**CADENAS GEOsearch and SAP with CIDEON**

Dr. Martin Stahr, Felix Finster

# Agenda

**Component reuse and its advantages**

Geometric Similarity Search

Combining GEOsearch and SAP data

Demonstration

Wrap up

# Component reuse and its advantages

- **Accelerated Design**:

  - Less redundance and redevelopment
  - Less administrative tasks (document management, checks, drawing creation, …)

- **Logistics and Manufacturing**:

  - Reuse of existing information (Procurement-, Purchasing-, Manufacturing data and documents)

- **Cost Estimates**:

  - Faster cost predictions thanks to existing calculations

## <span style="color:red">Reliable Product Introduction</span>

# Agenda

Component reuse and its advantages

## Geometric Similarity Search

Combining GEOsearch and SAP data

Demonstration

How you can benefit

cideon software

# How to find similar parts

- Typical methods to organize similar components:

  - Folder Structures
  - Classification
  - Descriptive methods

# How to find similar parts

Restrictions of descriptive methods:

- Classification has to be modeled and set up

- Users have to enter data into classification / descriptive fields to enable components to be found

- Search parameter are only descriptive and have to be known to the user who performs the search
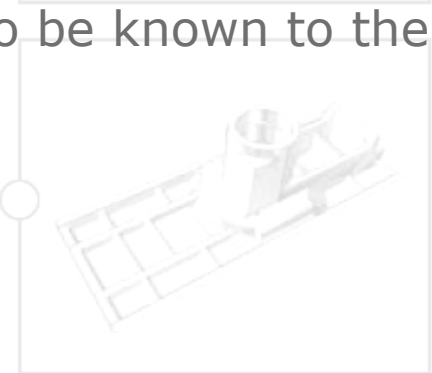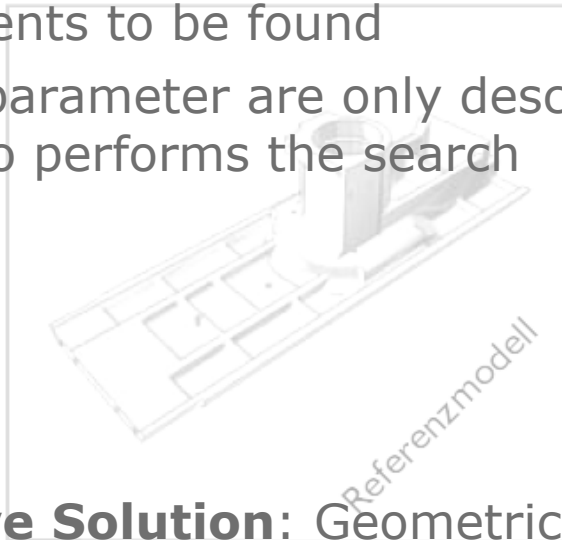
**Alternative Solution**: Geometric Similarity

- Independent from description and classification

- Based on CAD geometry and corresponding fingerprints

- High result set for reusable parts

cideon ❖ software

# Better evaluation for found components

## Geometrical similar – but can it be used as well?



Geometric Similarity                                    Information from PLM

**Best Decision**

cideon ✧ software

# CADENAS GEOsearch and SAP PLM CAD Integration



**CADENAS GEOsearch**

www.cadenas.de/en



cideon ❖ software

Engineering Software

**GEOsearch SAP Connector**
**GEOsearch SAP Importer**

www.cideon.com

# Agenda

Component reuse and its advantages

Geometric Similarity Search

**Combining GEOsearch and SAP data**

Demonstration

How you can benefit

# Simple but powerful combination of GEOsearch and SAP data

## SAP PLM CAD Integration



**1.** Choose 3D reference

## CADENAS GEOsearch



**2.** Perform search



**3.** Select from result set

# Advantages of GEOsearch Connector

- Direct Integration to SAP, CAD and GEOsearch

  - CAD components can directly be used as reference geometry

# Advantages of GEOsearch Connector

- Direct Integration to SAP, CAD and GEOsearch

  - Search can be performed from any component via context menu
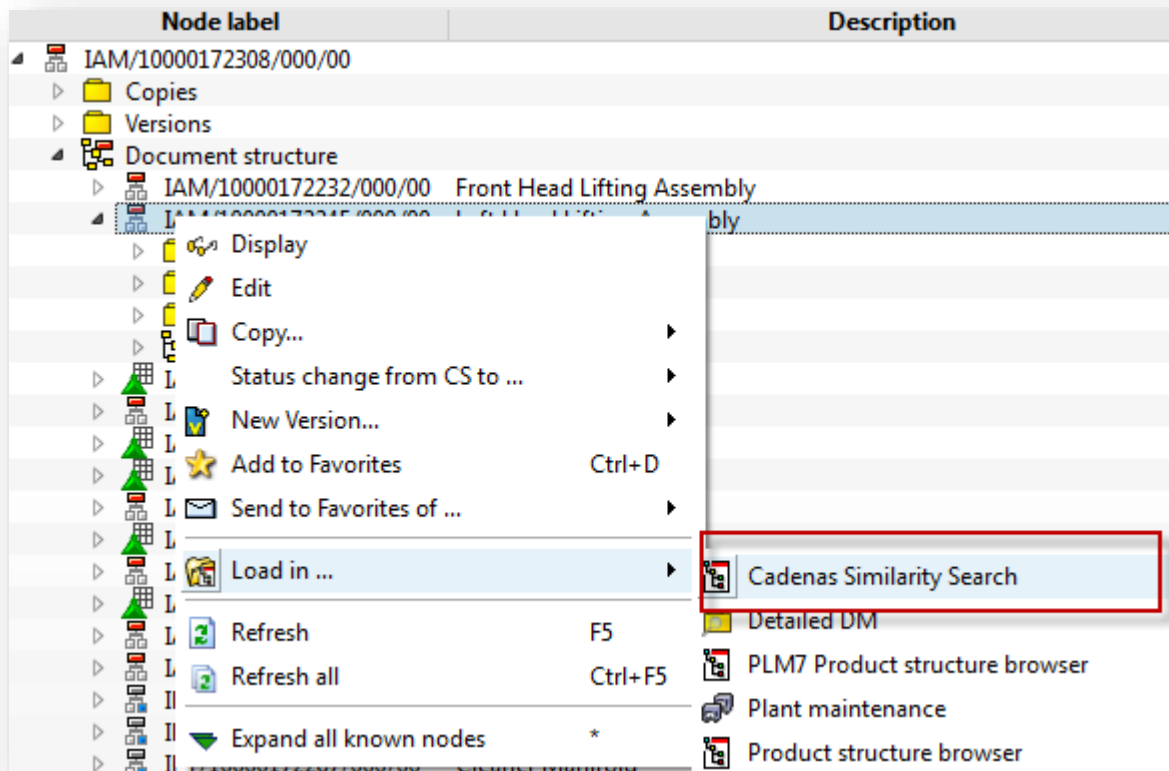
# Advantages of GEOsearch Connector

- Direct Integration to SAP, CAD and GEOsearch

  - Clear result set from GEOsearch including level of match, additionally enriched with SAP information:

    - Is the document released already?

    - Jump directly into material master

    - Link objects and where-used can easily be displayed

# Advantages of GEOsearch Connector

- Direct Integration to SAP, CAD and GEOsearch

  - Immediate use of components from result set by using the SAP PLM CAD Integration

    - Open directly in CAD via drag&drop for easy replace
    - Additional documents available on the spot



cideon ✚ software
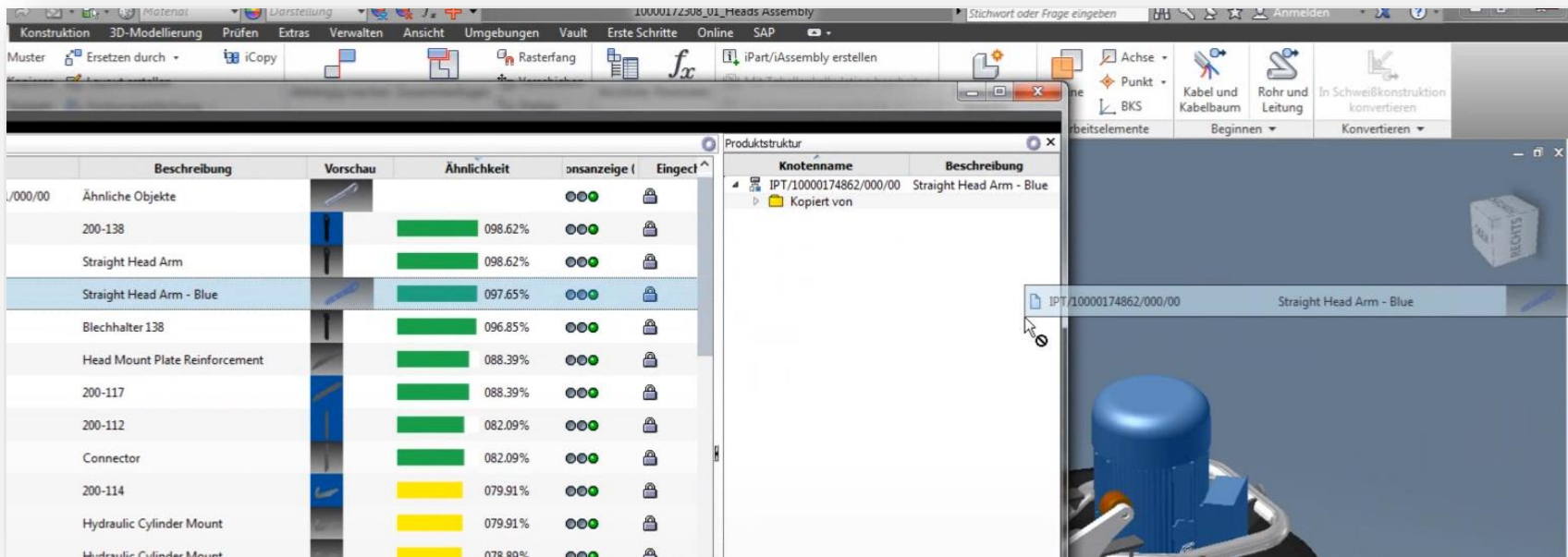
# Adding Content to GEOsearch

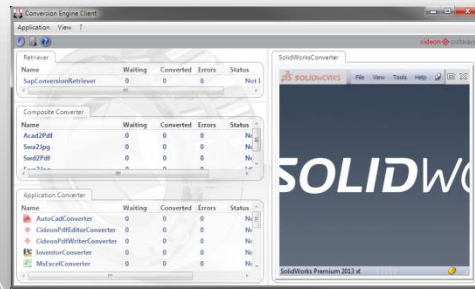- Automated import of GEOsearch content directly within the design process

  - At status change

  - On demand

  - Step by step population of GEOsearch database and hence increasing hit ratio



SAP DMS

CIDEON Conversion Engine

CADENAS GEOsearch
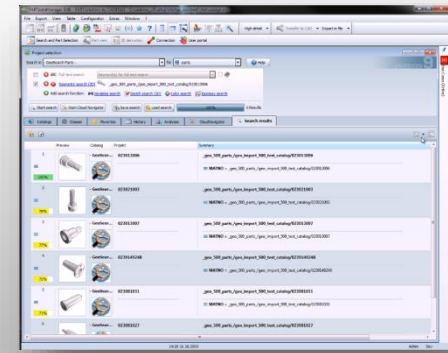
| Release of Document | Creation of Neutral Format and handover to GEOsearch | Creation of fingerprint and import of metadata |

cideon ❖ software

# Agenda

Component reuse and its advantages

Geometric Similarity Search

Combining GEOsearch and SAP data

**Demonstration**

How you can benefit

# Demonstration
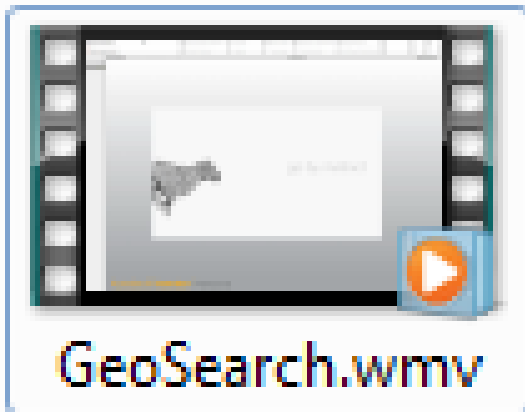


GeoSearch.wmv

- **Demo Steps:**
  - Open Assembly
  - Navigate to component which should be replaced
  - Execute the GEOsearch
  - Replace component with similar part from result set

# Agenda

Component reuse and its advantages

Geometric Similarity Search

Combining GEOsearch and SAP data

Demonstration

**How you can benefit**

cideon ❖ software

# How you can benefit

**Complete Integration**

Population of GEOsearch conent as well as searching

**Use search results**

Found components can easily be loaded into CAD via drag&drop

**Flexible and enhanceable**

Customizable result list, limits, search methods

**User friendly**

Simple execution via context menu, directly on CAD structure
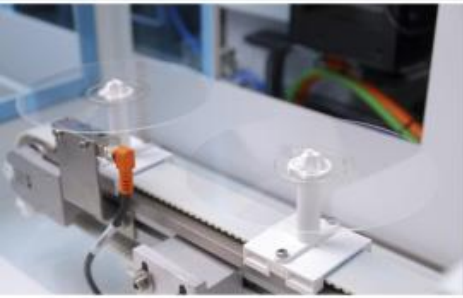
**Tailored Information**

Object information (SAP data) plus additional documents

**State-of-the art Technology**

Use of CADENAS GEOsearch and SAP PLM CAD Integration

cideon software

**Thank you!**

www.cideon.com