic concepts

Summary