

Model-Based Definition

This course covers the dimensioning and tolerancing of a 3D CAD model for downstream use. Using a 3D CAD model eliminates the need for a 2D drawing.

Course objectives

The goal of the course is to become familiar with the Model-Based Definition (MBD) process. It also covers the annotation mode – the tools for annotating a 3D CAD in PTC Creo, optionally with the Creo GDT-Advisor module.

You will learn to transfer 2D information into a 3D model so that all Product Manufacturing Information (PMI) is present so that the 3D model becomes machine readable. Ultimately, one no longer speaks of a 2D drawing, but a Technical Data Package or a Product Definition Data set.

At the end of the course, participants will be able to:

- have a better understanding of the MBD process and of how MBD models are created and PMI is required.
- be able to use a 3D CAD model as a tool to communicate better and more unambiguously across the organization.

This training can be expanded with topics from the GD&T course.

Target group

The course is primarily aimed at designers who create and approve 3D models.

Training materials

Syllabus available in English.

Course content

Introduction to Model-Based Definition
Digital product definition data practices
ISO 16792:2021
Classification codes for drawings and data sets
General model requirements

Preparing Models for Annotation
Creating Annotation Elements
Modifying Annotation Elements

Setting up Combination States

Teaching a best-practice workflow

Theoretical exercises
Practical exercises on client 3D model

Creo GDT Advisor is optional.

General

The full course takes one to two days, depending on the selected options. Our training hours are flexible.

A maximum of 12 participants per course, in order to promote mutual discussion and interaction.

The projector (1920x1080pixels) is provided by the customer.

Laptops with Creo Parametric can be provided, optimally each participant has a laptop at their disposal.

The training can be given in both Dutch and English.

