



GEO
SEARCH

PARTsolutions Intelligent Finding V9.05 / ...06



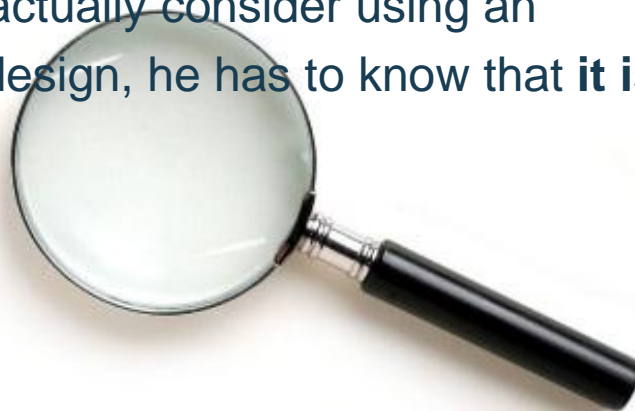
Optimize your search time!

Result of a survey by the Aberdeen Group (USA)

GEO
SEARCH

PARTsolutions
Intelligent Finding

So that an engineer can actually consider using an existing part for his new design, he has to know that **it is existing and he has to find it!**



“The engineer averagely spends 45 % of his working time **looking for information** in data bases and libraries“.

Solution: optimize your search = work more cost-effectively



AGENDA

User Interface

- Search mask as of PARTsolutions V9.06

Search methods

- Full-text Search
- GEOsearch 3D
- Sketch Search 2D
- Topology Search
- Unmachined Part Search
- Cloud Navigator multi level search
- Partial Search (first excerpt)

CAD Integration - seamless



User Interface



User Interface

- PARTsolutions search mask until V9.04

The screenshot shows the PARTdataManager 9.04 search interface. Key components are highlighted with red boxes:

- Search Mask:** Located at the top, it includes a search term field (containing "Suchbegriff(e) für Volltextsuche"), a manufacturer filter field (containing "Herstellername"), and a search button.
- Search Options:** A dialog box titled "Suchen" with tabs for "Suchen" and "Vergleichen". It contains a table of search criteria and options.
- Search Results:** A table showing search results with columns for variable names and descriptions.
- 3D Model:** A 3D wireframe model of a cube is shown in the bottom left corner.

Variable	Beschreibung	Wert / von	bis	Einheit	Sy
Schlagwort	Schlagwort	=			
ERP_PDM_NUMBER	ERP-Nummer	=			
STATUS	Status	=			
MAT_WERKSTOFF	MAT_WERKSTOFF	=			
LAGER_HQ	Anzahl Lager HQ	=			
LAGER_LOC1	Anzahl Lager 1	=			
LAGER_LOC2	Stock Lager 2	=			
ERSATZ	Ersatznummer	=			
MAT_DESCRIPTOR...	MAT_DESCRIPTION_DE	=			





User Interface as of V9.06

- Consistent, simplified search mask as of PARTsolutions V9.06

The screenshot displays the PARTdataManager 9.05 interface. The search mask is highlighted with a red box and includes the following options:

- A=B** Variablensuche D=8; L=10 - 15
- Skizzensuche (2D)** [Icon]
- Topologiesuche** Rotationssymmetrie = symmetrisch
- Suchfunktion hinzufügen: **Geometrische Suche (3D)**, **Farbsuche**

Below the search mask, the 'Kataloge' (Catalogs) section is highlighted with a red box, showing tabs for 'Klassen', 'Favoriten', 'Verlauf', 'Analysen', and 'CloudNavigator'. The 'Filter: Hersteller' (Filter: Manufacturer) section is also highlighted with a red box, showing a list of manufacturers:

Accurate Inc.	Accuride	ACE Stoßdämpfe...	AC
20.04.2011	03.02.2011	29.02.2012	01.06

The bottom part of the screenshot shows a tree view of catalogs on the left and a grid of manufacturer logos and names on the right, including AIRTAC, ALBION, and ALFA.



Full-text Search



Search methods

⇒ Full-text Search

- Search for text- & numerical entries as search results so far

PARTdataManager 9.04 - PARTsolutions by CADENAS

Datei Export ERP Ansicht Tabelle Konfigurator Extras Fenster ?

Teileauswahl Teileansicht 2D-Ableitung Verschraubung Textsuche Skizzensuche (2D) Geometrische Suche (3D)

Schlagnwortsuche: 300 662 a10 in Aktuelle Auswahl

Herstellername

Suche

Suche Favoriten Verlauf Analyse

Suchen in: /Kataloge

Va...	Beschr...	Wert /...	bis	Ei...	ε
	Schlag...	= 300 66...			
ER...	ERP-Nu...	=			
ST...	Status	=			
MA...	MAT_W...	=			
LA...	Anzahl ...	=			
LA...	Anzahl ...	=			
LA...	Stock L...	=			

Suchen

100% Anzahl: 0

Ihre Suchanfrage lieferte keine Ergebnisse

Wie können Sie Ihre Suche verbessern?

Schlagnwortsuche: Verwenden Sie weniger Schlagworte oder versuchen Sie, die Schlagworte zu verallgemeinern





Search methods

⇒ Full-text Search

- Search results PARTsolutions V9.04

The screenshot shows the PARTdataManager 9.05 interface. The search bar at the top contains the query "Schlagwortsuche: gasfeder HUB=300 L=662". Below the search bar, there are options for search functions: Variablensuche, Geometrische Suche (3D), Skizzensuche (2D), Farbsuche, Topologiesuche, and Filter. The search results are displayed in a table with columns for Vorschau, Katalog, Projekt, and Zusammenfassung. Two results are shown, both for ACE Stoßd... (Shock absorbers). The first result is for GS-8 bis 70, and the second is for GS 8 VA bis 40. Both results show technical specifications: ARTNR = GS-2..., HUB = 300 mm, HUBST = 0 mm, SR = ohne, AK = A10 (Gelenkauge), AD = A10 (Gelenkauge), AS = ohne, F1 = 150 N, L = 662 mm, and FO = Datenblatt. The values "HUB = 300 mm" and "L = 662 mm" are highlighted with red boxes in the original image.

Vorschau	Katalog	Projekt	Zusammenfassung
	ACE Stoßd...	GS-8 bis 70	GS-28(300_0_A10_A10_150) ARTNR = GS-2... HUB = 300 mm HUBST = 0 mm SR = ohne AK = A10 (Gelenkauge) AD = A10 (Gelenkauge) AS = ohne F1 = 150 N L = 662 mm FO = Datenblatt
	ACE Stoßd...	GS 8 VA bis 40	GS-28-VA(300_0_0_B10_B10_Ohne_150) ARTNR = GS-28-VA... HUB = 300 mm L = 662 mm HUBST = 0 mm SCH = ohne AK = B10 (Gewindezapfen) AD = B10 (Gewindezapfen) AS = Ohne F1 = 150 N INFO = Datenblatt





Search methods

⇒ Full-text Search

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- Awareness of not wasting the PARTsolutions attributes from the table contents

VERSCHWENDEN

VER~~SCH~~WENDEN

but use as much text and numerical values as possible since V9.05

VERWENDEN



Search methods

⇒ Full-text Search

- Enhanced and accelerated Full-text Search
- Search within millions of purchased parts in few seconds
- Since V9.05 Indexed numerical table values with



Search methods

⇒ Full-text Search

- Search for any TAB contents with PARTsolutions V9.05

The screenshot shows the PARTdataManager 9.05 interface. The search bar at the top contains the query "Schlagwortsuche: gasfeder 300 662". Below the search bar, there are various search filters and options. The search results are displayed in a table with columns for Vorschau, Katalog, Projekt, and Zusammenfassung. The results are as follows:

Vorschau	Katalog	Projekt	Zusammenfassung
	Weforma	WM_GVA	GVAB28300WM-GVA-28-300 (0,0)
	Weforma	Edelstahl Gasfeder	GVAB28300WM-GVA-28-300 (0,0) BEZ = WM-GVA-28-300 INFO = bitte anklicker HUB = 300.000 mm ZUBEHOER = ohne POSITION = ausgefahren mm KRAFT = 150-2500 KRAFT1 = 3800 Nm D = 28.000 mm B = 362.000 mm C1 = 9.000 mm C2 = 13.000 mm E = 14.000 mm GW = M10 mm
	ACE Stoßd...	GS-8 bis 70	GS-28(300_0_A10_A10_150)
	ACE	Industrie-Gasfedern	ARTNR = GS-28-300 HUB = 300 mm HUBST = 0 mm SR = ohne AK = A10 (Gelenkauge) AD = A10 (Gelenkauge) AS = ohne F1 = 150 N L = 662 mm INFO = Datenblatt
	ACE Stoßd...	GS 8 VA bis 40	GS-28-VA(300_0_0_B10_B10_Ohne_150)
	ACE	Industrie-Gasfedern	ARTNR = GS-28-300 HUB = 300 mm L = 662 mm HUBST = 0 mm SCH = ohne AK = B10 (Gewindezapfen) AD = B10 (Gewindezapfen) AS = Ohne F1 = 150 N INFO = Datenblatt
	Weforma	WM-G	GB28300WM-G-28-300(01)
	Weforma	Gasdruckfeder	ARTNR = GB28300 BEZ = WM-G-28-300 INFO = bitte anklicker HUB = 300.000 mm GW = M10 mm POSITION = ausgefahren ZUBEHOER = ohne KRAFT = 150-2500 Nmin.-Nmax. 48753 Nmax. D = 28.000 mm A = 662.000 mm L = 25 mm B4 = 43 mm B5 = - mm B6 = 13 mm B7 = - mm C1 = 9.000 mm C2 = 13.000 mm E = 14.000 mm

- Differently named variables (eg. A=length) will be found anyway!



GEOsearch 3D



Search methods

⇒ GEOsearch 3D

- Improved overview of search results





Search methods

⇒ GEOsearch 3D

- Improved overview of search methods

The screenshot displays the PARTdataManager 9.05 interface. The main window shows a search results table with columns for 'Vorschau', 'Katalog', 'Projekt', and 'Zusammenfassung'. The first row is highlighted with a red box, and its dimensions (X=367 mm, Y=260 mm, Z=116.5 mm) are circled in blue. A blue arrow points from this row to a 3D model comparison window on the right. This window shows a 3D model of a part with dimensions 260.000 mm, 367.000 mm, and 116.500 mm highlighted in blue boxes. Below the 3D model is a 2D comparison window.

Suchergebnis	Projektnummer	Zusammenfassung	Abmessungen (mm)
	023044097	_geo_500_parts_/geo_import_500_test_catalog/023044097	X = 367 mm Y = 260 mm Z = 116.5 mm
	023044101	_geo_500_parts_/geo_import_500_test_catalog/023044101	X = 397 mm Y = 260 mm Z = 116.5 mm
	0230441041	_geo_500_parts_/geo_import_500_test_catalog/0230441041	X = 397 mm Y = 260 mm Z = 116.5 mm
	OEFFNERHEBEL_Z161000846_000.STL	OEFFNERHEBEL_Z161000846_000	X = 155 mm Y = 117.5 mm Z = 58.96 mm
	OEFFNERHEBEL_Z161002400_000.STL	OEFFNERHEBEL_Z161002400_000	X = 157.6 mm Y = 117.5 mm Z = 58.99 mm

Parameter	Value
ATNO	_geo_500_parts_/geo_impo...
CLASSNAME	-
Topolo...	
Volumen	839272 mm ³
Oberfläche	139529 mm ²
Längste Ausdehnung	367 mm
Mittlere Ausdehnung	260 mm
Kürzeste Ausdehnung	116.5 mm
Ausdehnung in x-Richtung	367 mm
Ausdehnung in y-Richtung	260 mm





Develop a self-designed parts structure with similar CAD components

The screenshot shows a CAD software interface with a 3D model of a part. A red box highlights the 'Teil Zielordner ermitteln' button. A blue arrow points from this button to the 'PARTsolutions GEOsearch & Classification' window. The window displays a table of search results:

#	%	Vorschau	Zielordner	Referenzteile
1	90		Sternbleche	mitnehmerscheibe_qt_z149007869_000 (91%) mitnehmerscheibe_qt_z149005860_000 (91%) mitnehmerscheibe_vs_z149007631_000
2	82		Bleche	seitenblech_r_z161002595_000 (86%) seitenblech_z161001744_000 (82%) sensorblech_oben_z149902334_000 (81%) sensorblech_z148007999_000 (81%) sensorblech_unten_z149902335_000 (81%)
3	82		Platten	23064022 (84%) 239106775 (83%) 239089932 (82%) 23064021 (82%) 239111750 (82%)
4	82		Motorenhalter	motorplatte_z148008990_000 (82%)
5	-		Unklassifiziert	

Zielordner mit ähnlichen Bauteilen

zum Zielordner hinzufügen

Suche beendet. 5 Ergebnisse gefunden

- A CAD integrated assistant recommends the target folder with the most similar components



Develop a self-designed parts structure with similar CAD components

PARTsolutions GEOsearch & Classification

Suchergebnisse:

#	%	Vorschau	Zielordner	Referenzteile
1	90		Sternbleche	mitnehmerscheibe_of_z149007869_000 (91%) mitnehmerscheibe_of_z149005860_000 (91%) mitnehmerscheibe_of_z149007631_000 (91%)
2	82		Bleche	seitenblech_r_z161002595_000 (86%) seitenblech_z151001744_000 (82%) sensorblech_cban_z149902334_000 (81%) sensorblech_z148007989_000 (81%) sensorblech_unten_z149902335_000 (81%)
3	82		Platten	23064022 (84%) 239106775 (82%) 239089932 (82%) 23064021 (82%) 239111750 (82%)
4	82		Motorenhalter	motorplatte...
5	-		Unklassifiziert	

Suche beendet. 5 Ergebnisse

Target folder with similar components

PARTdataManager 9.04 - PARTsolutions by CADENAS

Suchbegriff(e) für volltextsuche in Aktuelle Auswahl

Herstellerfilter: Herstellername

Kataloge

- Brouer
- Bühler Motor
- Bülte
- Burger & Brown
- Bürkert
- Busok + Shamban
- Camozzi
- Captron
- caterpillar
- CCB Components
- CCVI Japan
- Centryco
- Chizvette Unificate
- China Industry Standards
- CXD

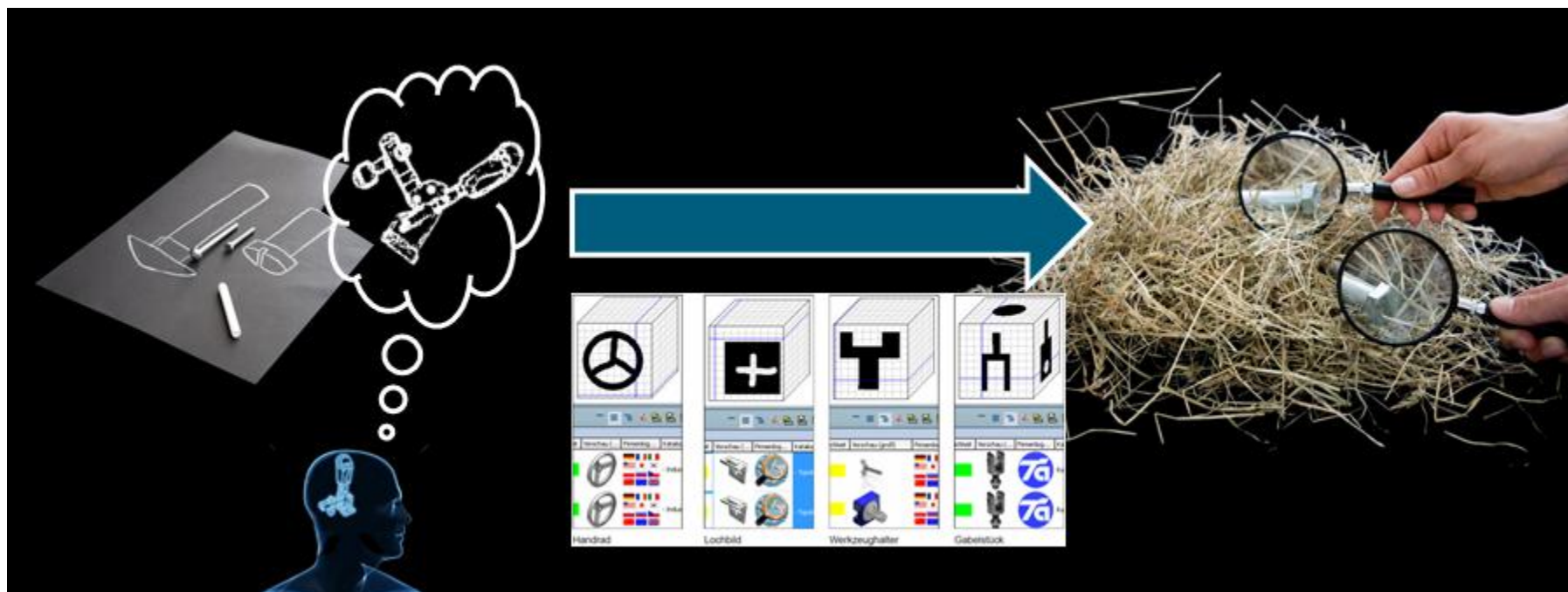
Details

mitnehmerscheib...

stern



Search by Sketch 2D





Search methods

⇒ Search by Sketch 2D, as of V9.06

- Optimized arrangement of functions in the search window
- Search history is saved, fast sketch reuse

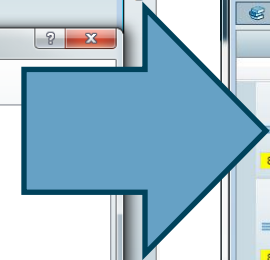
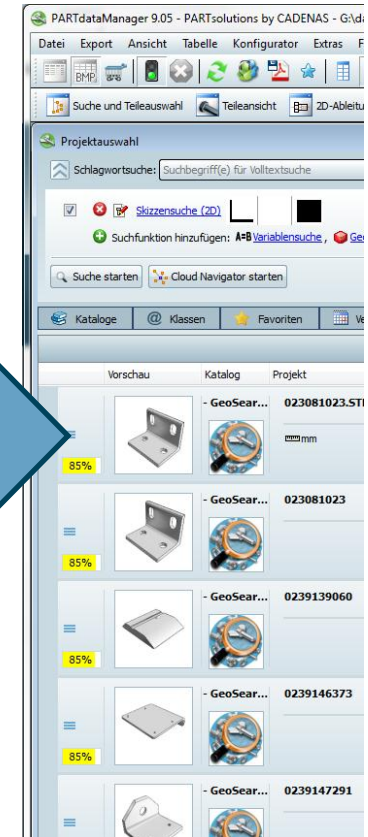
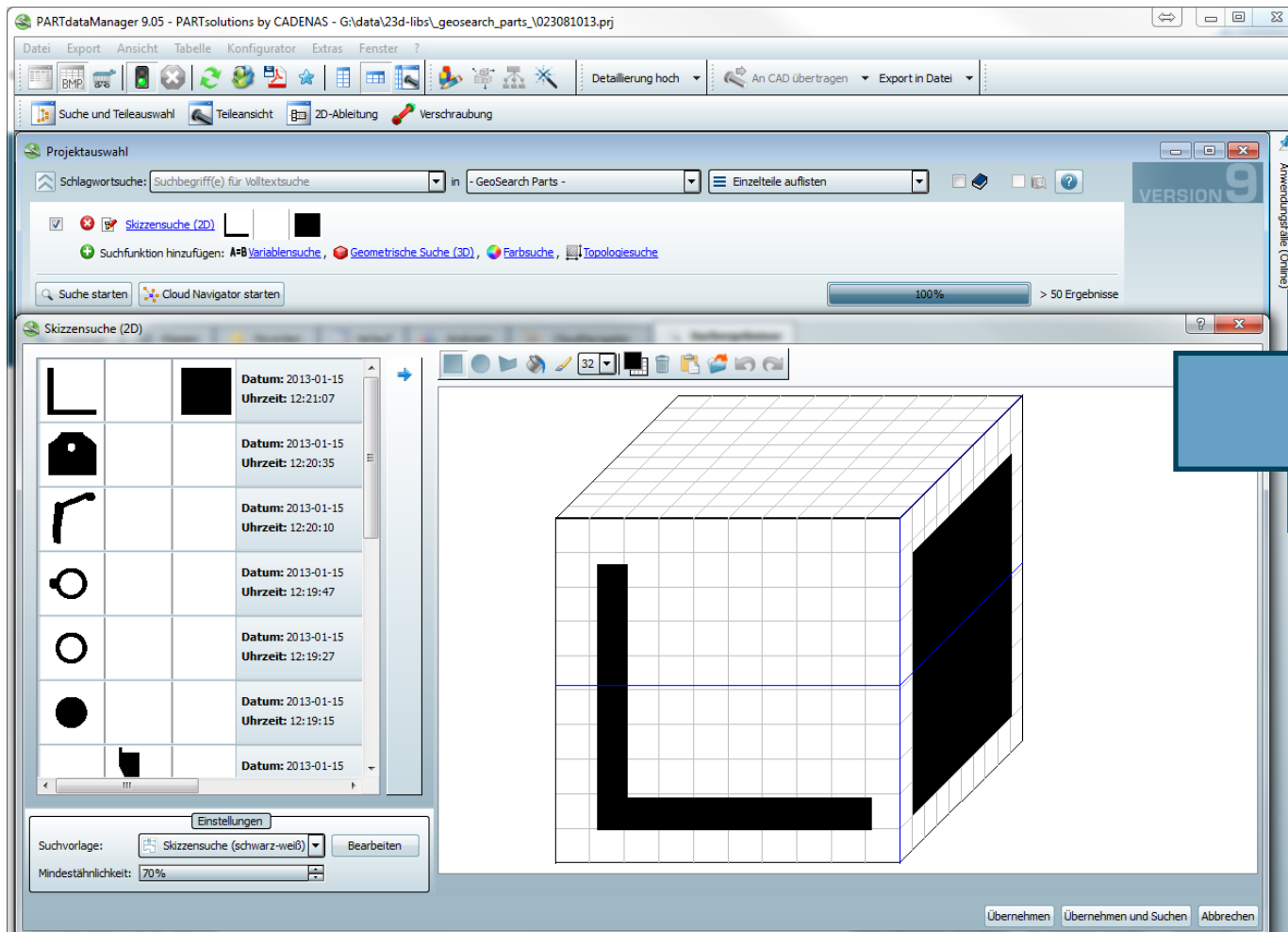




Search methods

⇒ Search by Sketch 2D, as of V9.06

- Optimized arrangement of functions in the search window
- Search history is saved, fast sketch reuse

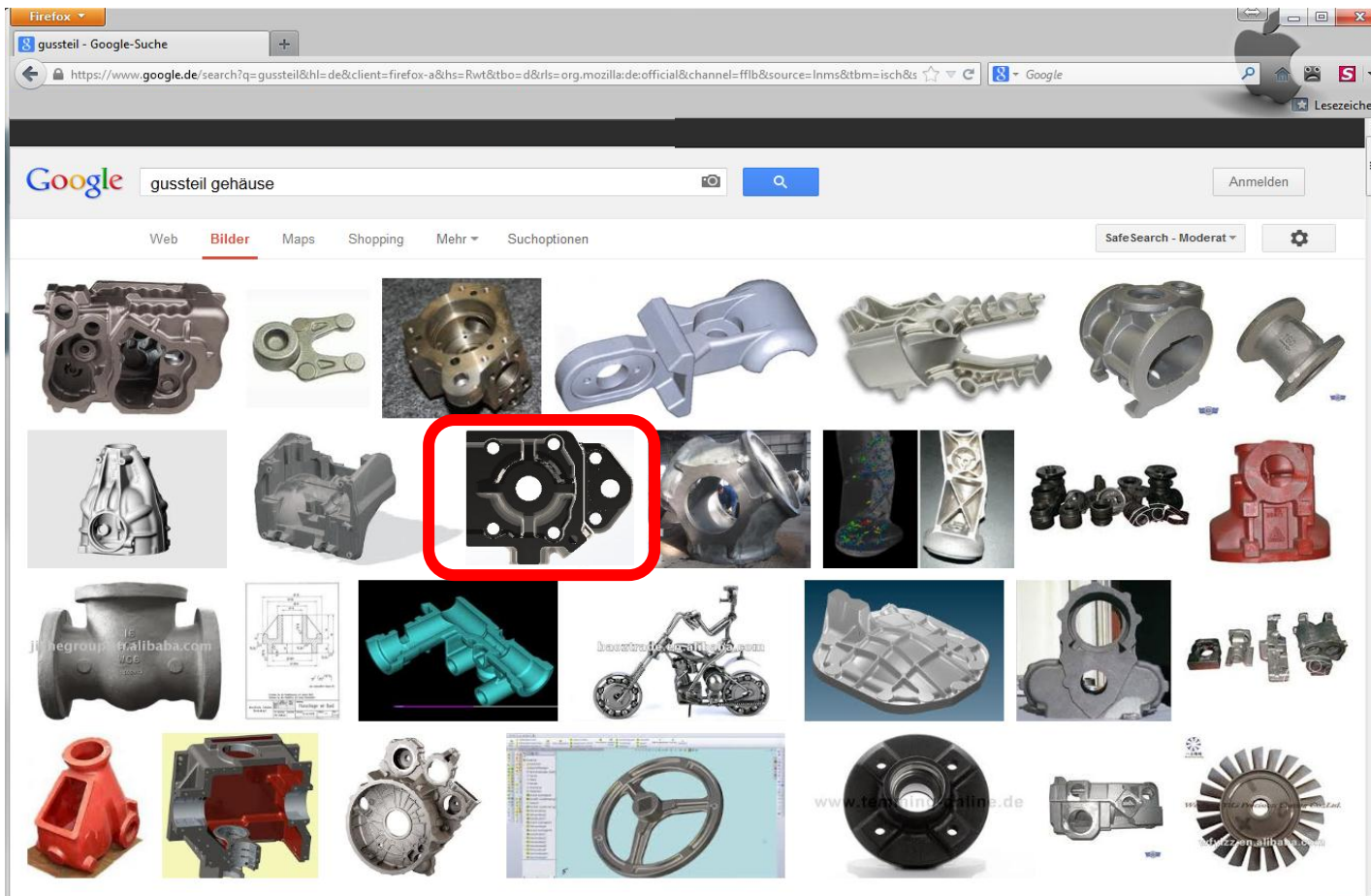




Search methods

⇒ Search by Sketch 2D, as of V9.05

- By use of photos of completed projects we have found a cast iron part that seems to be suitable
- The 2D view of this component will act as a master for our search

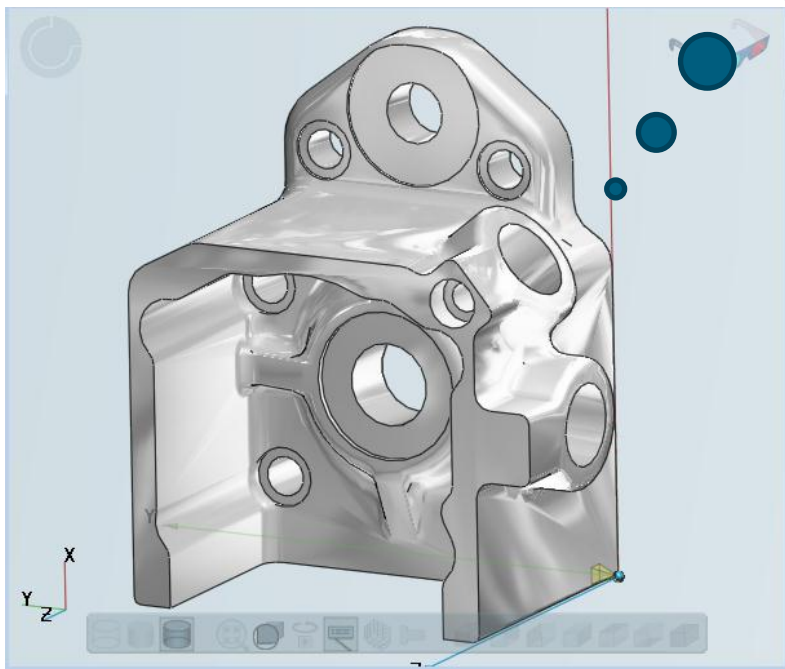




Search methods

⇒ Search by Sketch 2D, V9.05

This is how the third-party
cast iron part looks like as
a CAD model.

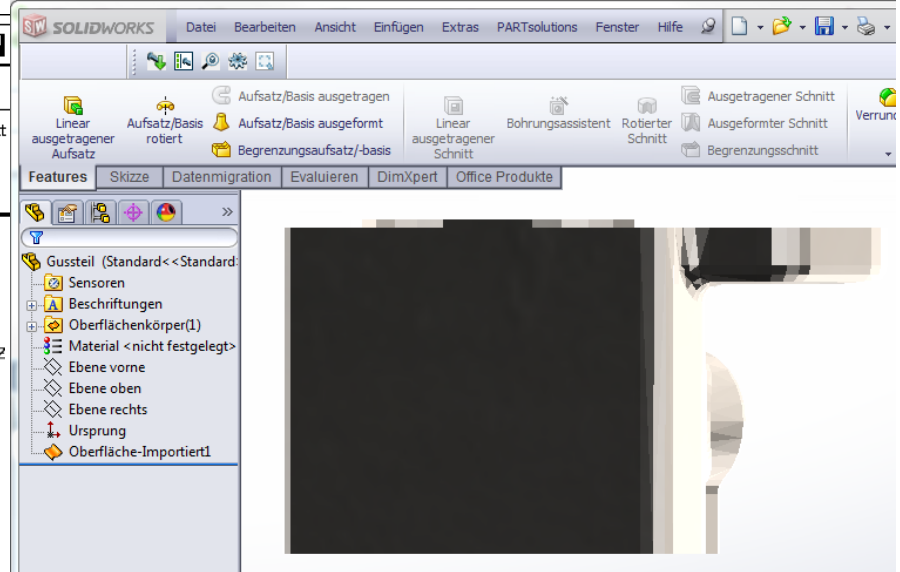
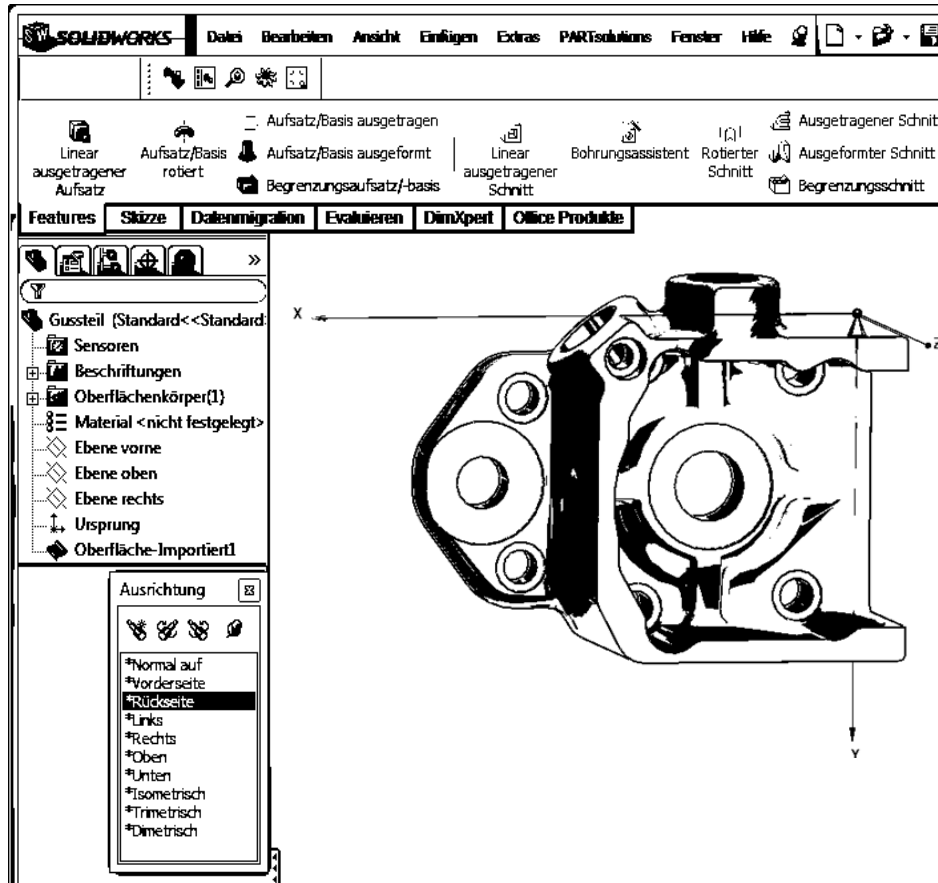




Search methods

⇒ Search by Sketch 2D, as of V9.05

- The manufacturer provides us only the graphics and the dimensions of the component (160.50 x 133.00 x 88.50) and two shaft boreholes of 25 mm.



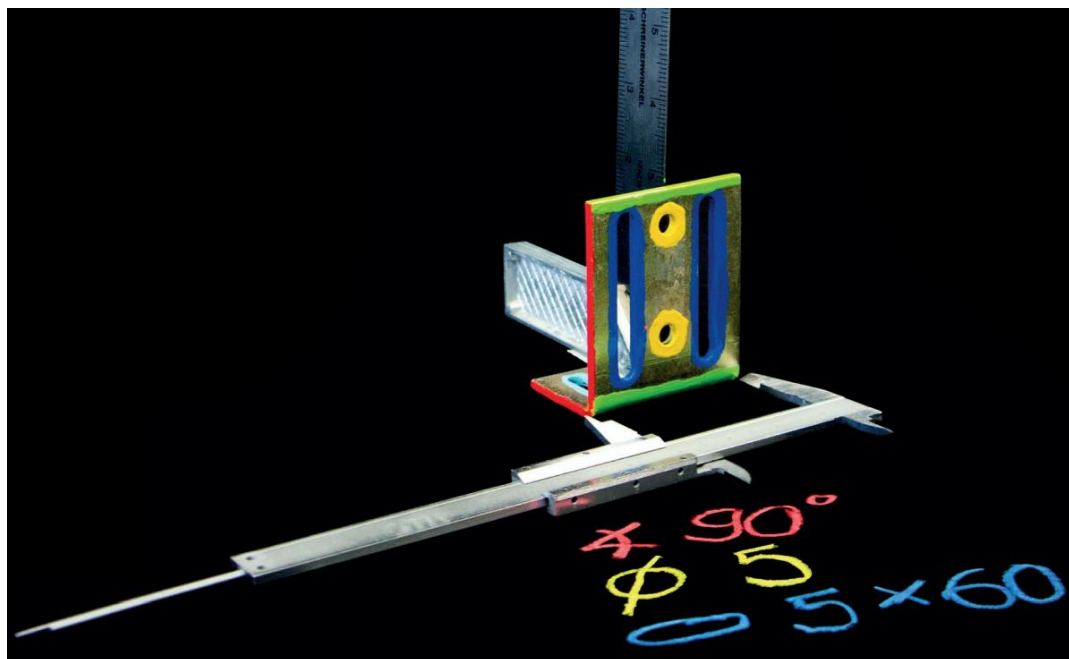
B) JPG import, CAD-Screenshot (not meaningful view as basis for a search)

A) Import of the black-and-white picture received via fax that has been scanned as a sample





Topology Search





Search methods

⇒ Topology Search





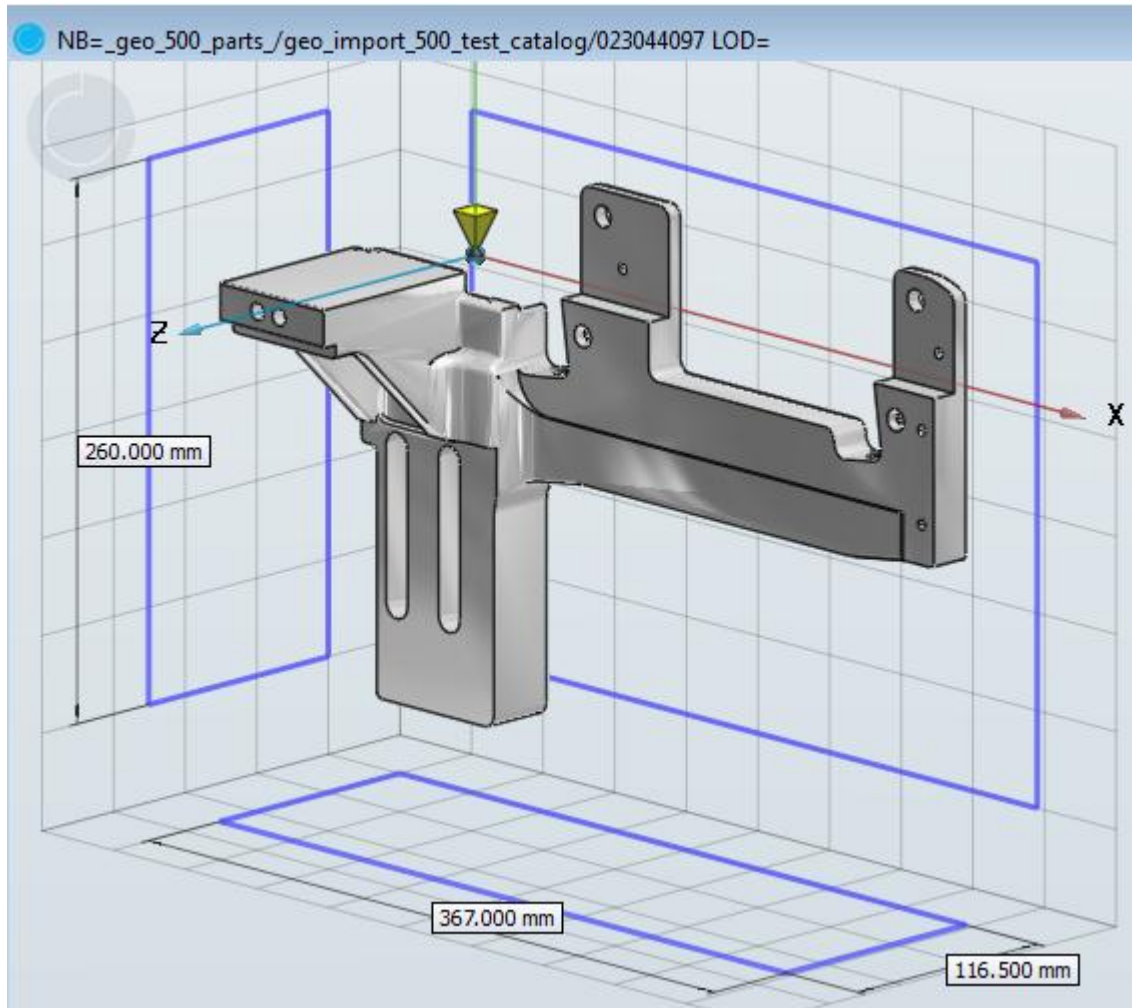
Unmachined Part Search



Search methods

⇒ Unmachined Part Search

- Unmachined part search for an angle





Search methods

⇒ Unmachined Part Search

- Automated raw part report about all parts incl. new comparison dialogue (r.)

Suche nach Rohteilen

Übersicht Ergebnisse

UnmachinedParts

1 von 1 Teilen (100%) haben Treffer geliefert

1.

Katalog: -GeoSearch Parts -
Bezeichnung: _geo_500_parts_geo_import_500_test_catalog/023044097
Norm-Nummer: 023044097
Norm-Titel: _geo_500_parts_geo_import_500_test_catalog_023044097
ERP-Status: ●

Katalog: -GeoSearch Parts -
Bezeichnung: _geo_500_parts_geo_import_500_test_catalog/023044097
Norm-Nummer: 023044097
Norm-Titel: _geo_500_parts_geo_import_500_test_catalog_023044097
Überstand: 0.000%
Verschnitt: 0.000%
ERP-Status: ●

Katalog: -GeoSearch Parts -
Bezeichnung: Rohling_097i
Norm-Nummer: Rohling_097i.stl
Überstand: 0.000%
Verschnitt: 65.116%
ERP-Status: ●

Zeichen	Beschreibung	Rohling_097i	_geo_500_part
	Anzahl der Paare paralleler ...	2	2
	Anzahl der Paare paralleler ...	2	2
	Anzahl der Paare paralleler ...	1	1
	Anzahl der Paare paralleler ...	2	2
	Anzahl der Paare paralleler ...	1	1
	Anzahl der Paare paralleler ...	3	3
	Anzahl der Paare paralleler ...	4	4
	Anzahl der Paare paralleler ...	2	2
	Anzahl der Paare paralleler ...	1	1
	Anzahl der Paare paralleler ...	2	2
	Anzahl der Paare paralleler ...	2	2
	Anzahl der Paare paralleler ...	2	2
	Anzahl der Paare benachba...	47	10
	Anzahl der Paare benachba...	4	4
	Anzahl der Bohrflöcher mit ...	2	2
	Anzahl der Bohrflöcher mit ...	2	2
	Anzahl der Bohrflöcher mit ...	12	12
	Anzahl der Bohrflöcher mit ...	2	2
	Anzahl der Innenzylinder m...	6	6
	Anzahl der Innenzylinder m...	2	2

Auswahlzelle für selektierte Projekte

3D-Vergleich

2D-Vergleich



Search methods

⇒ Unmachined Part Search




PARTsolutions
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- Automated raw part report about all parts incl. new comparison dialogue (r.)

The screenshot displays the 'Suchergebnisse' (Search Results) window and the 'Bauteilvergleich' (Part Comparison) dialog.

Suchergebnisse (Suche nach Rohteilen):

- Buttons: Übersicht, Ergebnisse
- UnmachinedParts
- 1 von 1 Teilen (100%) haben Treffer geliefert
- Item 1: 
 - Katalog: - GeoSearch Parts -
 - Bezeichnung: _geo_500_parts/_geo_import_500_test_catalog/023038001
 - Norm-Nummer: 023038001
 - Norm-Titel:

Bauteilvergleich (Tabellarischer Vergleich):

Auswahlzeile für selektierte Projekte
3D-Vergleich

Item 1 (Rohling_001_06):

- Katalog: - GeoSearch Parts -
- Bezeichnung: Rohling_001_06
- Norm-Nummer: Rohling_001_06.STEP
- Norm-Titel:
- Überstand: 0.000% (~0 mm²)
- Verschnitt: 56.433% (~1137165 mm³)

Item 2 (Rohling_001_05):

- Katalog: - GeoSearch Parts -
- Bezeichnung: Rohling_001_05
- Norm-Nummer: Rohling_001_05.STEP
- Norm-Titel:
- Überstand: 0.000% (~0 mm²)
- Verschnitt: 66.680% (~1784425 mm³)

Bauteilvergleich (3D-Vergleich):

- 3D-Modellvergleich mit X, Y, Z Achsen.
- Maßstab: 2.616

Bauteilvergleich (2D-Vergleich):

- 195 Anwendungsfälle (Online)
- 195 Post(s)
- Posten Sie Ihren individuellen ENGINEERING ANWENDUNGSFALL. Laden Sie dazu reale Bilder oder Screenshots aus CAD Systemen mit einer kurzen Beschreibung hoch.
- Die besten Anwendungsfälle werden ständig mit
- Verstecken, wenn keine Anwendungsfälle vorhanden sind. [Registrieren](#)





Cloud Navigator



Search methods

⇒ Cloud Navigator

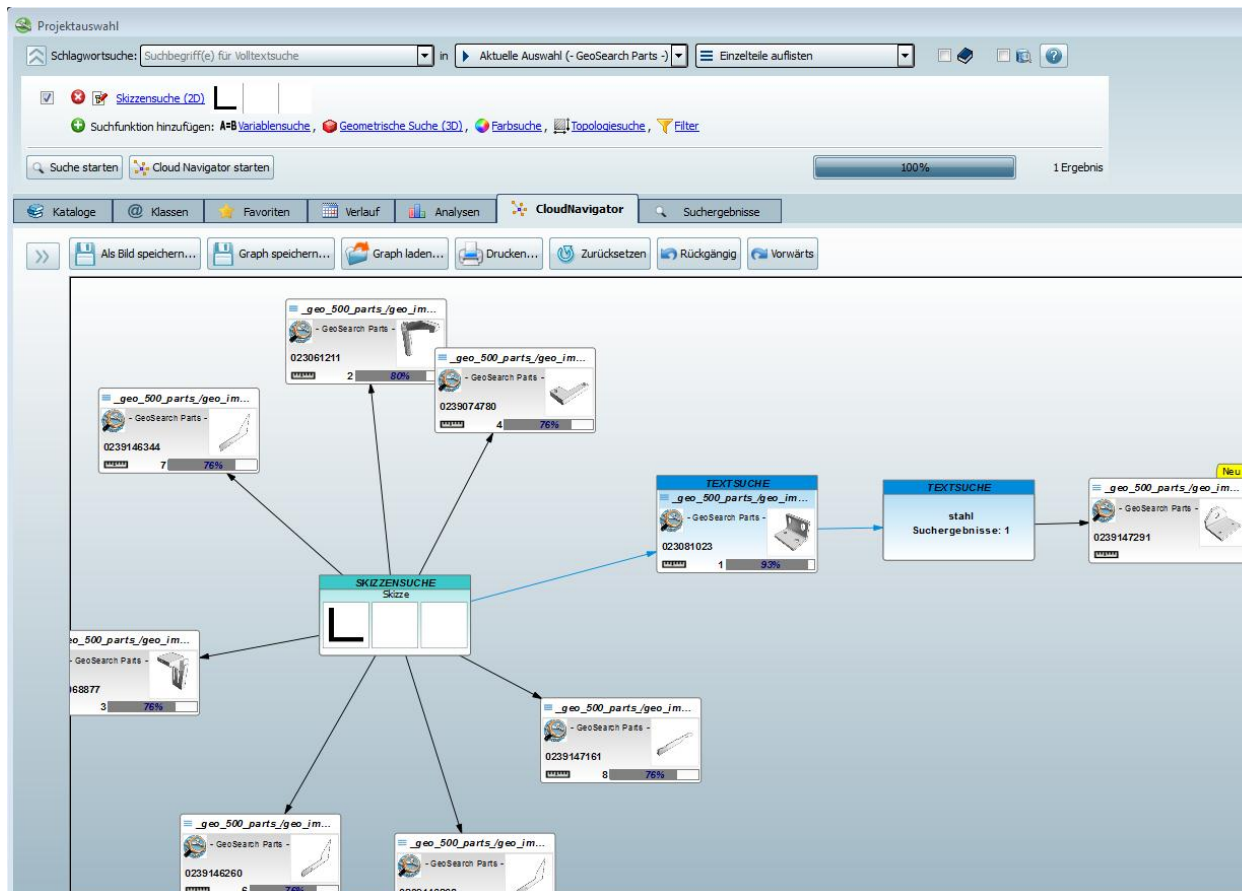




Search methods

⇒ Cloud Navigator, V9.05

- Visual display of logical relations of similar components
- Similar components are automatically marked red in case of several search hubs
- Text-, Topology- or Geometric Search in the Cloud Navigator





Partial Search*



Search methods

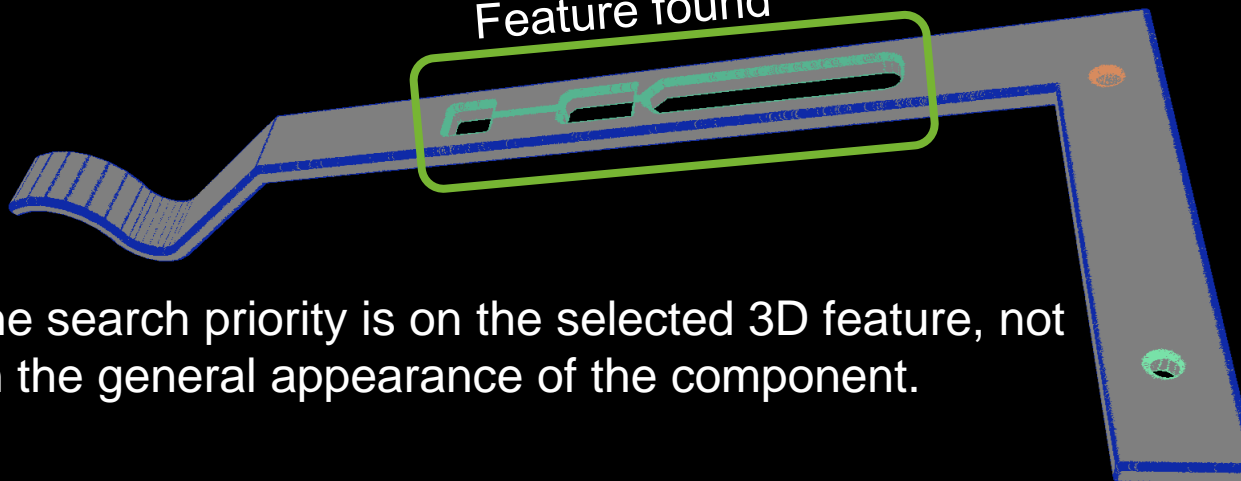
⇒ Partial Search (coming soon)

- Search for selected 3D feature of a component in all parts

Definition of search feature



Feature found



The search priority is on the selected 3D feature, not on the general appearance of the component.



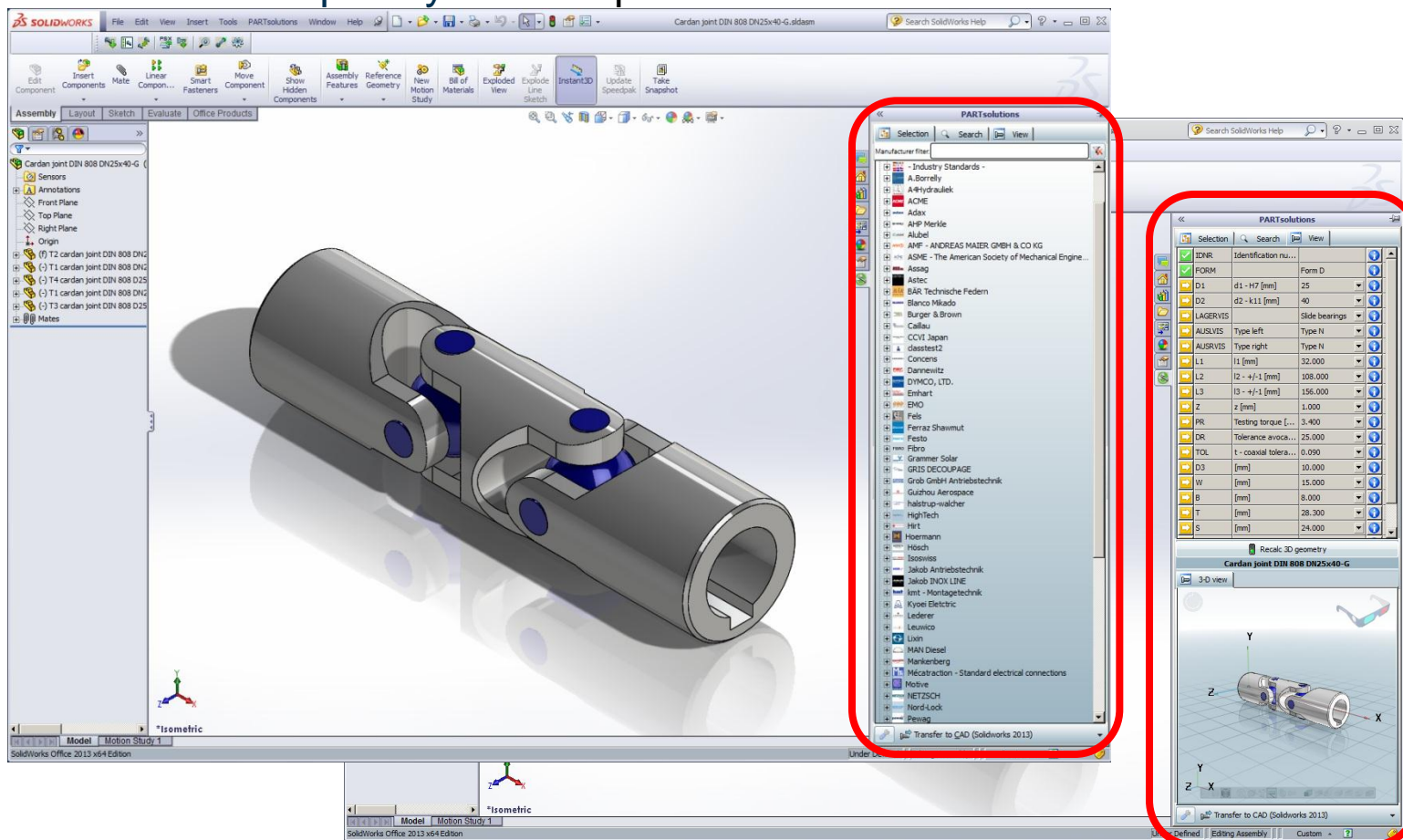
CAD Integration



Search methods

⇒ CAD Integration

- Completely revised seamless CAD Integration as of V9.05
- As of V9.05 completely PDM capable



- See it live at the CADENAS demo point





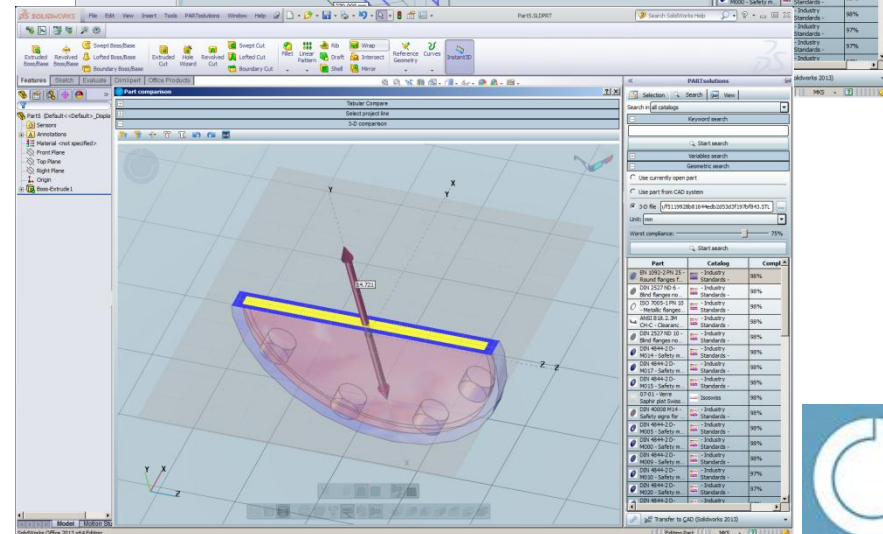
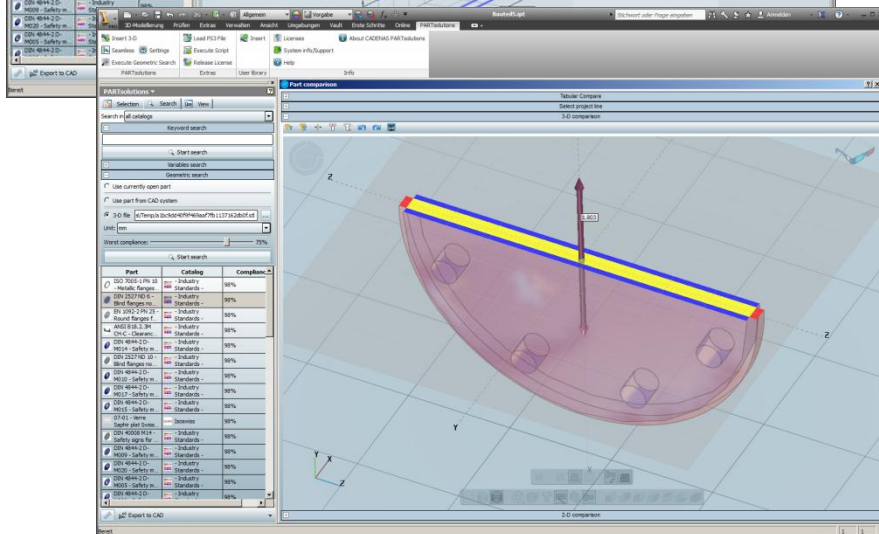
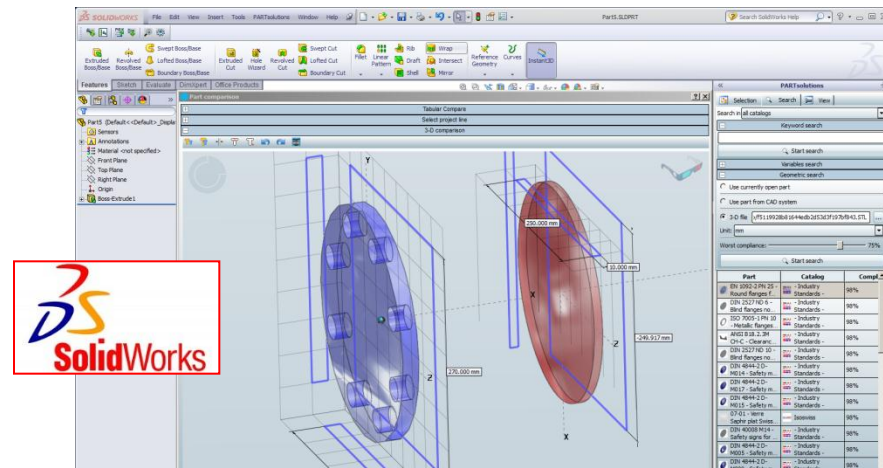
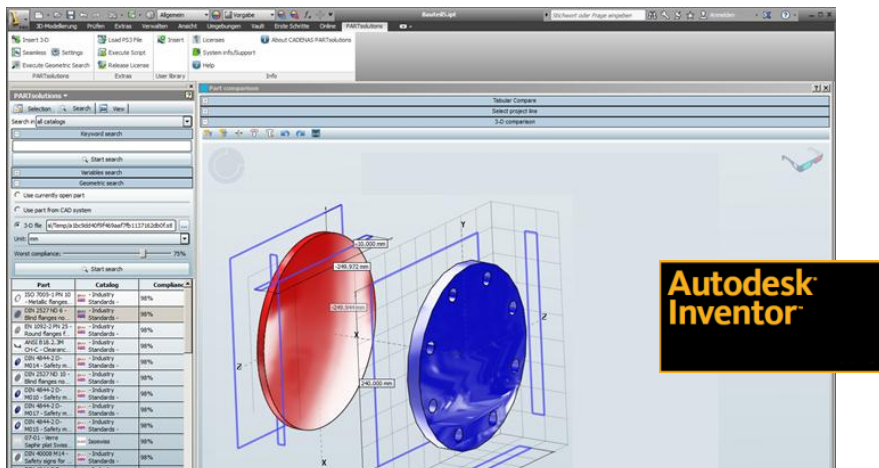
Search methods

⇒ CAD Integration



PARTsolutions
Intelligent Finding

- GEOsearch 3D seamless comparison (examples of inventor and SolidWorks)





Search methods

⇒ CAD Integration

- GEOsearch comparison of attributes in CAD

Part comparison

Symbol	Description	C:/Users/dklaus/AppData/Local/...	Flange DIN 2527 B 125 ND 6
		M 1 2	M 1 2
Parameter			
IDNR	IDNR	-	-
NW	Nominal width	-	125
D	Flange outer diameter	-	240.000 mm
FORM	Flange thickness	-	8
B	Pitch circle diameter	-	18.000 mm
K	Diameter max.	-	200.000 mm
D9	Number of screws	-	115.000 mm
N	Nominal diameter of screws	-	8.000
GEWINDE	Nominal diameter of screws	-	16.000 mm
D2	Diameter for screws	-	18.000 mm
GEWT	Weight form B (7.85 kg/dm ³)	-	6.110 kg
GEWT	Weight form T (7.85 kg/dm ³)	-	6.280 kg
Topology			
	Volume	490581 mm ³	770039 mm ³
	Surface	103969 mm ²	107143 mm ²
	Largest dimension	249.97 mm	240 mm
	Middle dimension	249.94 mm	240 mm
	Shortest dimension	10 mm	18 mm
	Dimension in direction of x-axis	249.94 mm	18 mm
	Dimension in direction of y-axis	10 mm	240 mm
	Dimension in direction of z-axis	249.97 mm	240 mm
	Axis symmetry	symmetric	symmetric
	Rotation symmetry	symmetric	symmetric
	Plane symmetry	symmetric	symmetric
	Number of boreholes	0	8
	Number of inner cylinders	0	8
	Number of outer diameters	0	1
	Basic shape	Cylinder	None
	Number of pairs of parallel pla	<input type="checkbox"/> 1	<input type="checkbox"/> 1
	Number of pairs of parallel pla	<input type="checkbox"/> 1	<input type="checkbox"/> 1
	Number of boreholes with dia.	-	8
	Number of inner cylinders wit.	-	8
	Number of outer cylinders wit.	-	1
etc			
CNS_CP_PLACE_PA	0	-	X
CNSRPRBASE	-	-	X
CNSORDERNO	Order Number	-	B 125 ND 6
eclass7.1			
37-03-02-02	-	-	X
AAQ333001	nominal pressure	-	6 A91
BAG982004	Nominal width	-	125





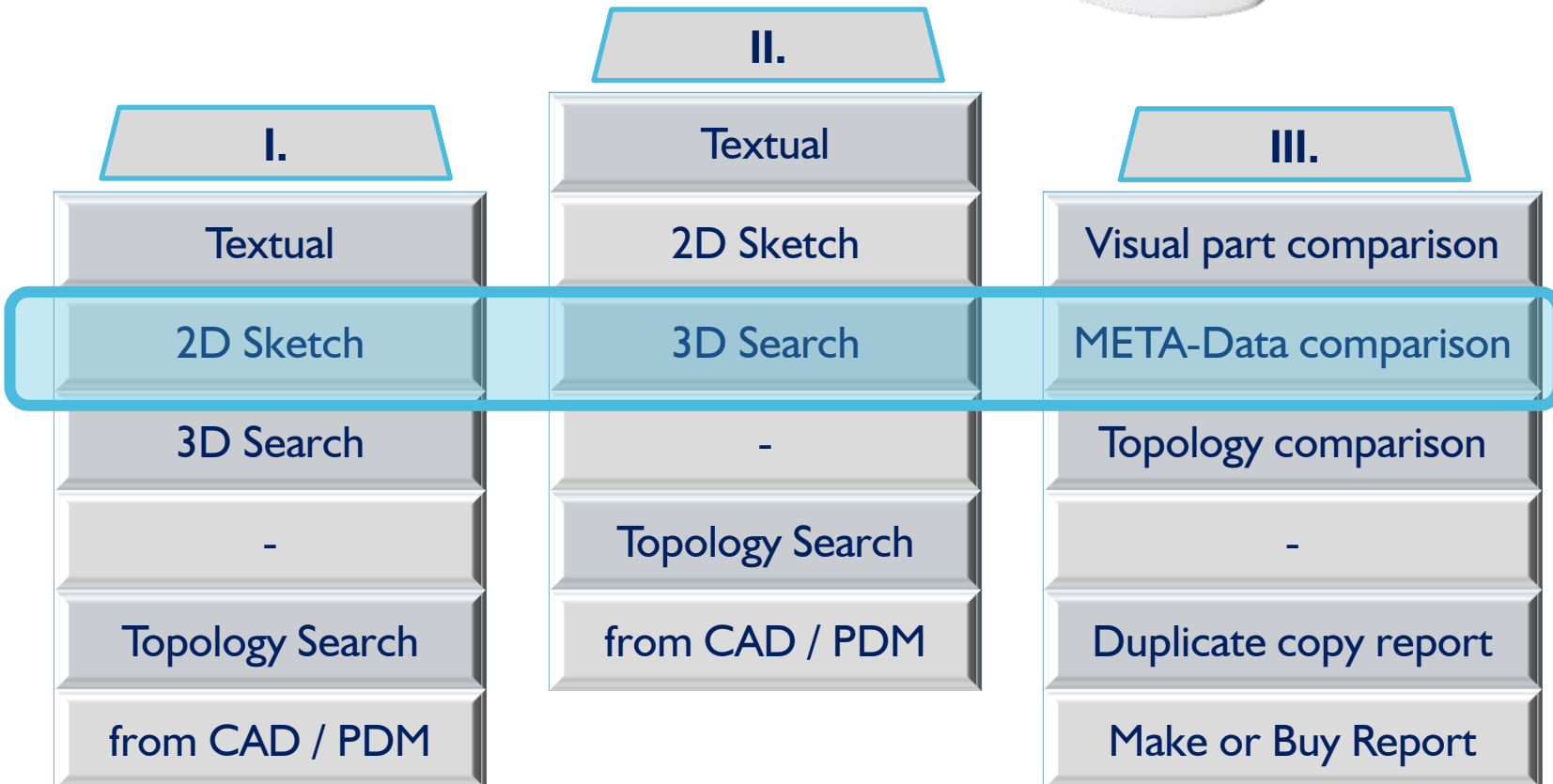
Combine search methods



Combining search methods allow best search results



- Get better search results by combining several search methods (similar to combinations of locks)



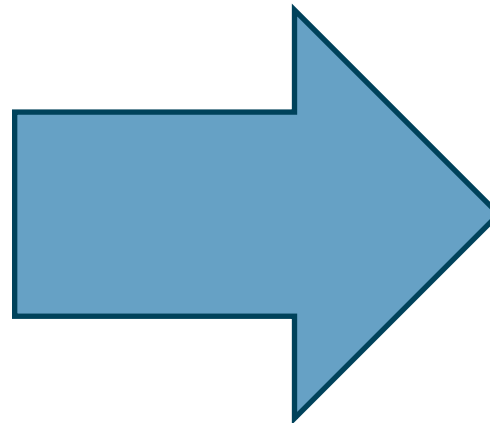


Search methods

⇒ PDM Integration

QUESTIONS ?

FEEDBACK ?



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