



PRODUCT SHEET MODELSEARCH

for CREO Parametric and CREO Elements/Direct
for MODEL MANAGER and WINDCHILL

Geometric similarity search in perfection

Sorting, classifying, archiving – not that easy in a design engineers' daily business. And not exactly what they would choose to do voluntarily. Trying to describe the geometric shape of a part linguistically is just as difficult as boiling the ocean, says Thomas Bauer, Head of R&D at TECHSOFT, summing up a dilemma which caused some classification projects to break apart. In many cases it would be far more efficient to use parts that already exist in the database rather than reinventing them over and over again.

The software is proactive, fully automatic, helpful, and good

There is the perfect solution for every task: you just have to listen carefully to what the users really want and focus on the essentials. And this is precisely what was done during development of ModelSearch. The result is a software which finds the fastest way to the goal, fully automated and proactive, pretty much like a car navigation system. Via the geometric footprint of the individual parts, which is determined from a variety of properties such as dimensions, areas, moments of inertia, bores, etc., the track to similar, already existing 3D models is recorded and tracked in real time.

This data matching is done thanks to „In Memory Computing“ and the ModelSearch Live component as fast as lightning on one hand and continuously on the other.

**DESIGN.
CREATE.
OPERATE.**

This means the user is constantly fed preview images of the most similar models during his design process. The more detailed his designs become, the more accurately the parts get that he receives from PTC Creo Elements/Direct or PTC Creo Parametric.

Since the geometric footprint is human-readable, it is of course also possible to search for parts interactively. Predefined geometric search criteria such as sleeve, washer, folded sheet metal part or gusset, automatically support the designer in his search. In this way, existing parts can be found and reused quickly and easily with just a few mouse clicks.

FUNCTIONALITY:

- Automatic geometric footprint generation of all 3D models
- Interactive similarity, geometry, and hole pattern search
- Continuous similarity search – ModelSearch Live
- Duplicate detection at runtime

HIGHLIGHTS:

- Ready for use throughout the company once it has been installed
- Extremely fast response times thanks to in-memory computing technology
- Suitable for universal use as no PLM system customizing is necessary
- Native integration in Windchill and Model Manager as well as Creo Parametric and Creo Elements/Direct - no additional software required
- MultiCAD support for Windchill, supported CAD Systems CATIA®, Siemens® NX™, SolidWorks®, and Autodesk® Inventor™

BENEFITS:

- reduced design activities
- reduced production activities
- reduced part diversity

