

Tolerance study for Functional Design

This training session is designed to provide insight into tolerance chains for anyone who comes into contact with product development.

Training objective

The objective of this training session is to give drafters and product developers an understanding of tolerances and their consequences on their products. This training is highly practical and is designed primarily to provide detailed understanding.

By the end of the two-day training session, participants will:

- Have an understanding of the dimensional and functional relationships in systems and components
- Be able to control tolerance risks and eliminate them structurally
- Be able to convert geometrical tolerancing into tolerance studies
- Be able to apply statistics in tolerance studies
- Make assumptions in a design, draw conclusions based on tolerance stackup results and optimise these

Target group

The training is designed for anyone who comes into contact with product development, and preferably who has already taken the course on geometrical dimensioning and tolerancing.

Training materials

Syllabus:

- Hand-outs
- Course
- Exercises
- CD with Tolerance Stack-up spreadsheet in MS Excel 2013

General

- Maximum of 8 participants per session, in order to promote class discussion and interaction.
- The projector, whiteboard and laptops will be provided by the client. Optimally, each participant will have access to a laptop.
- The training can be given in either Dutch or English.
- After completion, each participant will receive a certificate.

Contents of the trainingInleiding

Introduction

- importance of tolerance analysis, have a view on tolerances
- basic geometrical dimensioning and tolerancing
- have an understanding on tolerance zones and reference systems

Tolerance diagram

- 1D vector diagram on workpiece and assembly
- geometrical dimensioning and tolerancing in a stack-up
- assumptions in a tolerance analysis

Statistics

- basics in statistics
- statistics in tolerance analysis

Points of attention in stack-ups
Trigonometry, assembly shift

Practical exercises

Price

Please feel free to contact me for your customised quotation.

