# 3DPartFinder
## SOLUTIONS for SOLIDWORKS



**Designers**
**CAD Users**
**Reuse**
**Innovate**

**Product**
**Development**
**Locate Data**
**Efficiently**

**Standardization**
**Rationalization**
**Database**
**Analysis**

## STOP DUPLICATES PARTS CREATION!

Stop searching for parts using traditional search engines based on name, description or part number. 3DPartFinder finds all duplicates, nearby duplicates and similar parts using the SHAPE as input! Launch 3DPartFinder when you begin a design project and ensure that no duplicates will ever been created. You can save time and reuse the closest existing design to improve your costs!

## ACCELERATE DEVELOPMENT!

Every time you reuse data found by 3DPartFinder you take advantage of your field proven designs and free-up yourself to work on more projects, resulting in increased productivity!

## ANALYZE YOUR PARTS!

Analyze all parts and rapidly find duplicates, quasi-duplicates and similar parts!
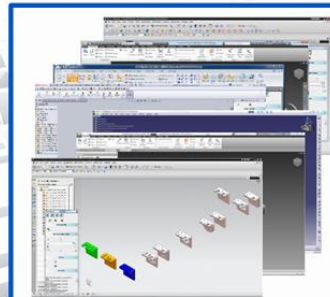
Monitor your reuse strategy and progress, provide new tools to help standardization or even prepare a successful PLM implementation!

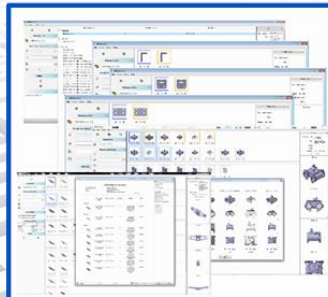Compare database or PLM Vaults and reduce the number of parts!
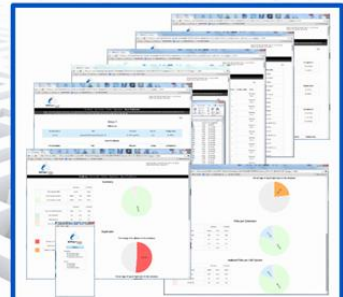
### 3DSemantix

**From Geometric Data to Business Intelligence!**

# *Accelerate product development and improve productivity!*

**3DPartFinder is a shape search engine** that does for parts what Google® does with text, it finds and displays parts similar to the initial inquiry.

## Creating a new part costs more than you think!

Nowadays, using almost any CAD system, an experienced designer can create a new part very quickly. Most of the time it is much faster for an experienced designer to create a new part than search the company database for similar or identical parts. Who is to blame? After all, your design team has to meet tight schedules and the company has critical time-to-market windows to introduce its new products. But designing a new part is only the beginning of the entire part's creation process. As you go through the various steps that will finally take the part to inventory, you add value to it and therefore increase the part's cost.

## Part reuse is accessible to all!

Whether you are an engineer, designer or executive manager, you probably realize that companies adopting an automated part reuse strategy have the potential for huge cost savings. Here are some of the main benefits of a part reuse strategy:

- Stop the creation of duplicates
- Reduced tooling, prototype and testing costs
- Reuse engineering knowledge and best practices
- Increase productivity and shorten training time
- Help standardization, reduce number of parts and inventory costs

The key to a successful part reuse strategy is to have the ability to search on the basis of shape to find rapidly identical or similar items.

Start working with 3DPartFinder and begin to save money by leveraging your biggest asset: Your CAD designs, related documents and processes cumulated over the years!

# 3DPartFinder
## SOLUTIONS for SOLIDWORKS

## Good reasons to have 3DPartFinder:

1. Implement part reuse and savings in a simple and convivial way
2. Deliver your projects faster with your best engineering practices
3. Increase your productivity and deliver more projects
4. Finally, find what you knew you had!

## EFFICIENCY FOR DESIGNERS!

We have integrated 3DPartFinder as an add-in in SOLIDWORKS and major CAD systems to give you access to all their functions without compromises. Launch 3DPartFinder in your CAD and results are presented in a CAD Assembly. Parts are ranked according to their similarity and you can analyze them directly in your CAD system!

## PRODUCTIVITY FOR ALL!

We have made available the advanced geometric shape search technology offered by 3DPartFinder to all users as not all have CAD system available! It provides PLM or non PLM users shape search capabilities to their existing alphanumeric search.

## ANALYTICS!

Analyze all parts and rapidly find duplicates, quasi-duplicates and similar parts!

Monitor your reuse strategy and progress, provide new tools to help standardization or even prepare a successful PLM implementation!

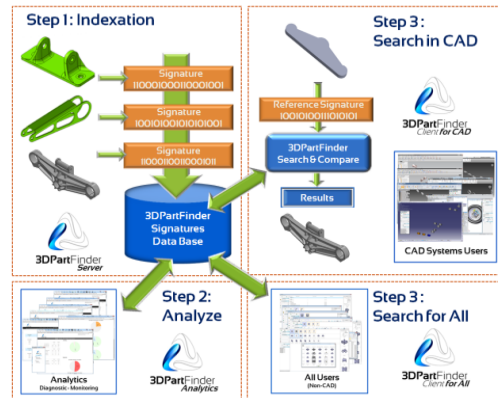Compare database or PLM Vaults and reduce the number of parts!

## BENEFITS:

1. **Reduce delay** associated to part search as well as engineering information.

2. **Profitable for all services**: concept, design, production, procurement, after sales, etc.

3. **Independent** from any keywords or language in which the part was created.

**From Geometric Data to Business Intelligence!**

## 3DPartFinder technology

3DPartFinder uses geometric CAD data for its search rather than alphanumeric characters. It can search a database of millions of parts and identify duplicate and/or similar geometry in seconds without the need for manual part pre-classification.

One of the fundamentals of the semantics created is the "signature" of a 3D model. The signature of a 3D CAD model is small (max.15KB) created as a result of its shape analysis. This signature is not a compressed version of the CAD model. It is a mathematical representation of the 3D shape that is irreversible, encrypted and therefore protect the intellectual property of its owner.
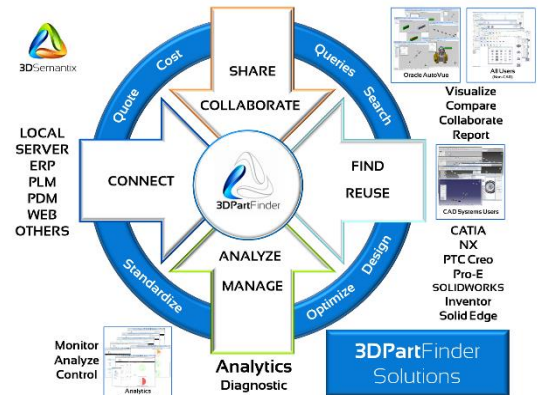


*3DPartFinder Signature Process & Solutions*

We use "native" CAD systems API to extract high precision signatures from CAD files. The signature does not suffer any deterioration that could be introduced by any intermediate formats such as VRML, STL or JT and allows for greater accuracy of the research. Once the software installation is completed, the 3DPartFinder indexing operation creates automatically the search database of those fingerprints and maintains it automatically!

## Technical Specifications

- Research time generally below 1 second
- Configurable and automatic part indexation process
- Windows 64-bit, Windows 7, 8, 8.1 and 10
- Works with SOLIDWORKS and CATIA
- Supports CAD files configurations, family table and PLM versions
- Supports SW PDM and major PLM and PDM with all security in place!

## Available for all!



## Speaking the « Shape language »

Traditional search engines rely on comparison and search capabilities based on part numbers and descriptions alone. While this method can be very useful, its limitations do not allow companies to fully optimize their parts management due to issues such as inconsistent standards and classifications, limited part number conventions and native language dependence.

3DSemantix has created the semantics to "speak" the 3D shape language required to find, without a doubt, if you have similar parts in your directory. 3DPartFinder is an advanced shape-based search engine that uses this new semantics to help you find all similar or identical parts in less than a second.

Regardless of your motivations, once you adopt 3DPartFinder, you won't begin a new project without using our search engine!

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