PART SOLUTIONS | eCATALOG SOLUTIONS | PART COMMUNITY

Version 9

PARTsolutions manual for Offline CD

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CADENAS GmbH

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Germany	
CADENAS GmbH Augsburg	Berliner Allee 28 b+c 86153 Augsburg Phone: +49 / (0) 821 / 2 58 58 0-0 Fax: +49 / (0) 821 / 2 58 58 0-999 Hotline: +49 / (0) 821 / 2 58 58 20 License request (Fax): +49 / (0) 821 / 2 58 58 2-999 **E-mail**: <info@cadenas.de> Internet: www.cadenas.de
Italy	
CADENAS Italiana s.r.l.	Via Bassa Dei Sassi 1 I-40138 Bologna (BO) Tel.: +39 - 051 - 0870755 Fax: +39 - 051 - 0419105 **E-mail**: <info@cadenas.it>
France	
CADENAS France SARL	14 rue Philibert Collet F-01400 Châtillon sur Charlaronne Tel.: +33 (0)4 81 30 00 04 Fax: +33 (0) 4 74 55 26 96 Hotline: +49/ (0) 821 / 258 58 22 77 **E-mail** -support: <support@cadenas.fr> **E-mail**: <info@cadenas.fr>
Spain	
CADENAS Ibérica	C / Berruguete 90, bajos E - 08035 Barcelona Phone: +34 / 932 749 540 **E-mail**: <info@cadenas-es.com>
USA	
PARTsolutions LLC. USA	200 Techne Center Dr., Suite 118 Milford, OH 45150 USA Phone: +1 / (513) 453 - 04 53 Fax: +1 / (513) 453 - 04 60 **E-mail**: <info@part-solutions.com> **E-mail**-support: <support@part-solutions.com> Internet: www.part-solutions.com
Korea	
CADENAS Korea	Donga Venture Tower, 907 305-301 Bongmyung-dong, Yusong-gu, Deajeon, Korea-Süd Phone: +82 / 505 / 936 - 93 60 **E-mail**: <info@cadenas.co.kr>
Japan	
CADENAS web2cad INC. Japan	8-4-1, Toshima, Kita-ku Tokyo 114-0024, Japan Phone: +81-3-59 61 - 50 31 Fax: +81-3-59 61 - 50 32 **E-mail**: <info@cadenas.co.jp>
China	
CADENAS GmbH Shanghai	CADENAS GmbH Shanghai Rep. Office Nr. 885 the People Road Huaihai Zhonghua Building, 603 Room 200010 Shanghai People's Republic of China Phone: +86 / (0) 21 / 63551318 Fax: +86 / (0) 21 / 63551319 **E-mail**: <Marketing@cadenas.cn>

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Preface

Dear PARTsolutions customer,

With Offline CDs, designed in your in-house Corporate Design, you contact more users besides marketing by Internet or paper catalogs and enable a direct and efficient usage of your catalog data.

The manual in hand is separated in two sections. At first you get an overview concerning starting the Offline CD, part selection and part export. In the second chapter detailed information on the modules PARTdataManager and PARTadmin is found, which will support effective usage of the software.

Your CADENAS-Team

Chapter 1. Overview

1.1. System requirements

A proper operating of PARTsolutions within WINDOWS is only warranted in combination with system requirements mentioned below. An installation on other systems is possible with reservations, but will not be supported.

- **Operating System**
  - For client operation of software (e.g. PARTdataManager) the following systems can be used:
    - Windows Vista Service Pack 2 or higher
    - Windows 7
    - Windows 8

> **Note**
>
> On this please regard the CAD specific system requirements. Support is given, if the respective CAD interface also supports Win8.

- **Hardware**

GROUP	GROUP
CPU	Min. P4 2GHz Intel or comparable processor
Physical Memory	Min. 700 MB (1 GB recommended) space for PARTsolutions (in addition to the CAD)
Software Base	1 GB HD
Graphics card	Min. 64 MB; OpenGL capable; Hardware 3-d assistance recommended

1.2. Installation / Start

Insert CD.

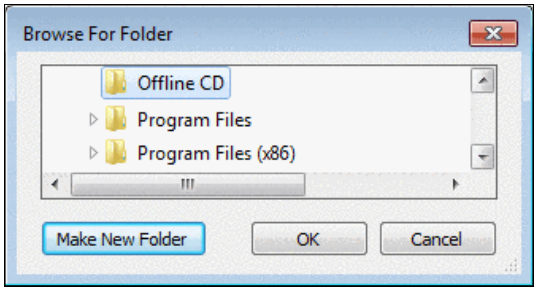
The following window is opening.[1]

Select the desired language.

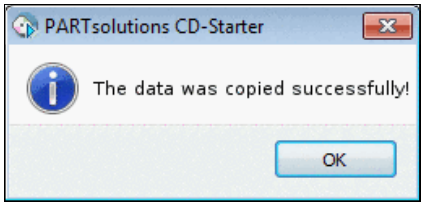
You can **directly start from CD** the desired module (e.g. **PARTdataManager**) without preceding installation. In this case click on the respective button.

The advantage of **installing the application** is a faster access time. In this case at first click the **Install** button. Furthermore you can configurate the interface.

After clicking **Install** the **Browse For Folder** dialog appears.



Select the installation directory

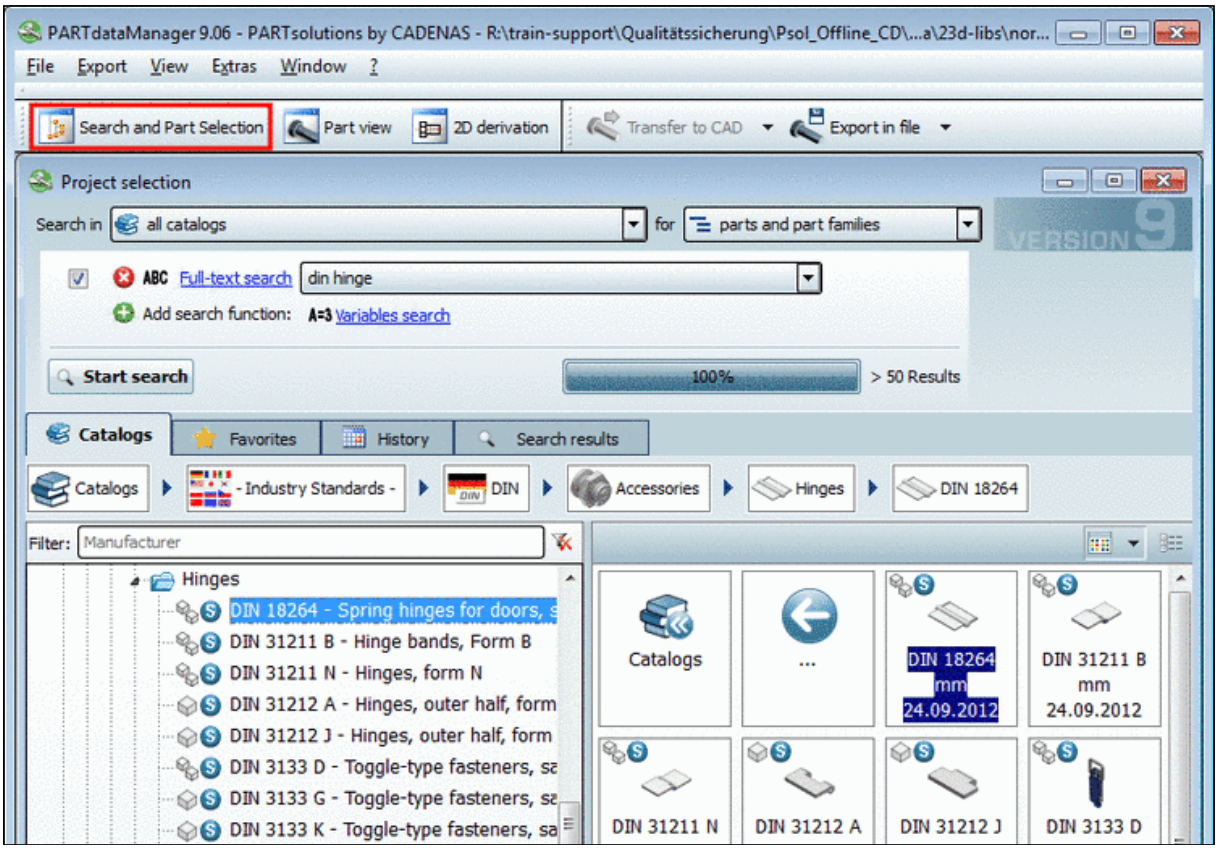


After completed successful installation you get a confirmation message

[1] Here exemplified with CADENAS logo, otherwise with your company logo.

1.3. Search and Part selection in PARTdataManager

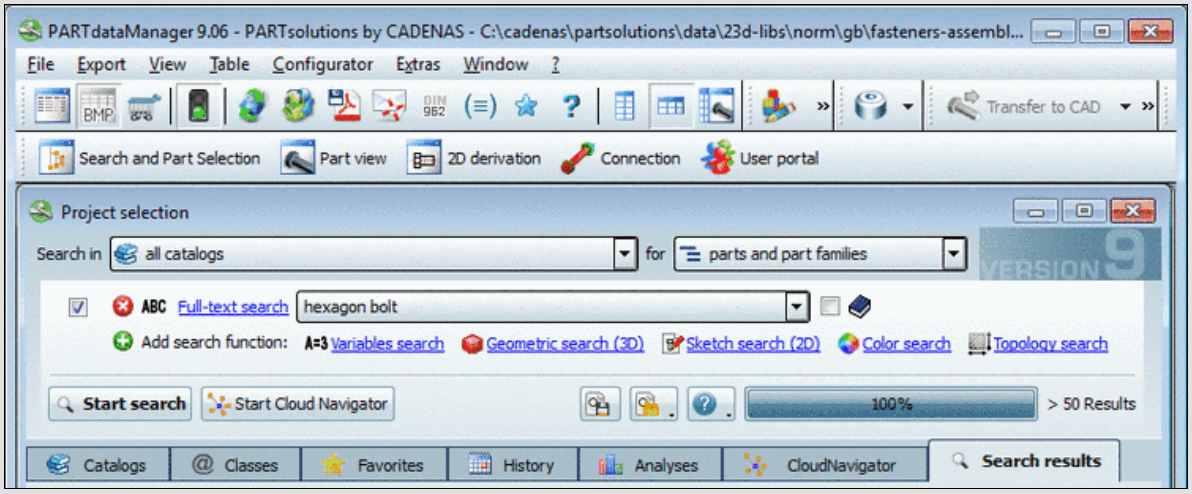
PARTdataManager opens with the **Search and Part Selection** window.



Browse to the desired part in the directory tree or use the Full-text search and Variables search.

Note

The amount of functions and the related user interface may differ according to manufacturer presetting and so the documentation in hand may slightly differ from your actual stand.

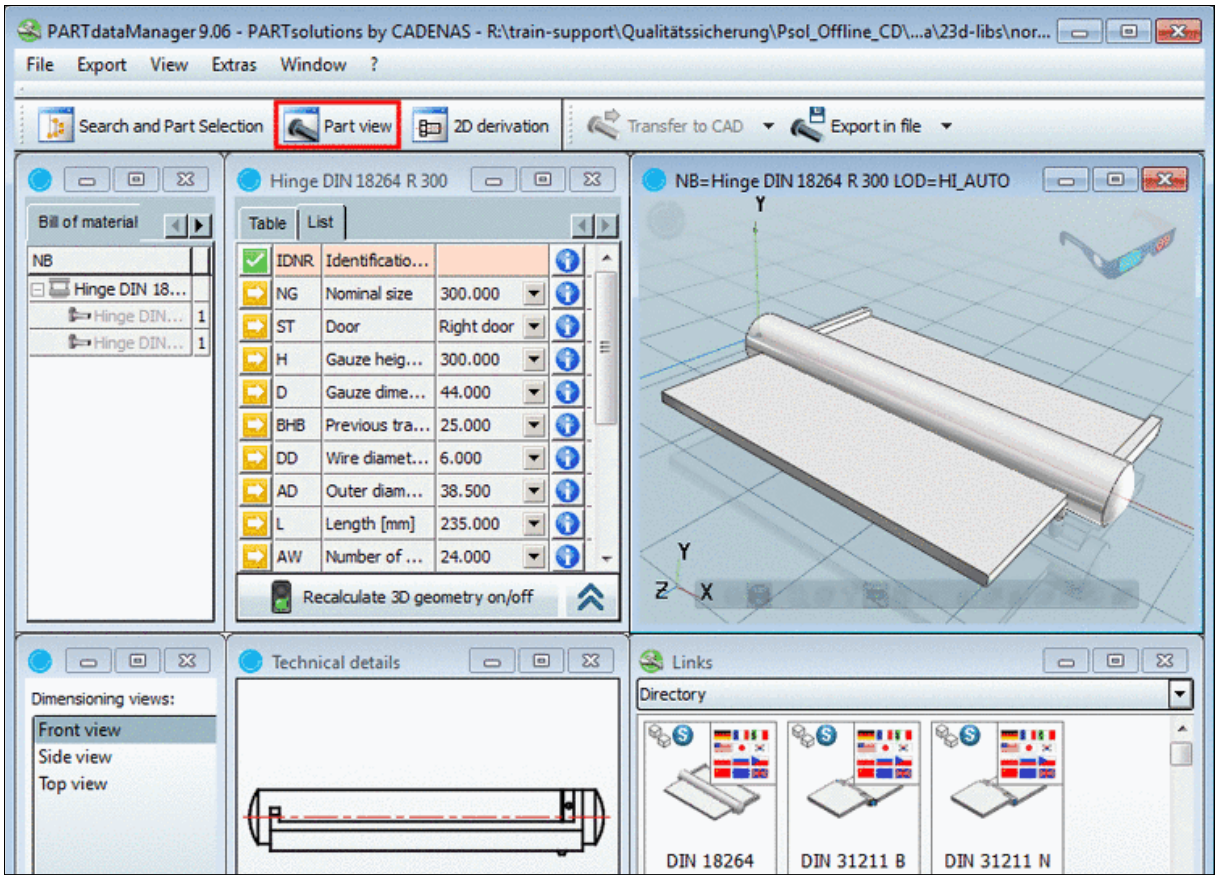


The figure shows exemplarily all search methods.

The offered amount of catalogs also depends from manufacturer presettings.

As soon as a level with a **part symbol** (e.g. (single part) or (assembly) is reached (this is the deepest directory level), the view switches to **Part view**.

Any time you can switch between **Search and Part Selection** and **Part view**.

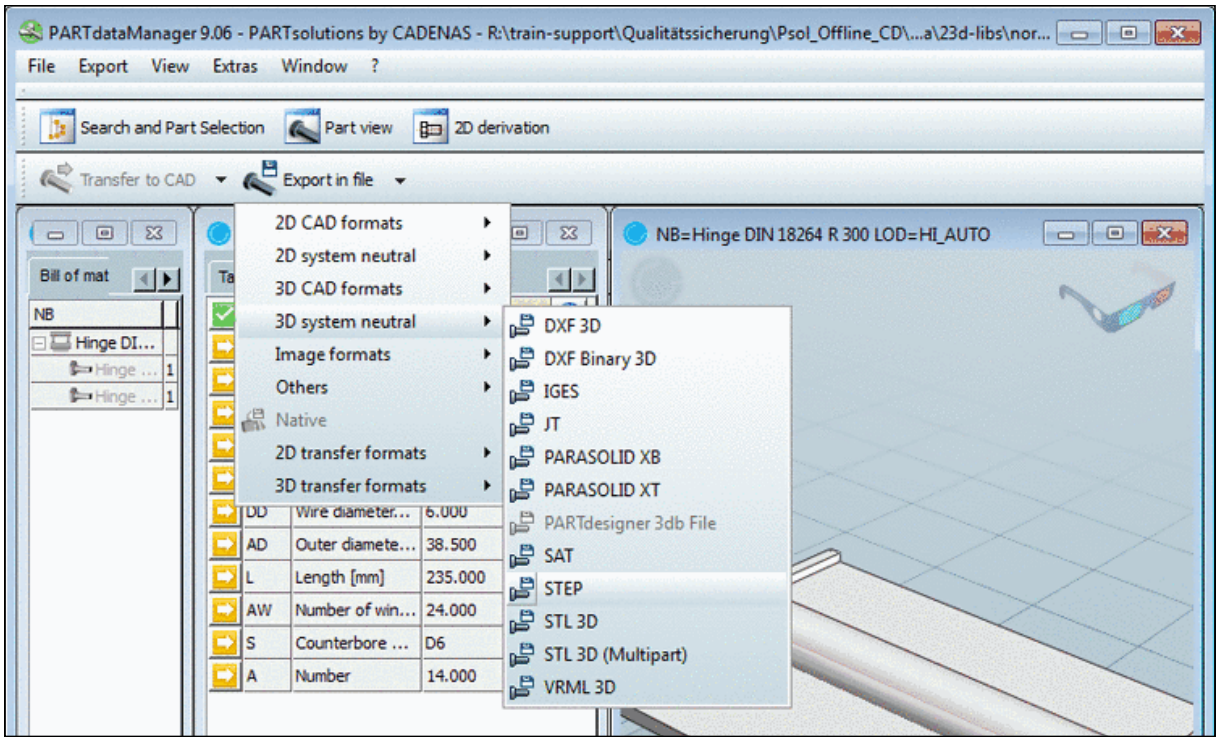


Select the desired variant

1.4. Selecting the export format

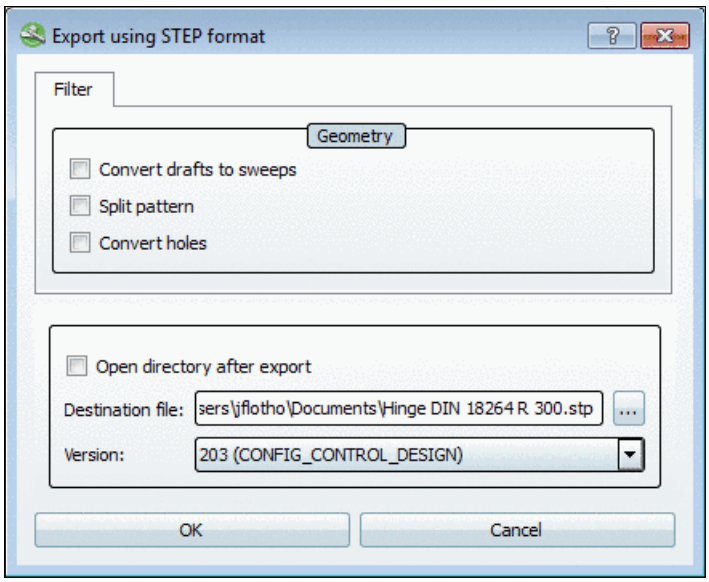
In the **Export in file** Export in file button click on the black arrow.[2]

The dialog for export format selection unfolds.



Choose the desired export format

In the **Export in ... format** dialog box, with the browse button ... define the **Destination file**; if needed also the **Version** in the list field below.



Choose "Destination file" and "Version"

Confirm with **OK**.

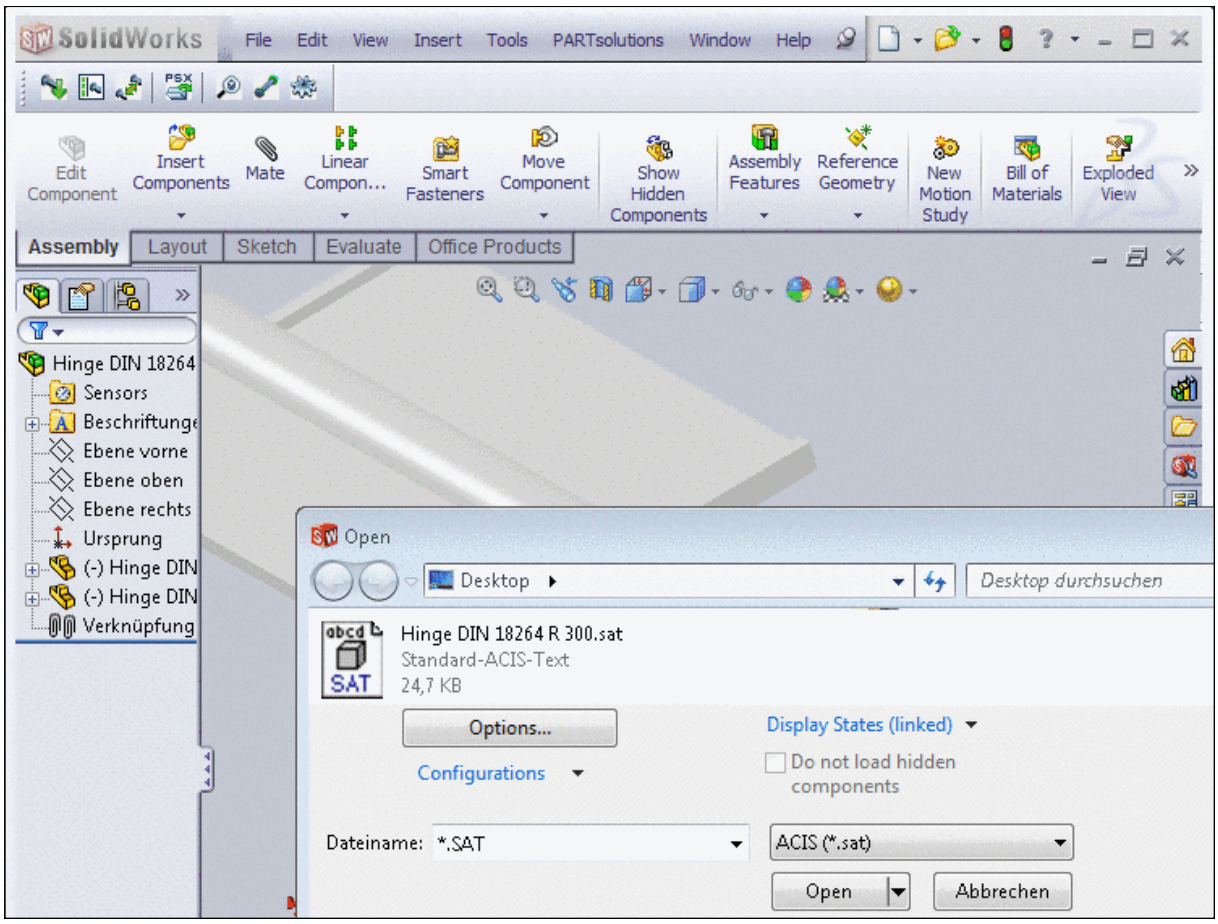
[2] As soon as a format had been selected always the last selection is displayed.

Note

The available export formats are customized by manufacturer. Optionally possible are system neutral formats, CAD specific formats, image formats and several other formats as PDF data sheet for example.

1.5. CAD system

Open the exported part/assembly in the CAD system[3]



Open exported part in the CAD system (here exemplified SolidWorks)

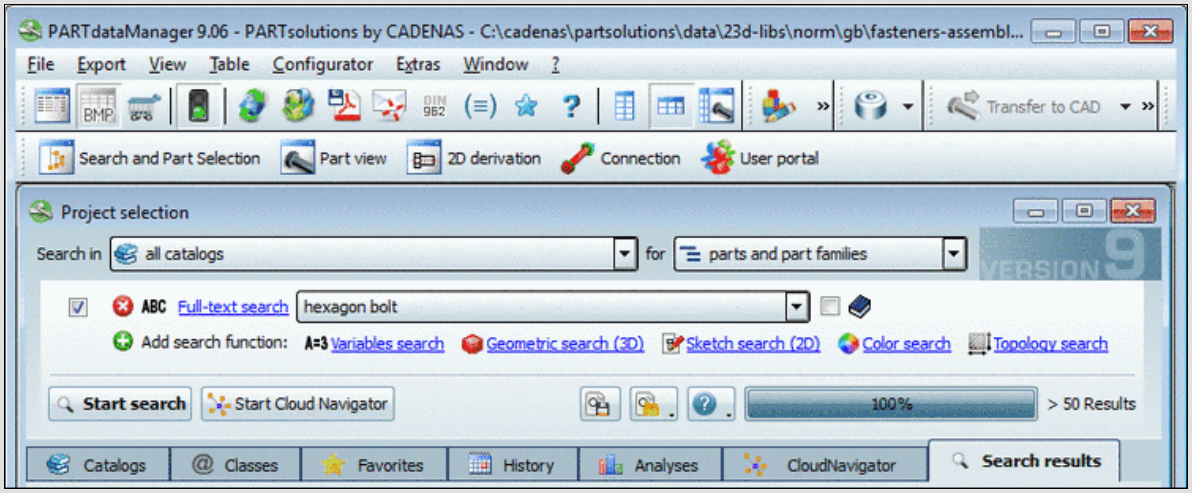
[3] If the respective export format is available a direct integration into the CAD system is possible, too.

Chapter 2. Effective usage of PARTdataManager

2.1. PARTdataManager

Note

The amount of functions and the related user interface may differ according to manufacturer presetting and so the documentation in hand may slightly differ from your actual stand.

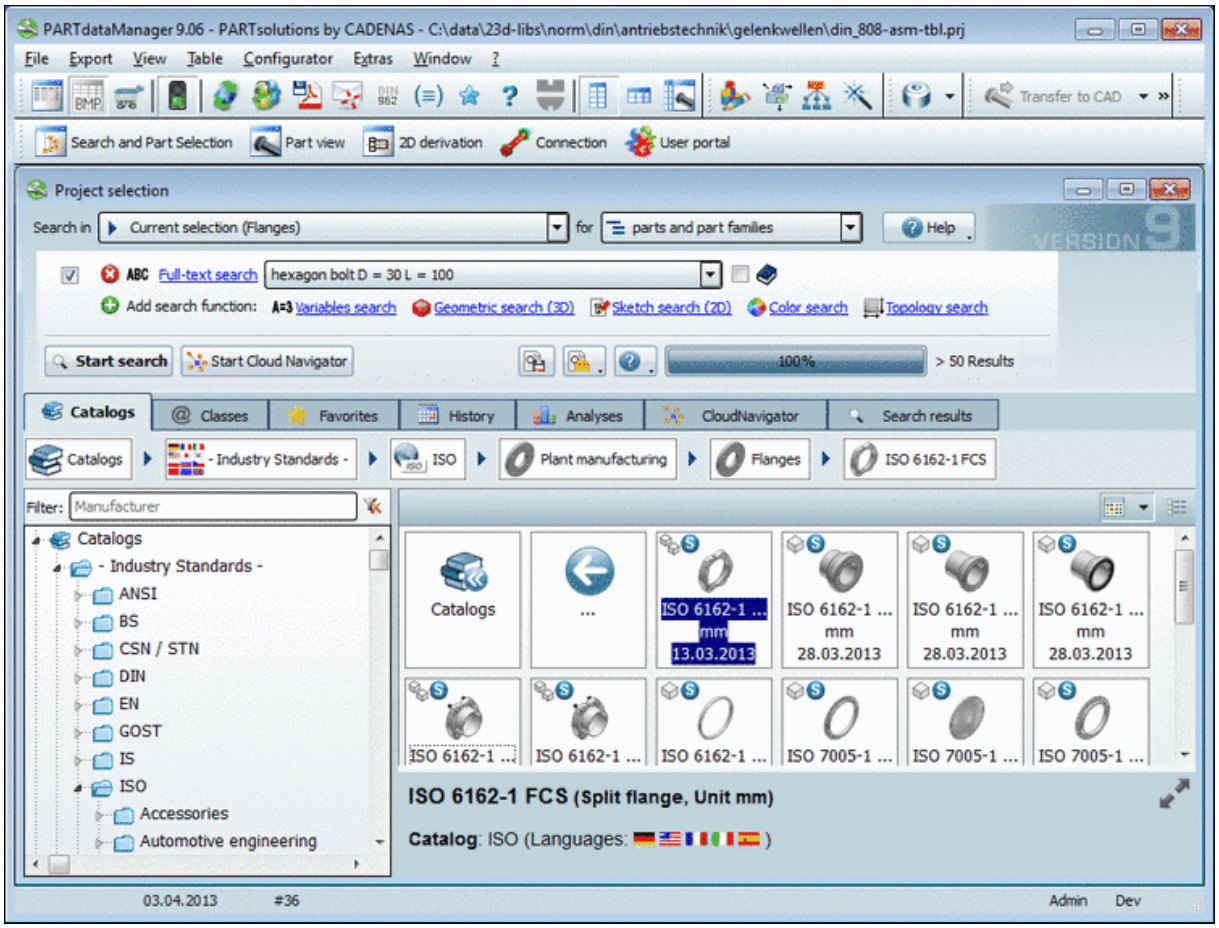


The figure shows exemplarily all search methods.

The offered amount of catalogs also depends from manufacturer presettings.

2.1.1. Search and Part Selection

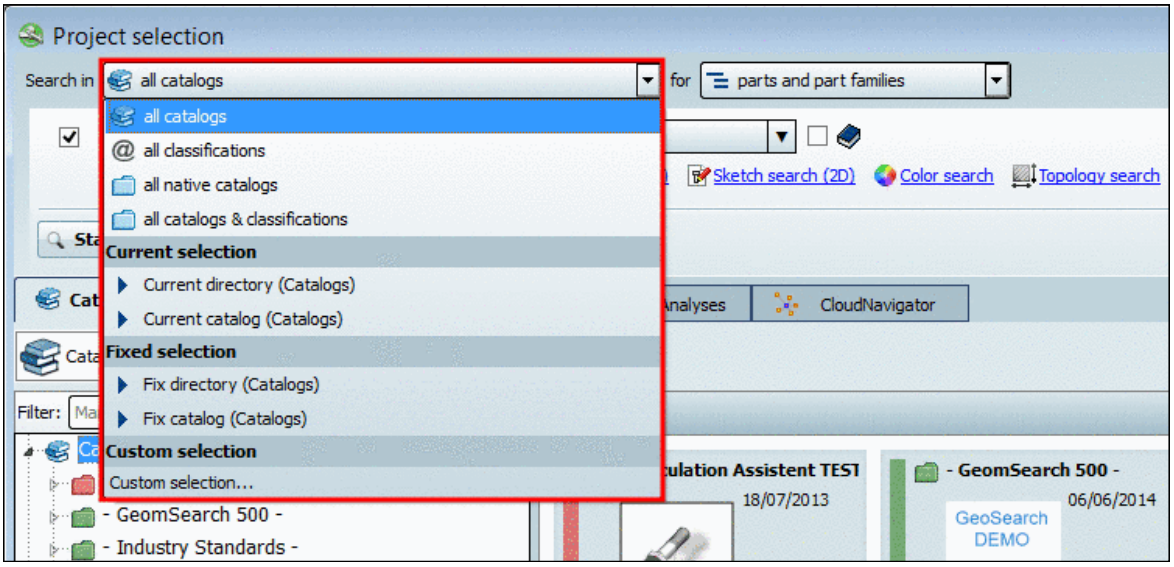
2.1.1.1. Search and Part Selection at a glance



Search and Part Selection

In the following you can find short explanations on the single setting options or functions. Each point contains links to detailed information:

- **Search in: Where?**



Search in...: In the opened list field you can find different options. At some options a specific directory is displayed in brackets. This is according to the one selected in the directory tree.

Define the area to be searched in the list field under **Search in...**.

Search all...: Optimal gathering of all possible parts, but less overview.

Specified search area: The desired hits do not have to be limited later.

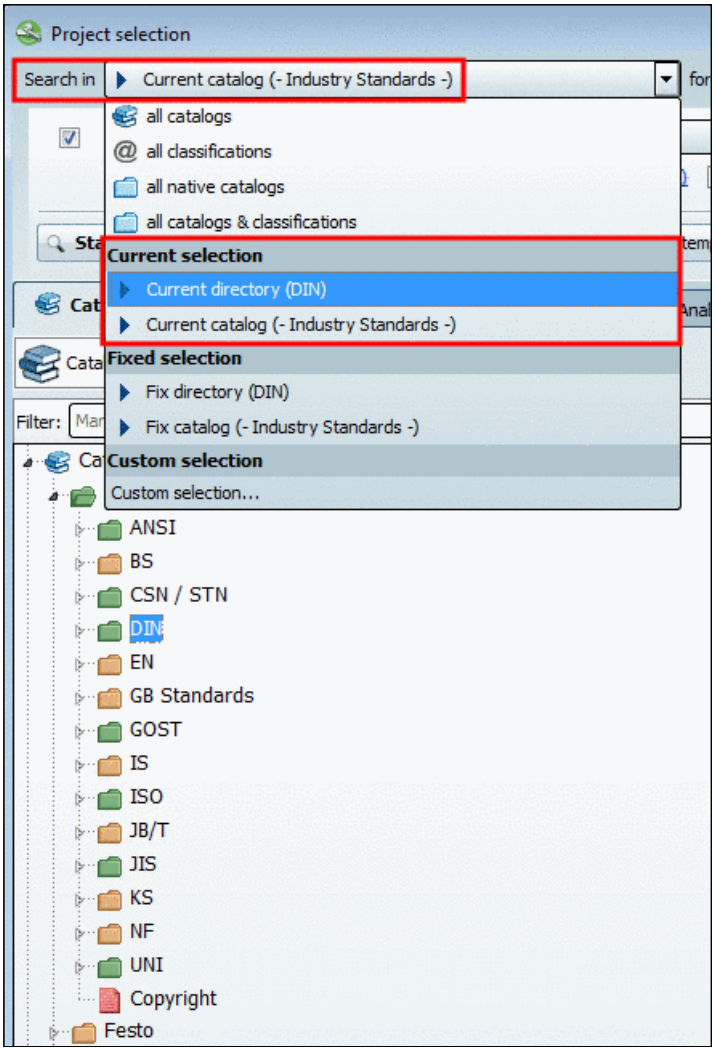
- In **all catalogs**
- In **all classifications**
- In **all native catalogs**
- In **all catalogs classifications**
- In **Current selection**
  - **Current directory** (<Name of selected directory>)

    When selecting **Current directory** the value in **Search in** changes analogously to the directory change in the index tree.

    That means, the search is always processed on the selected directory.
  - **Current catalog** (<Catalog name of selected directory>)

    When selecting **Current catalog** the value under **Search in** remains the same, as long as the index tree selection is inside the set catalog. Not until the catalog is changed while browsing, under **Search in**, the new catalog is set.

    That means, the search always refers to the catalog, where you are in.



In this exemplary figure the catalog displayed under Search in would not be changed when changing from DIN to ISO in the index tree.

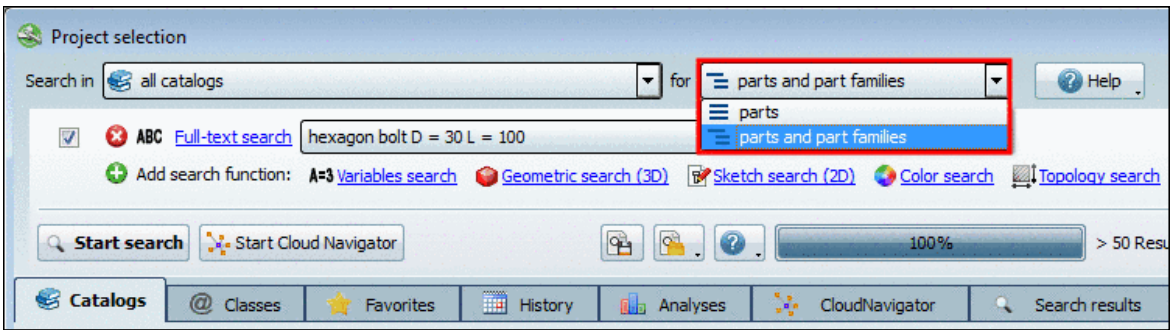
- **Fixed selection**:

When selecting **Fix directory** or **Fix catalog**, the displayed setting under **Search in Fix directory Fix catalog** remains unchanged when browsing in the index tree. The functionality of both options is identical. By switching from the "Fix directory" option to the "Fix catalog" option you can save the switching in the index tree itself.

- **Fix directory** (<Name of selected directory>)
- **Fix catalog** (<Catalog name of selected directory>)

- In **Custom selection...**

- **Search for: Part families or single parts?**



- Search for **parts**

  Less overview unless that the specification already happened by the method itself.

  For example by declaration of variables at the full-text search:

```
hexagon bolt D>=10 D<=16 L=50
```

- Search for **parts and part families**

  Good overview and although access on single parts.

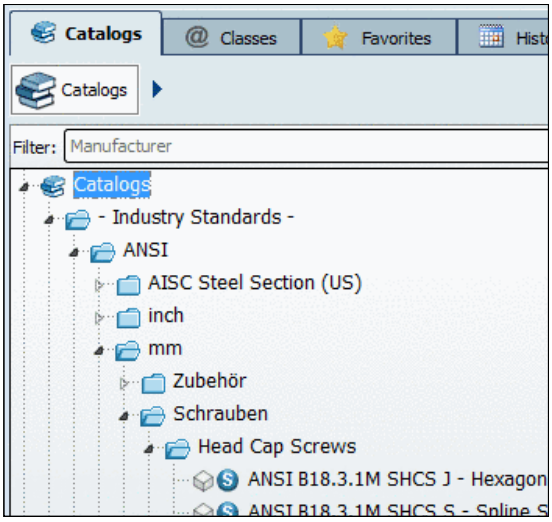
Detailed information on this can be found under Section 2.1.1.3, “ Search for Parts | Part families and Parts ”.

- **Which search method(s) shall be used?**

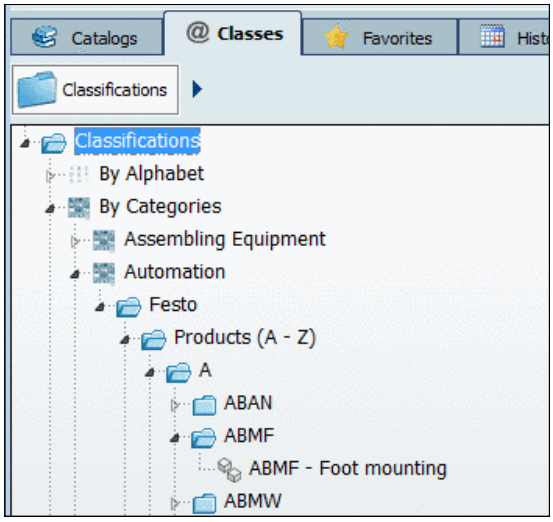
Basically there are two options: A manual search of the directory structures or the use of automated search methods.

- Manual search of the directory structures:

  Select the **Catalogs** or **Classes** tabbed page for example and search the respective directory structure for the desired part.



"Catalogs" tabbed page



"Classes" page

At the **project icons** (e.g. (part) or (assembly) you can recognize the **project level**.

As soon as you have selected a part with a **project icon** (e.g. (part) or (assembly) via double-click, the user interface switches to the **Part view**. You can find detailed information on the **Part view** under Section 2.1.2, “ Part view ”.

You can find detailed information on the single tabbed pages under Section 2.1.1.4.4, “ Part selection via index tree ”.

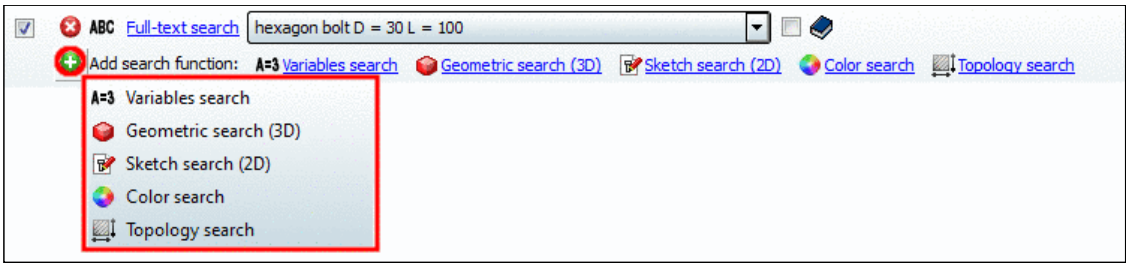
- Automated search of the directory structures:

  The full-text search is opened and activated at program start by default.

  Other search methods can be added anytime by click on the respective link or context menu command.

  With click on methods can be removed from the list.

  Via checkbox methods can be activated or deactivated for a certain run.

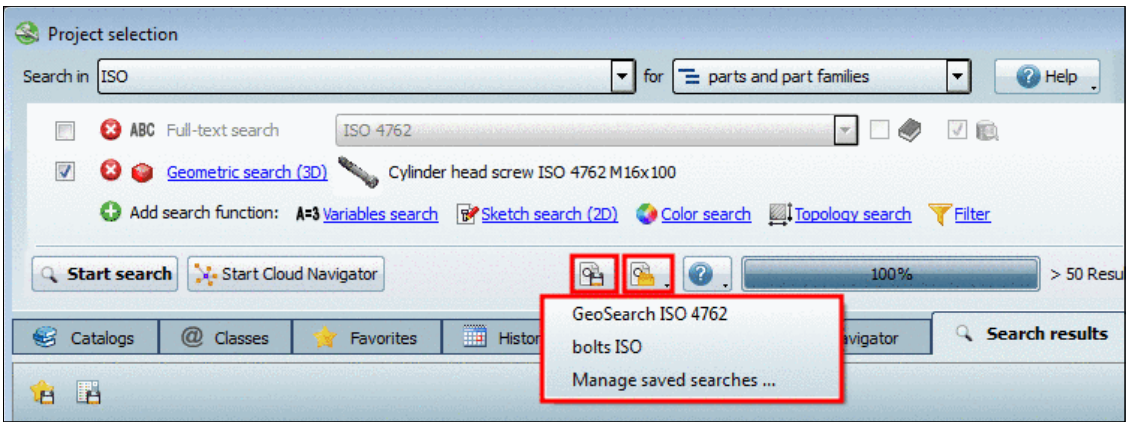


  - **Full-text search**
  - **Variables search** ,
  - **Geometric search (3D)**
  - **Sketch search (2D)**
  - **Color search**
  - **Topology search**

  You can find detailed information on the single search methods and additional options under Section 2.1.1.4, “ Search methods ”.

- **Search settings: save/load template**

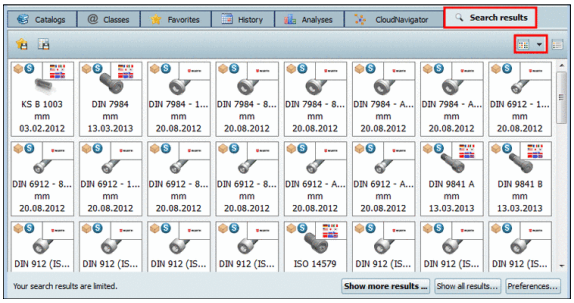
  Especially with complex settings you can save time, when using **Search templates**:



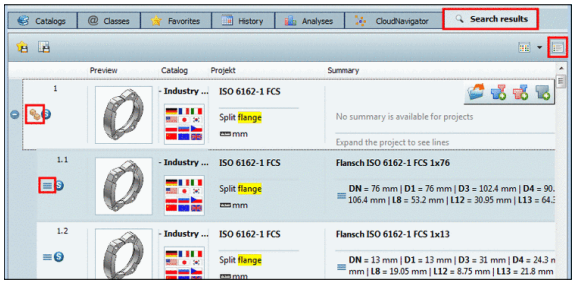
On this see Section 2.1.1.5, “ Search settings: Save as template / load ”.

- **Search results tabbed page**

  The search results are displayed below on the **Search results** tabbed page in **Symbols** mode or **Details** mode.



Symbols



Details

Dependent on the setting **parts** or **parts and part families** (compare above) the access on single parts is different. Whether the superordinate project (part or assembly) or a concrete characteristic is displayed you can recognize at the respective icon:

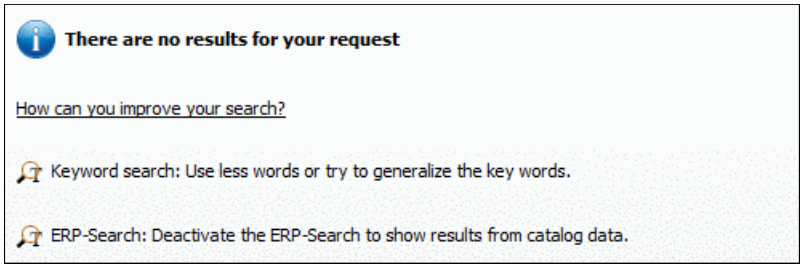
- | Part or assembly
- Concrete characteristic

In the **context menu** of a part family or a single part you can find various commands. In the **Details** mode **buttons** are displayed in addition.

Via **Open** for example you can switch to the **Part view**. You can find detailed information on the part view under Section 2.1.2, “ Part view ”.

Via for example you can open the **Part comparison** or load a part into the part comparison. You can find detailed information on **Part comparison** under Section 2.1.1.7, “ Part comparison ”.

- **There are no results for your request**:



- Use less keywords or try to generalize the keywords.
- Restrict the search area less.

- **Related results**

  See Section 2.1.1.6.2, “ "Related results" - Specify / broaden search ”.

- **More precise (AND) / Broaden search**

  If you get insufficient search results please regard the notes under Section 2.1.1.6.2, “ "Related results" - Specify / broaden search ”.

- **Show more results ...**:

  If there are more than 50 search results[1] below at the page end appears the **Show more results ...** button. Normally you will find the desired hits under the first. If you still want to see more results, then successively click on **Show more results ...** or **Show all results...**.

- **Save search results: in favorites / in file**

  The search delivered parts which you often use?

  Then select them all or single lines (selection via Ctrl key) in the search result list and save them under your **favorites**.

  Perhaps you want to pass the search results along and/or process in an external program?

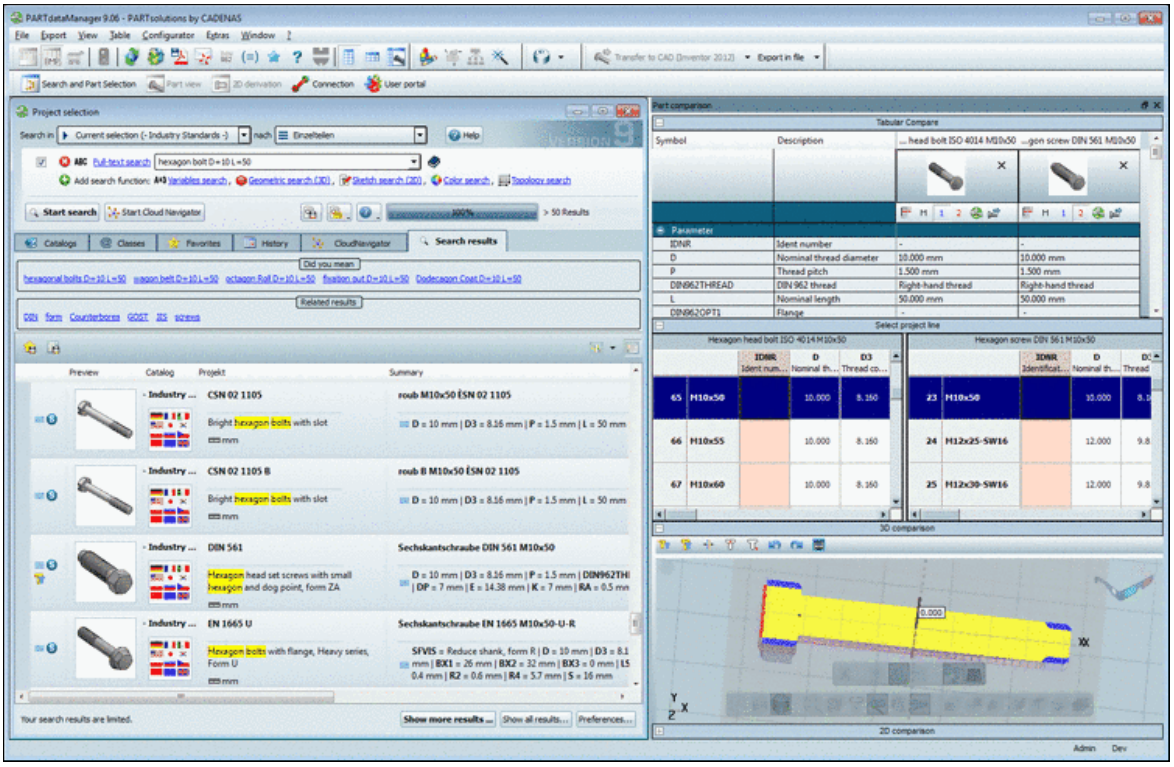
  Then save the search results (with the desired information from the table) in a **text file**.

  You can find the **commands** in form of two icons top left over the search results.

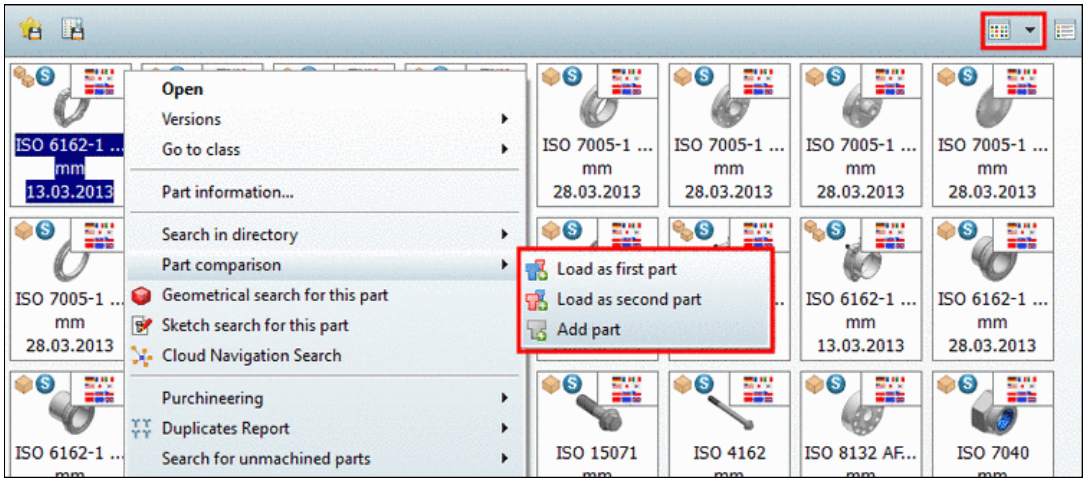
  - **Save search results in favorites**: See Section 2.1.1.6.1, “ Save search results: in favorites / in file”.
  - **Save search results in a file**: See Section 2.1.1.6.1, “ Save search results: in favorites / in file”.

- **Part comparison**

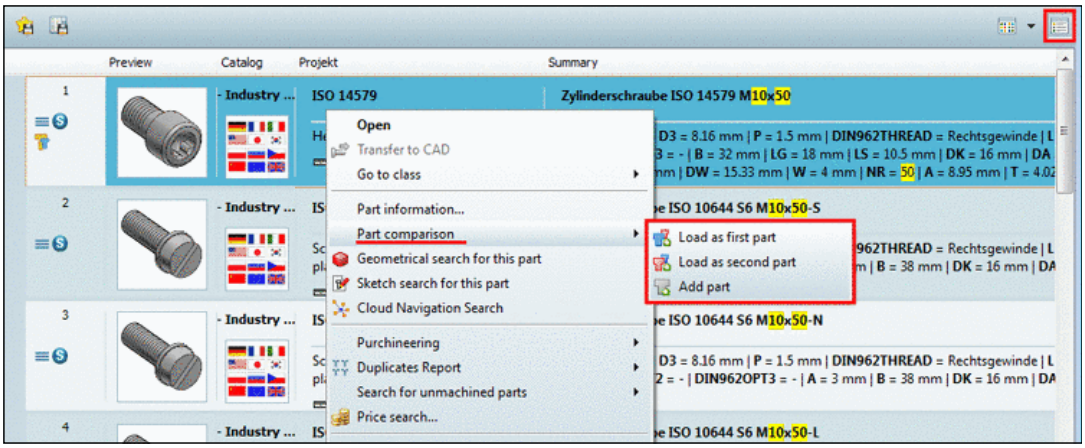
[1] If you want to change the presettings, then please click on the **Settings** button downright and select the **General** tabbed page.



The most important features:

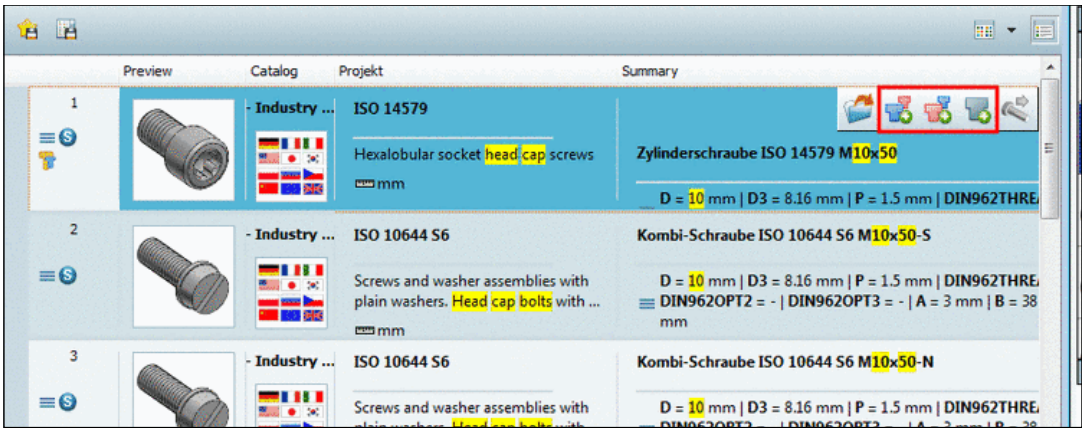
- You can add parts directly from the search results to the part comparison. (Via Drag & Drop, buttons or context menu command)
- There are several ways to open the **Part comparison** window/docking:
  - 

Open part comparison in "Symbol" view via context menu

- 

Open part comparison in "Details" view via context menu

When you move the mouse over a line some icons appear. Via , , you can open the part comparison as well.



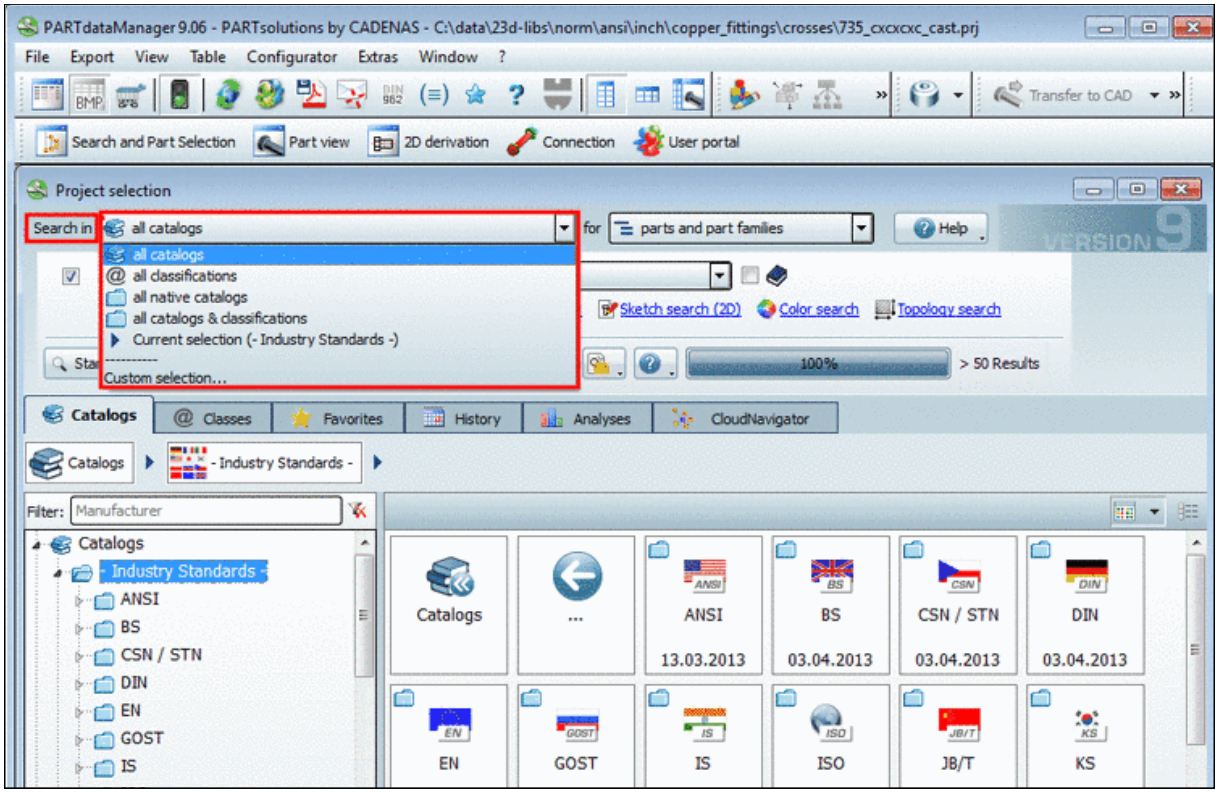
Start part comparison in "Details" view via button

- The part comparison can be used as docking or single window. In order to move the window click on the title bar with pressed mouse button.
- The compare can be performed on a textual base with various parameters (table variables, classification attributes, topologic data from geometry).
- Two parts a time can be loaded into the 2D/3D comparison. Coloring in the sectional view marks the differences, measuring grids can be displayed and show the dimensioning, and much more.

You can find detailed information on this under Section 2.1.1.7, “ Part comparison ”.

2.1.1.2. Determine catalog/classification/directory to be searched

Search in: Where?



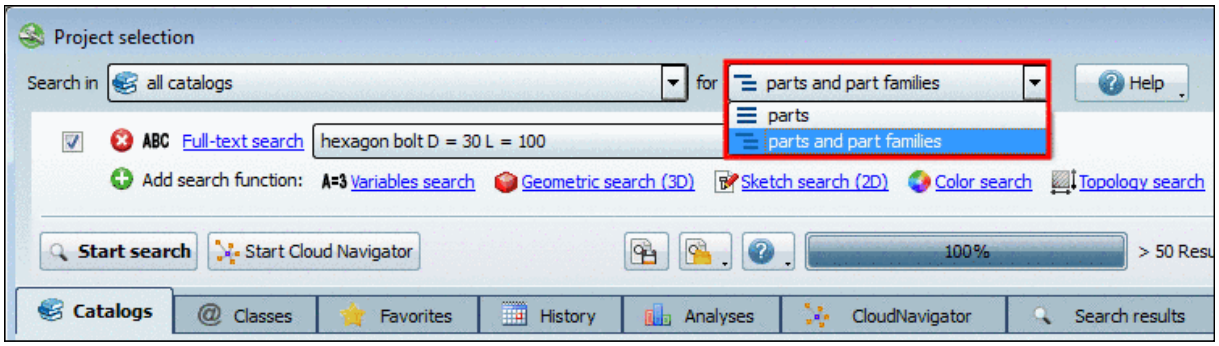
- In **all catalogs**

  When you search over "all", then the search possibly lasts a little bit longer (if many catalogs are installed).
- In **all classifications**
- In **all native catalogs**
- In **all catalogs classifications**
- In **Current selection**

  Select one of the tabbed pages **Catalogs**, **Classes Favorites** or **History** and there select the directory (subdirectory) to be searched. **Multiple selection** with Ctrl key.

2.1.1.3. Search for Parts | Part families and Parts

Do you want to search for **parts** or **parts and part families**?



"Search for": List field opened

In the **search results** for each of these settings you can choose between the **Symbols** or the **Details** mode and switch between these two modes anytime.

In the following the differences are explained:

- **Show parts** :

In the case of **Full-text search** this option makes sense, when **specific table variables** are used or the search is combined with a **Variables search** and thus the search delivers specific characteristics.

Example 1: **Full-text search** with term plus **table variables**

```
Hexagon bolt D=10 L=50
```

You can find detailed information on syntax or the various insert options under Section 2.1.1.4.2, “ Full-text search ”.

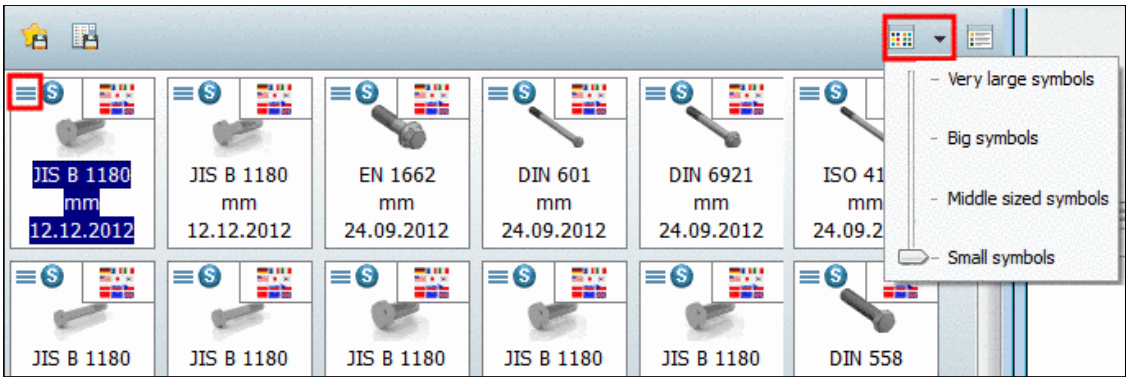
Example 2: **Full-text search** combined with **Variables search**

Note

When a full-text search without specification of parameters is performed and large tables are searched, use of this option makes no sense.

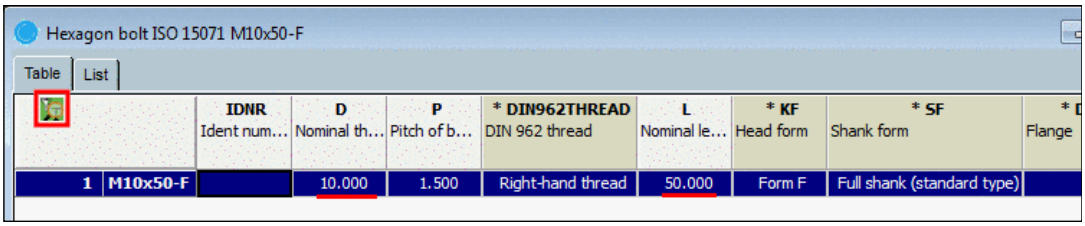
- Search results in **Symbols** mode

  All results are marked with the **parts** symbol. In the **Symbols** list field you can determine the preview size.



  When **double-clicking** on a part you reach the Part view.

  - The **filter symbol** signalizes that the table is restricted.



Part view in "Table" mode

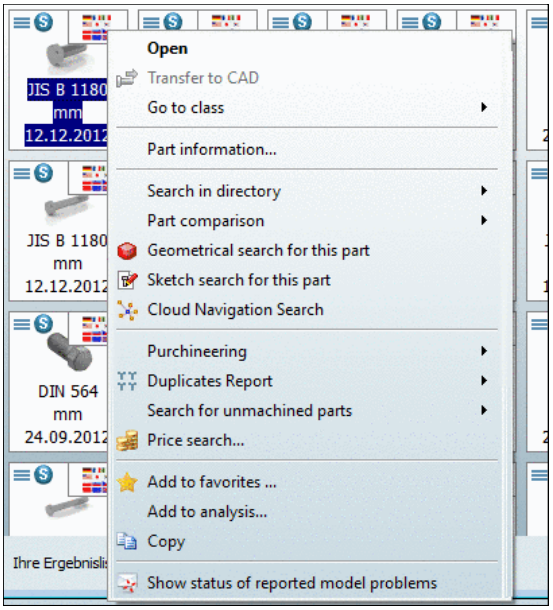
  - Only those characteristics are displayed, which exactly meet the search condition.
    Example:

```
Hexagon bolt D=10 L=50
```

  - When you want to see all lines, then click on the filter icon.

Among others the following **context menu commands** can be performed at each characteristic:

- Open it in the part view
- Directly transfer it to the CAD system
- Transfer it into the part comparison

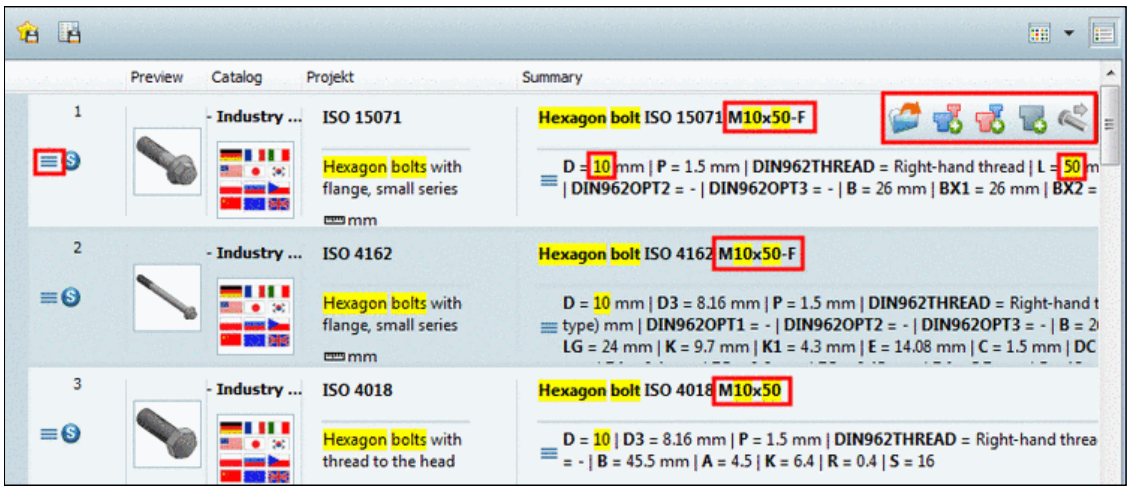


- Search result in **Details** mode

  All results are listed and marked with the **parts** symbol .

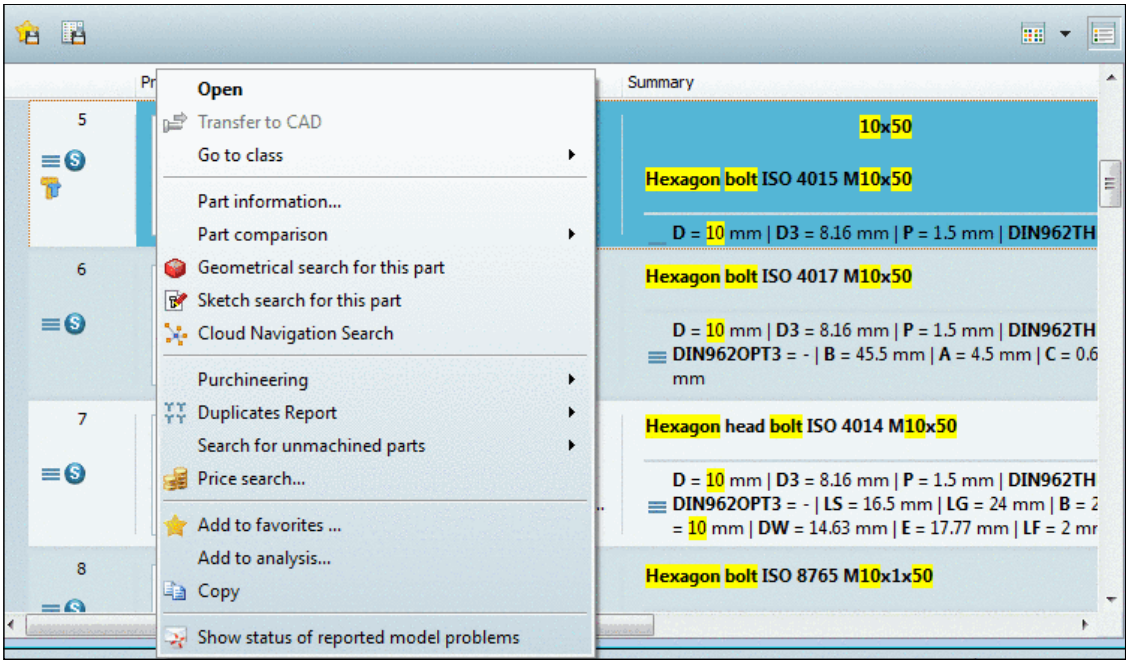
  You can recognize the characteristic in the **Summary** column. The single parameters of the search term are highlighted in yellow.

  When you move the mouse over a line, the respective buttons are displayed, so that you can reach the Part view or the Part comparison or export the respective part into your CAD system.



Among others the following **context menu commands** can be performed at each characteristic:

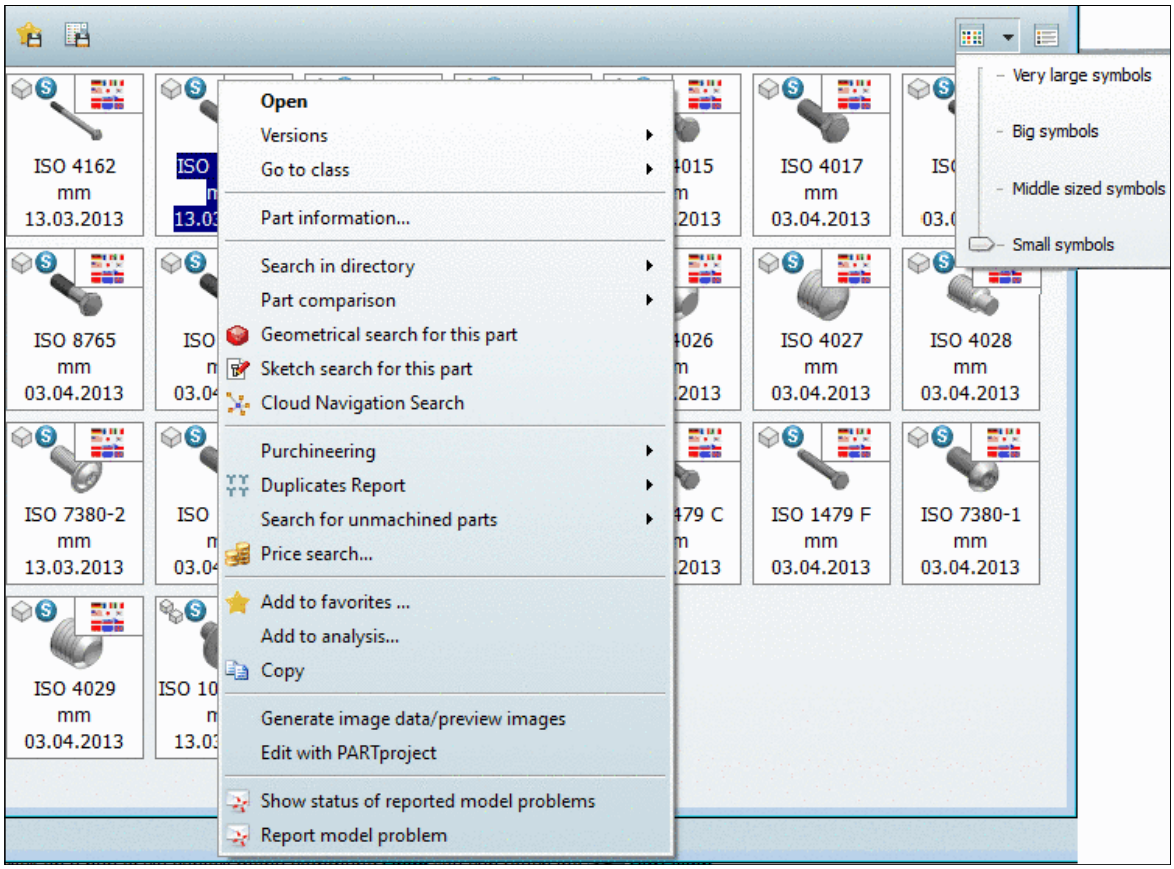
- Open it in the part view
- Directly transfer it to the CAD system
- Transfer it into the part comparison



- **Show parts and part families**: Result in **Symbols** mode

  Select this mode, when you do not want to find a specific characteristic in the first step, but just want to find adequate part families.

  The found parts are displayed with preview image and name. In the **Symbols** list field you can determine the preview size.



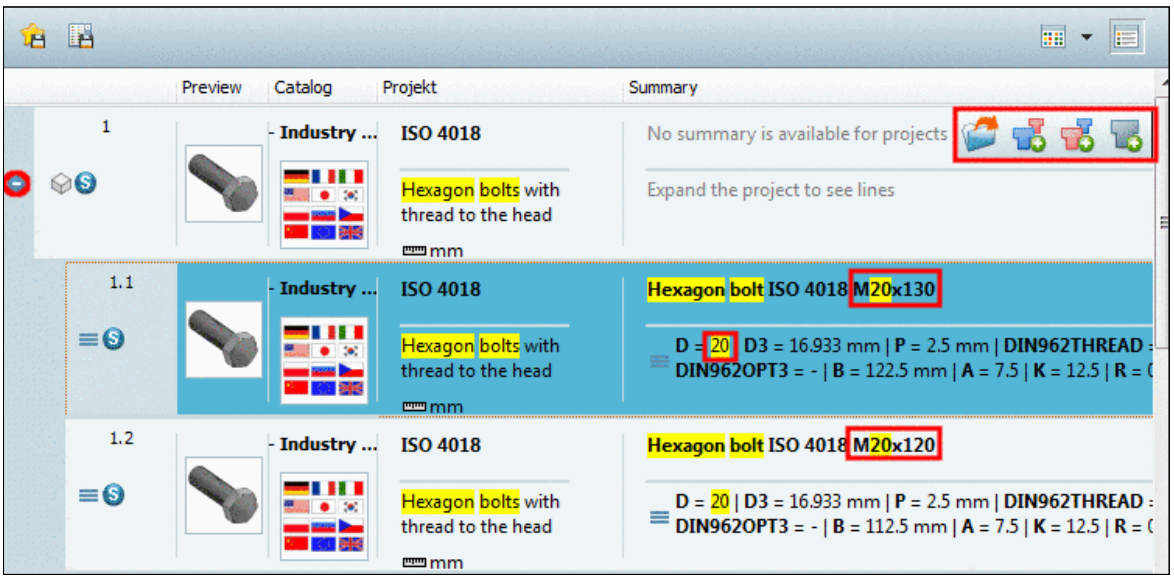
Search results in "Symbols" mode

The **selection** of a concrete **characteristic** then happens in the **Part view** or in the **Part comparison**.

- Via double-click on a part or via context menu command **Open** you can reach the **Part view**.
- Via context menu commands under **Part comparison** the respective dialog box opens, meaning you can transfer parts into the part comparison.

- **Show parts and part families**: Result in the **Details** mode

  In this mode you can access both the part family and the contained characteristics. First the result list is displayed compactly only with part families. However when you click on the button at a result part, below the found characteristics are displayed. These are marked with the respective icon .



Below the part family the found characteristics are displayed.

You can recognize the exact characteristic in the **Summary** column. In the result list the single parameters of the search term are highlighted with yellow.

When you move the mouse over a line the buttons for actions are displayed. Clicking on the respective button you can reach the Part view or the Part comparison or can export the respective characteristic into your CAD system.

In each line various context menu commands are available. Compare figure above.

Note

When you open PARTdataManager always the last setting is active.

2.1.1.4. Search methods

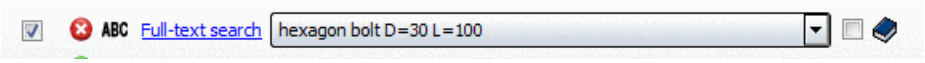
2.1.1.4.1. Select / combine search methods

You can use only one certain search method or combine them.[2] [3]

The **Full-text search** is opened and activated at program start by default. Just enter a search term and click on **Start search**.

[2] only Sketch search (2D) and Geometric search (3D) cannot be combined

[3] **Full-text search** and **Variables search** are always available. The other search methods require the license "CNS200x*PSADDONS*COMPLEXSEARCH".



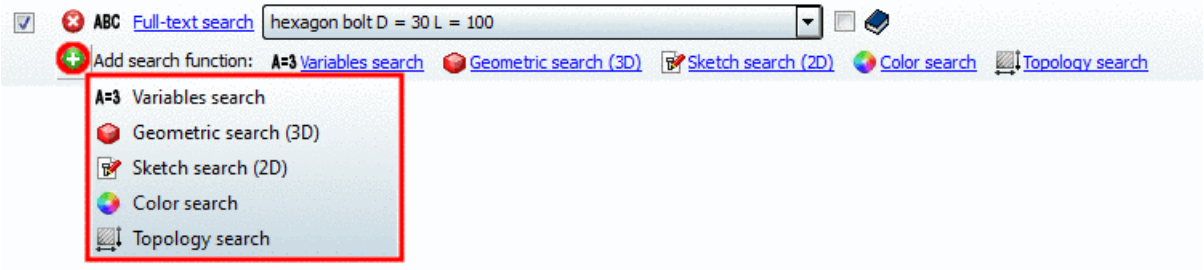
Search methods

The following **search methods** are available:

- Full-text search
- Variables search
- Geometric search (3D)
- Sketch search (2D)
- Color search
- Topology search

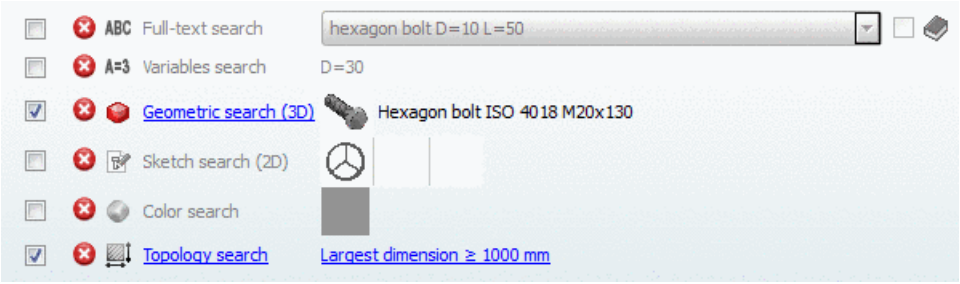
How you can add a search method?

Click on the desired **search method link** or on **Add search function** and then on the respective context menu command.



-> The respective dialog box opens.

After you have done the settings in the dialog box the search method is displayed with the specific, set parameters, so that you can always keep in view the settings.



In this exemplary figure all search methods have been already used and thus are listed. The geometric search and the topology search are activated and will be used for the next search run.

How to remove a search method from the list?

Click on the "remove" icon .

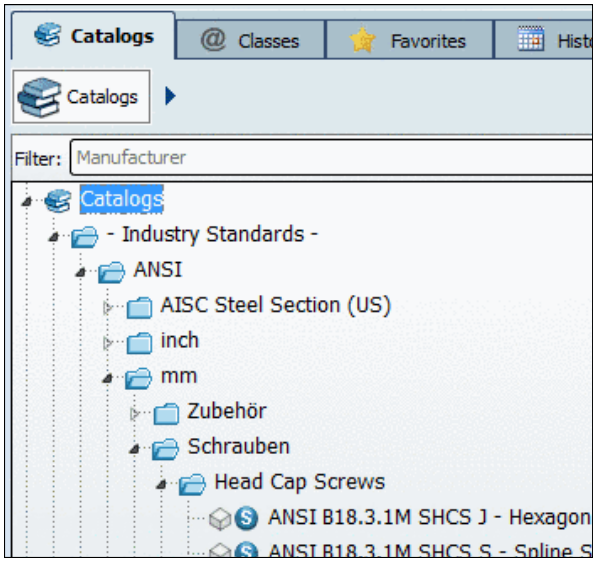
How to deactivate a search method for the next search run?

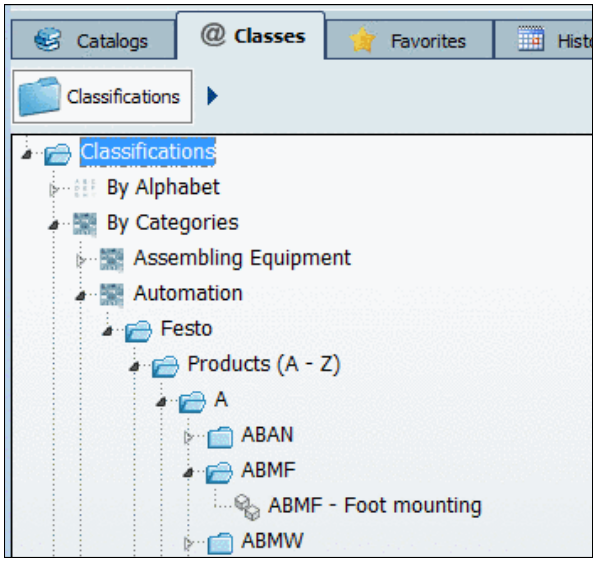
Clear the checkbox .

Manual search of directories

Alternatively you can manually search the directories.

Select the **Catalogs** or **Classes** tabbed page for example and search the respective directory structure for the desired part.





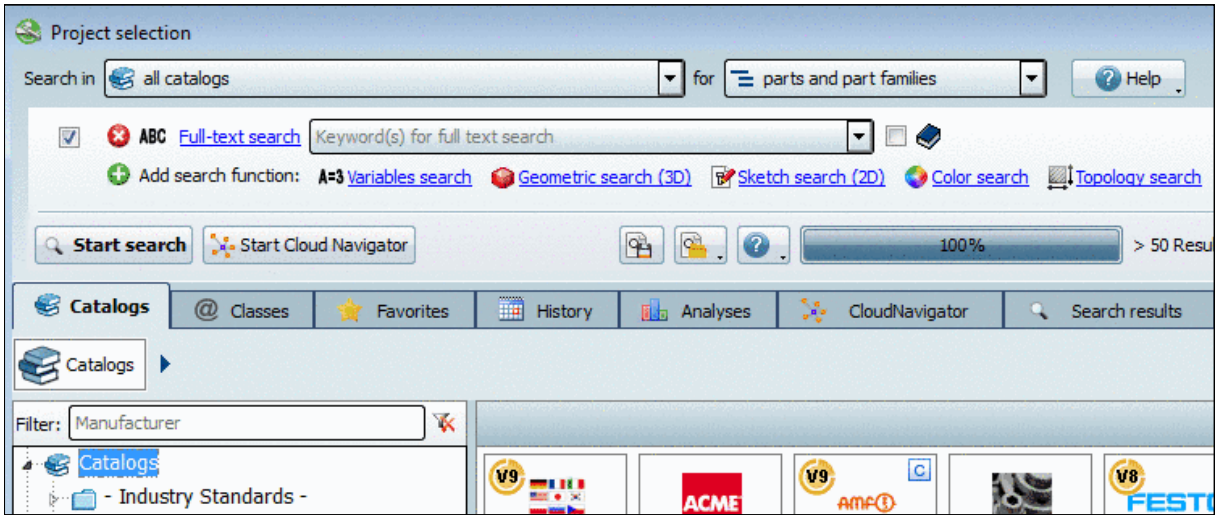
You can find detailed information on the single tabbed pages under Section 2.1.1.4.4, “ Part selection via index tree ”.

2.1.1.4.2. Full-text search

Note

In this chapter you can find detailed information concerning **Full-text search**. This is opened and activated at program start.

You can find information concerning setting options such as "**Search for parts and part families**" or "**Search using Custom selection...**, etc. under Search and part selection at a glance. Click on this link.



2.1.1.4.2.1. Full-text search options - Syntax

- **Term query**

  A term query is the actual basis for all queries.

  - **One** term:

    ```
    Bolt
    ```

The term "Bolt" can occur anywhere, also as substring. Some examples:

Through boring for **bolts**

Stop **bolts**

Bolts with flange

> **Note**
>
> A **precise spelling is important**. With scrambled letters (*blot*) or empty spaces (*b o l t*) you won't get any results.

- **Singular - Plural**

  Singular and plural terms lead to the same results.
- **Several** terms:

  Each term has to exist anywhere in the project. The **sequence** is **irrelevant**.

```
Bolt with shank
Hexagon bolt M10x50
```

> **Note**
>
> "M10x50" is not yet a variable search in the real sense (on this see under Section 2.1.1.4.3, “ Variables search ”), but is contained as text in the table. So empty spaces between the single parameters make a difference. A query with "M 10 x 50" is not successful.

- **Differentiation of character types**

  Inserting

```
ABC1234DEF
```

  or

```
ABC-1234-DEF
```

```
ABC 1234 DEF
```

  is also found.[4]
- **Leading zeros in part numbers**

  Inserting

```
9876
```

```
00009876
```

  is also found.

- **Term query with NOT operator**

  A NOT operator can be used in order to exclude certain terms from the results. Different spelling can be used for this method.

```
Bolt NOT reduced shank
Bolt !reduced shank
```

  A hit "bolt with shank" for example can be filtered in this way.

```
Bolt flush mounted NOT not
Bolt flush mounted !not
```

[4] Other special characters are handled in the same way.

A hit "bolt **not** flush mounted" for example can be filtered in this way.

> **Note**
>
> Between exclamation mark (!) and the term to exclude there may not be an empty space.

- **Term query with OR operator**

  With the OR operator the search can be expanded to several terms. At least one of the terms has to apply.

  ```
  Hexagon bolt OR Head cap bolt
  ```

- **Term query with AND Operator (Default!)**

  All terms connected by the AND operator have to be part of the result. This kind of query leads to the same result when no operator is used.

  ```
  bolt AND shank
  bolt shank
  ```

  ```
  16.2 21 90
  16.2 AND 21 AND 90
  ```

- **Term query with defined sequence (phrase) => "xyz"**

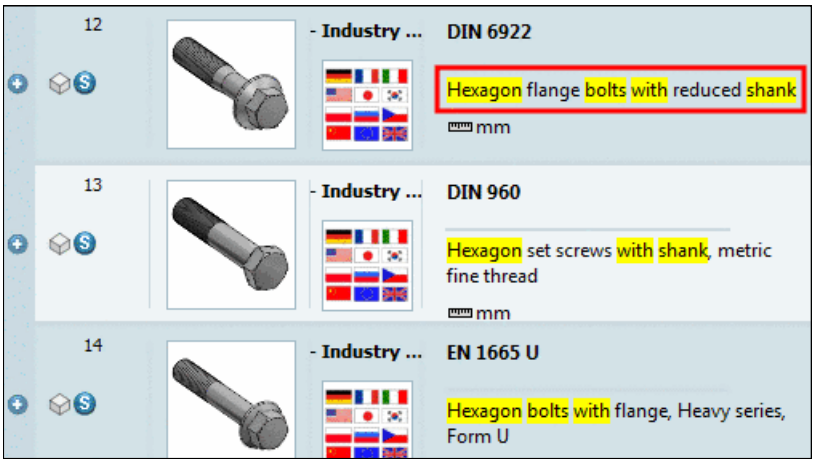
  Using quotation marks (") you can determine that the contained terms have to occur in the given sequence.

  Examples:

  - Term without quotation marks:

    ```
    Hexagon head bolts with shank
    ```

    This search both leads to exact hits and hits such as "Hexagon flange bolts with reduced shank".

  - Term with quotation marks:

    ```
    "Hexagon head bolts with shank"
    ```

    This search leads only to exact hits such as "Hexagon head bolts with shank", because the terms have to be directly behind one another.

Note

Using the plural form

```
"Hexagon head bolts with shank"
```

leads to the same hits than using the singular form.

```
"Hexagon head bolt with shank"
```

A "query with phrase" is automatically generated when a term contains special characters or terms which are composed by characters and numbers.

```
AB1-455-PDA => "AB 1 455 PDA"
```

- **Prefix query (Term query with a wildcard at the end) => ***

  Note: The wildcard sign may only occur at the end of a term or a number!

  Note: Adding a wildcard to a term affects the performance (negative)!

  Note: Normally the wildcard search is not needed.

  ```
  Bolt*
  ```

- **Wildcard query - Terms with a placeholder - ?**

  The **placeholder '?'** can **only be used for order numbers**. ? is for any single sign instead of the placeholder. Using several placeholders in a row at any position is possible.

  ```
  ABC-5?6
  ```

- **Wildcard query for a whole directory**

  See Section 2.1.1.4.2.1.1, “Wildcard query for a whole directory ”.

- **Syntax for table variables**

  Full-text search and **Variables search** can be combined in the input field. With numbers **mm** supposed.

  Connect the variable name with certain values by using mathematical operators.

  - **Variable name with concrete value**

    ```
    Hexagon bolt L1 = 400
    ```

  - In order to search for several variables, use mathematical **operators**.

> **Note**
>
> Upper or lower case makes no difference for the search term.
>
> Operators such as AND, NOT, OR have to be upper case.

```
Hexagon bolt L > 150 AND D = 20
Hexagon bolt L = 150 OR D = 20
```

- Not only (=) can be used, but all established operators such as (**=**, **<**, **<=**, **>**, **>=**).

```
Hexagon bolt L >= 120 AND L < 160 AND D = 22
```

- Use **brackets**

  Example 1:

  Hexagon bolts shall be found, either with the characteristic M10x50 or M10x60.

  Search term:

```
Hexagon bolt (M10x50 OR M10x60)
```

  Example 2:

  Bolts with material St37 or St70 shall be found.

  Search term:

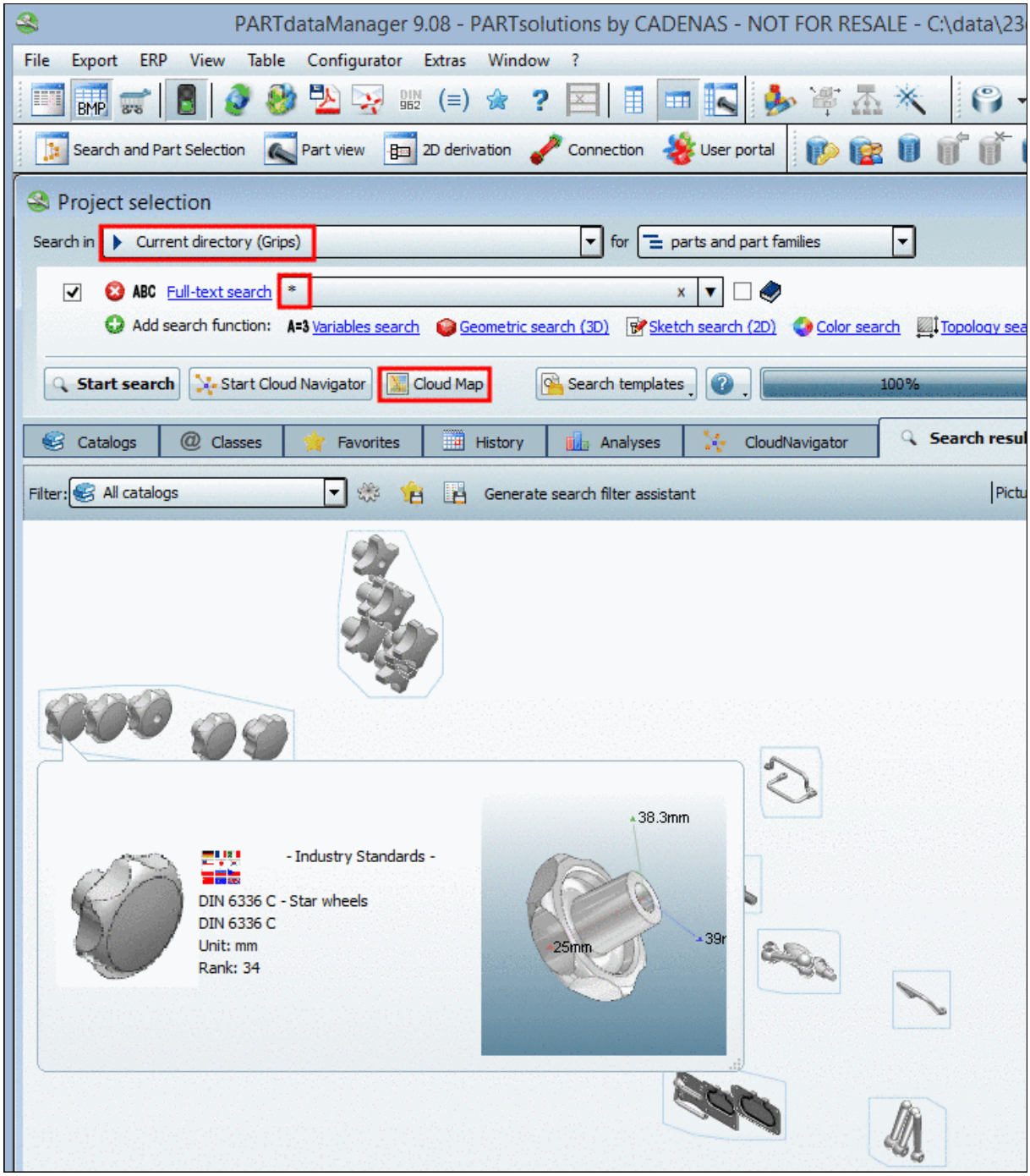
```
Bolt (st37 OR st70)
```

2.1.1.4.2.1.1. Wildcard query for a whole directory

Performing a wildcard search (*) in the **Full-text search** input field all projects of the directory set under **Search in** are outputted.

This can be interesting for a **Cloud Map Search** or also the **export of the search result** of a whole directory.

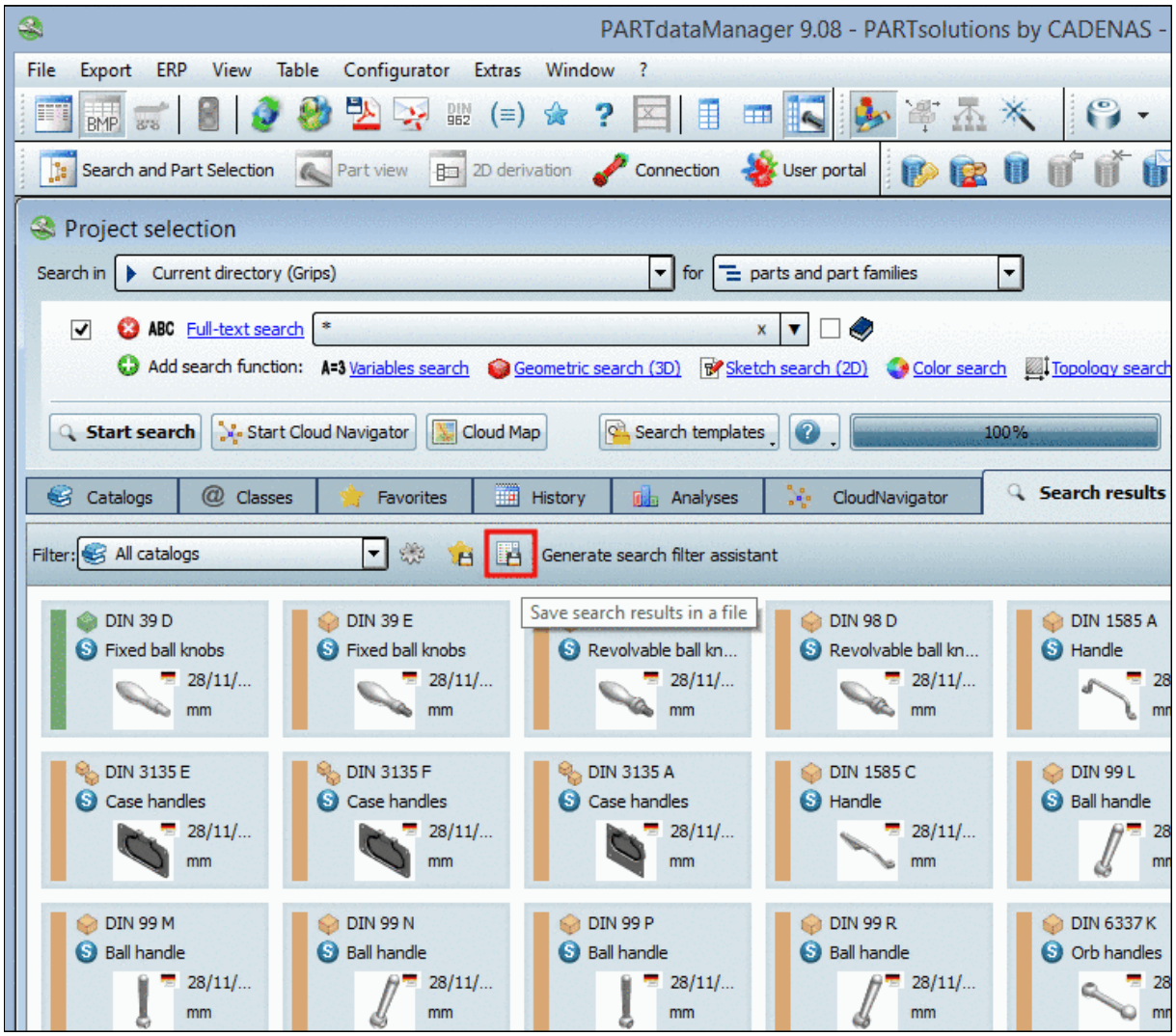
Cloud Map Search:



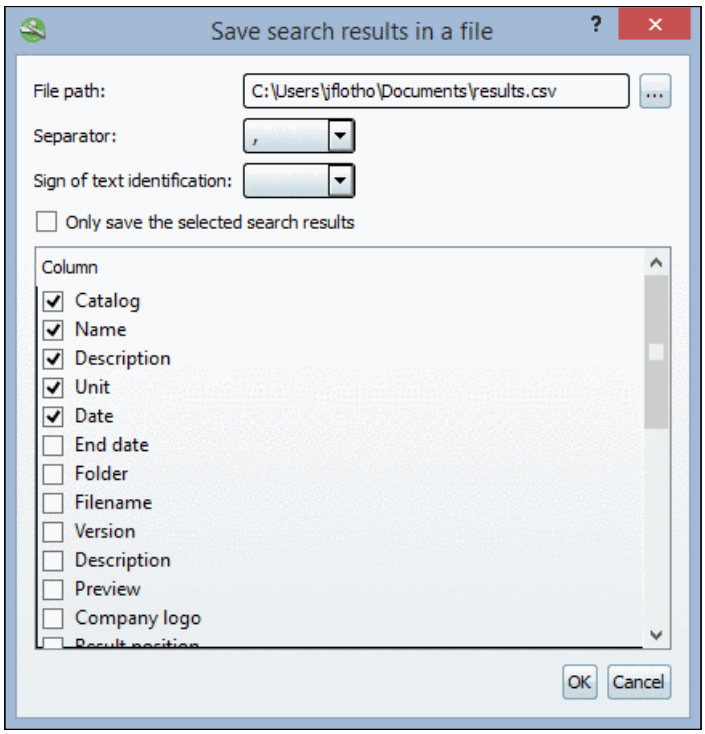
Example: All handles of the set directory are displayed in the Cloud Map.

Save search results in a file :

Click on the button .



The respective dialog box opens. Here you can specify the columns to be exported. You can save all search results or only the selected ones.



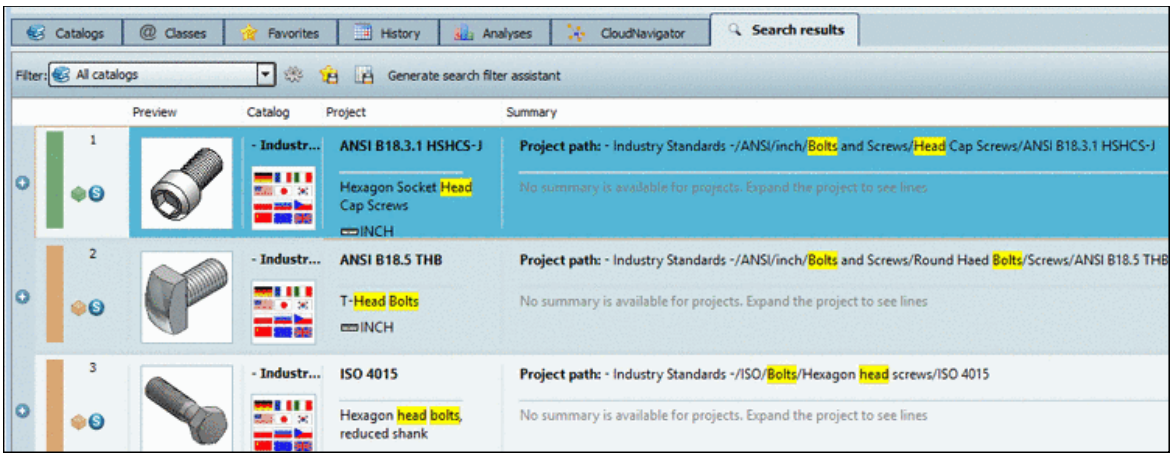
2.1.1.4.2.2. What is searched?

The following data are part of the index. Thus, for those it can be searched **in all languages**:

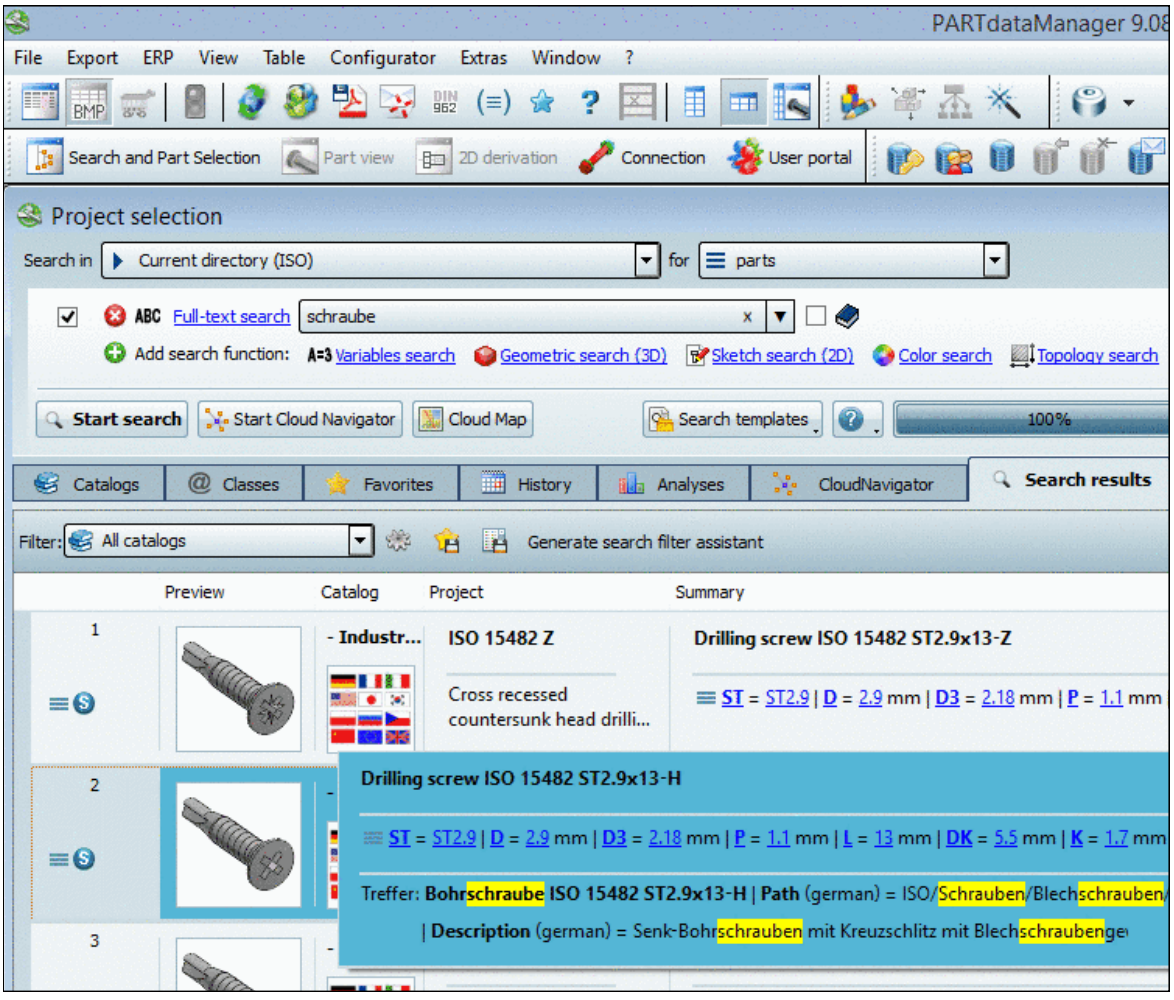
- **Project**
  - **Path**
  - NT
  - NN
  - Date
  - Catalog name
- **Table (+ERP)**
  - NB
  - Fixed numerical values
  - Fixed textual values
  - Order number (defined by CNSORDERNO)
  - Value range variables with fixed values (no value range)
- **Classifications**
  - EClass IDs or class description
  - Class attributes

Examples:

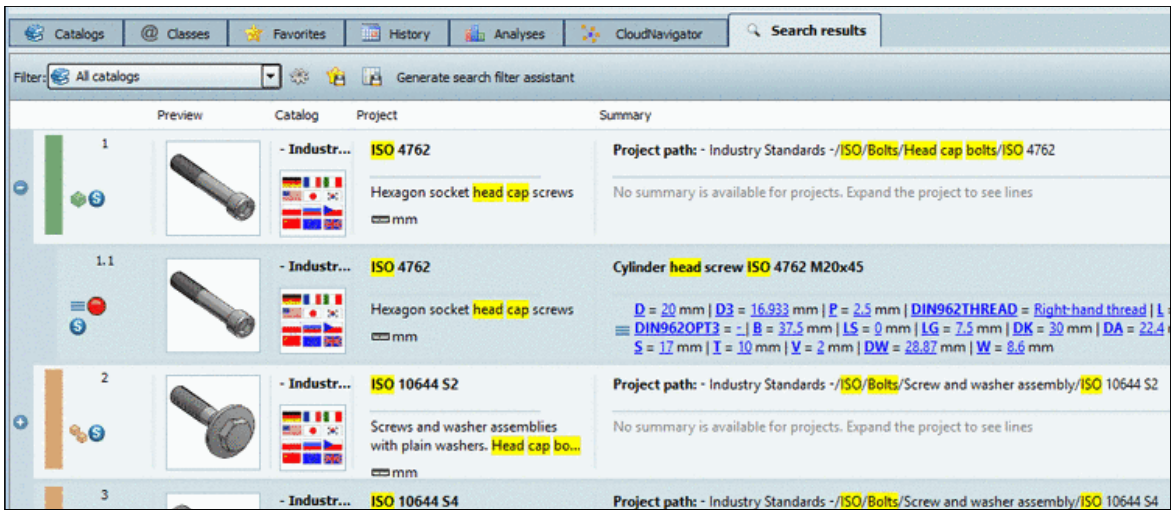
- The **Project path** is displayed on the tabbed page **Search results**, on **project level**, in the column **Summary**.



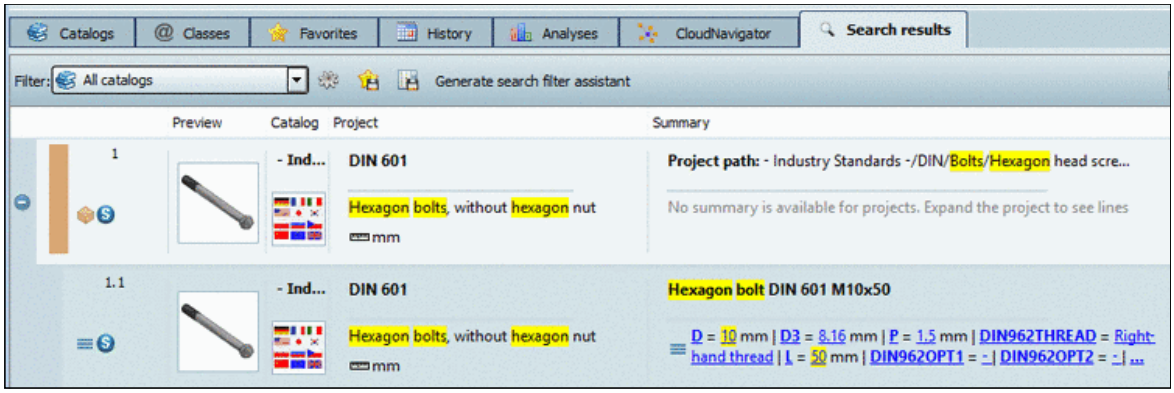
When searching in another language than the set one (in the next figure exemplarily "schraube") you can see, in the popup window, under **Hits** (Treffer) that the hit is based on an accordance in NB (standard name), path and description.



- In the following a search with "head cap bolt ISO" is conducted.
  The respective terms are marked on the tabbed page **Search results**:
  On project level: In Standard number (NN), Standard text (NT) and Project path
  On line level: In Standard number (NN), Standard text (NT) and Standard name (NB)



- Hits based on table values are marked in yellow on the tabbed page **Search results** as well. In the following example a search for "hexagon bolt D=10 L=50" has been performed.



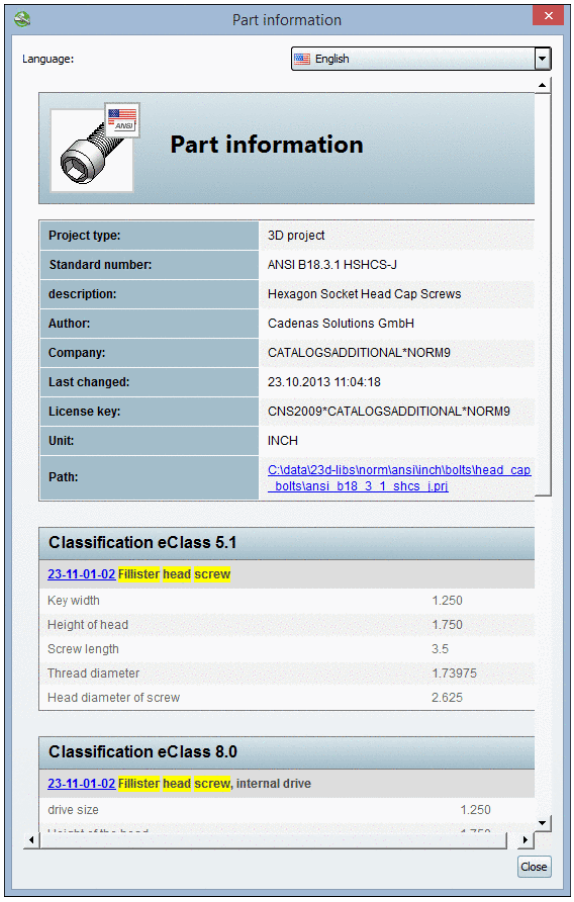
- In the following example a search with a class-name is performed.

```
Fillister head screw
```

> **Note**
>
> Hits from class-names are marked in yellow in the **Part information**.

You can call up the **Part information** both on project level and on line level with the same-named command in the context menu. If you are within the  **Part view**, you can call up the part information via **?** menu -> **Part information**.

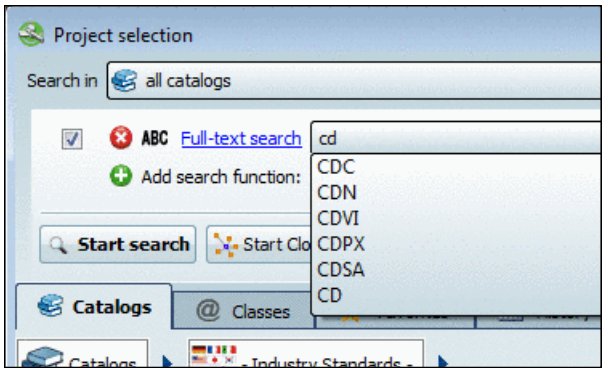
Search term marked in yellow



On line level, all class attributes with values are displayed in the "Part information" in addition..

2.1.1.4.2.3. Automatic phrase completions

While typing into the field **Full-text search** a list field is automatically opened and proposals are offered which can complete the search term.

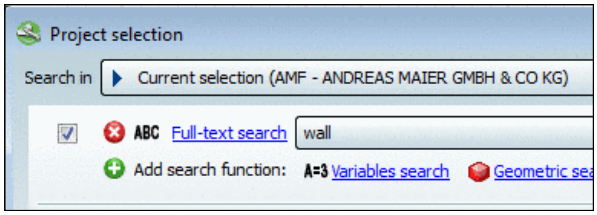


Example: When "cd" is entered several cylinder designations such as "CDN" or "CDVI" are offered for example.

With the tab key you can overtake a selected term from the list, with the return key you can overtake a selected term and a search is directly executed.

The displayed proposals also depend on the selection under **Search in**.

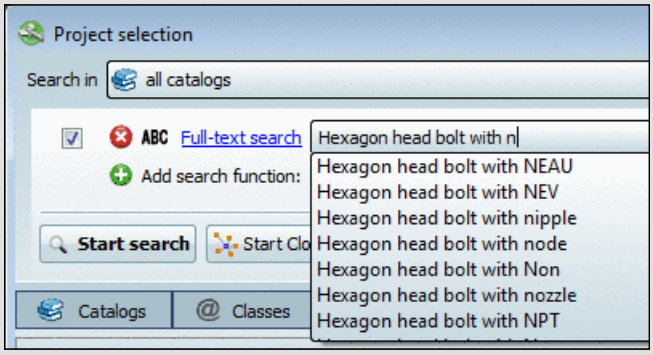
Current selection (- Industry Standards -): When "wall" is entered proposals are displayed.



Current selection (AMF) - When "wall" is entered no proposals are displayed. Thereby you receive the information that you won't get any results with this search term.

Note

The display of proposals does not automatically mean that a combination of terms really leads to hits, but instead that each single term exists.



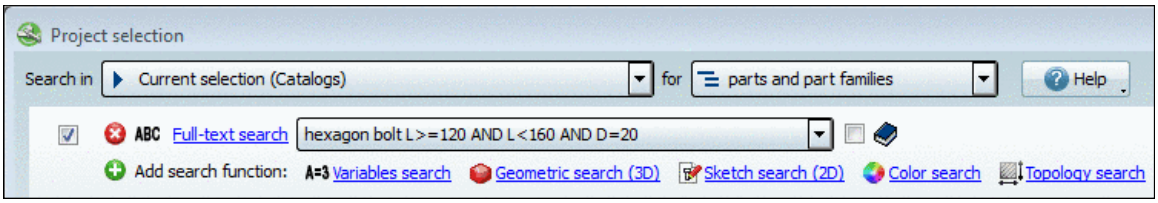
Example: "Hexagon head bolt with nipple" will not lead to any hits.

2.1.1.4.2.4. Full-text search example

The following example shows a complete search with setting search options, result list and starting the part view.

1. Limit the search at "**Current selection (ISO)**" and leave the setting "**Search for parts and part families**".
2. Enter the following into the input field:

```
hexagon bolt L >= 120 AND L < 160 AND D = 20
```

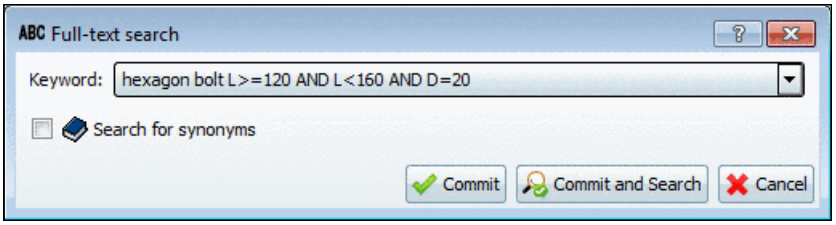


Tip

When you open the list field under **Full-text search**, then you see preceding inputs, which you can simply select with a single-click. So you can possibly save complicated entries.

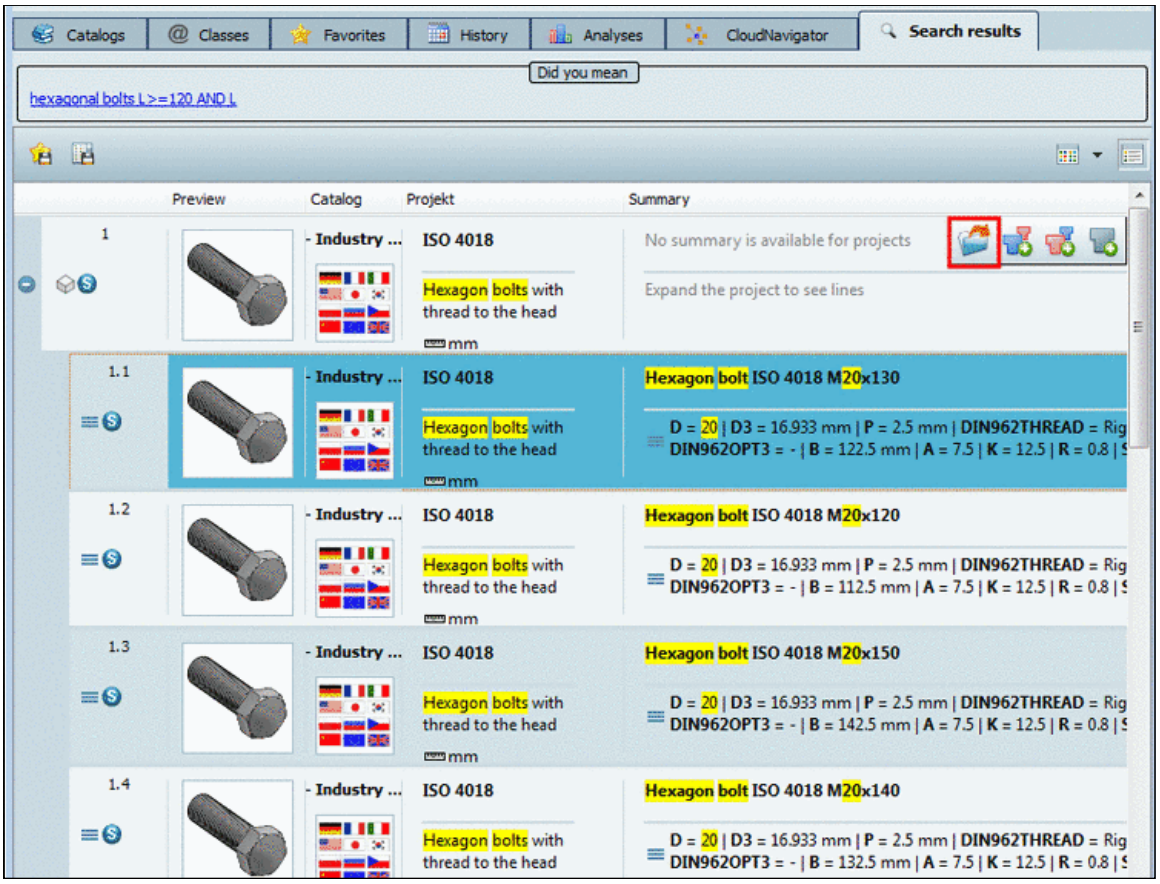
Should you have removed the full-text search via click on from the list of search methods, then simply click on the link ABC Full-text search.

-> The **Full-text search** dialog box opens and you can perform an entry anew.



3. Click on **Start search**.

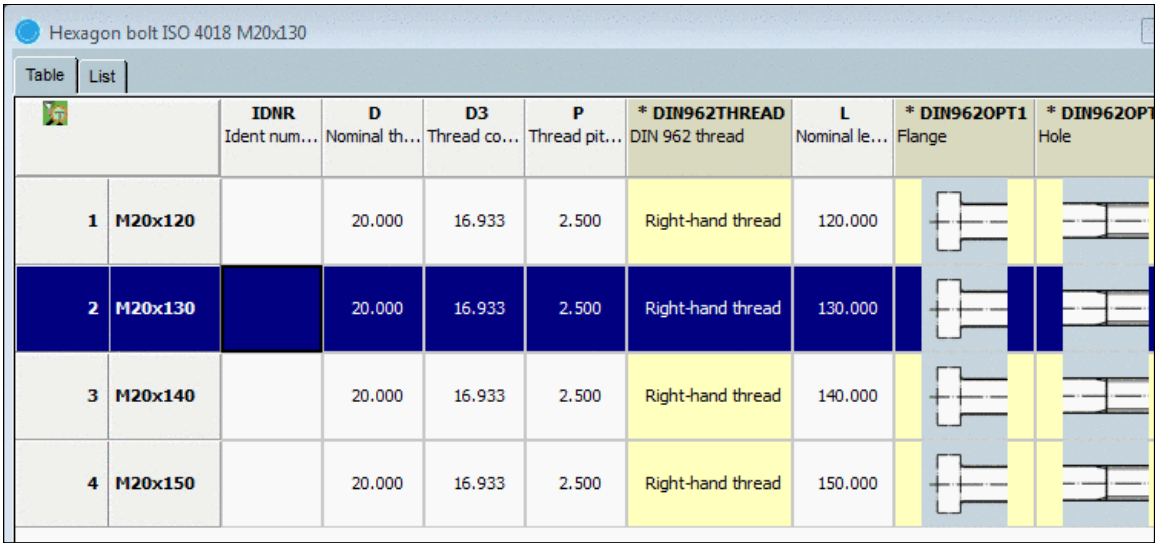
   -> The search results are listed on the **Search results** tabbed page. When you click on the plus sign, then you can see the single parts of the part family below. The following figure shows 4 lines, which exactly meet the search criteria (D equals 20 and L is between 120 and 150).



4. Click on the icon **Open**.

   -> The view switches to the **Part view**.

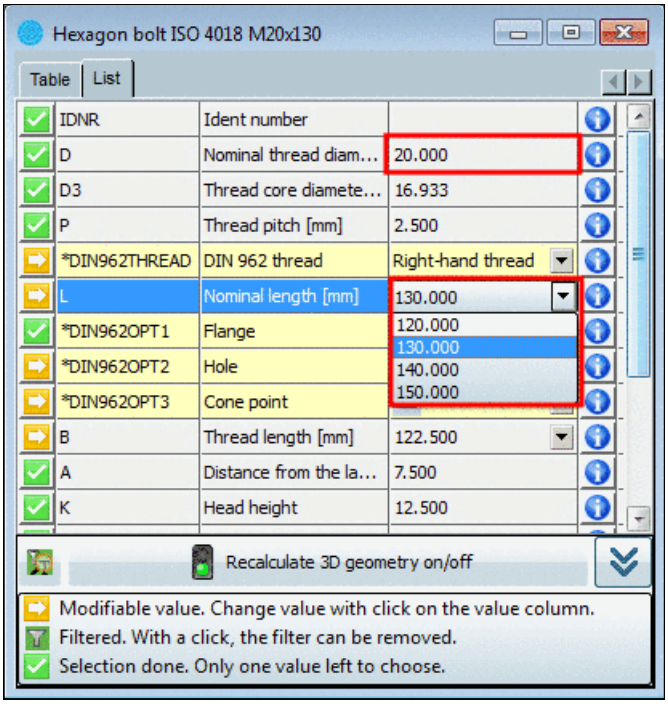
5. Select the **Table** tabbed page.



Part view in"Table" mode

Top left at the icon **Search filter on/off** you can recognize, that the characteristics have been filtered. When you want to see all characteristics, click on the icon.

Select the **List** tabbed page.



Part view in "List" mode

Also here you can recognize at the icon **Search filter on/off**, that the characteristics have been filtered. When you want to see all characteristics, click on the icon.

2.1.1.4.3. Variables search

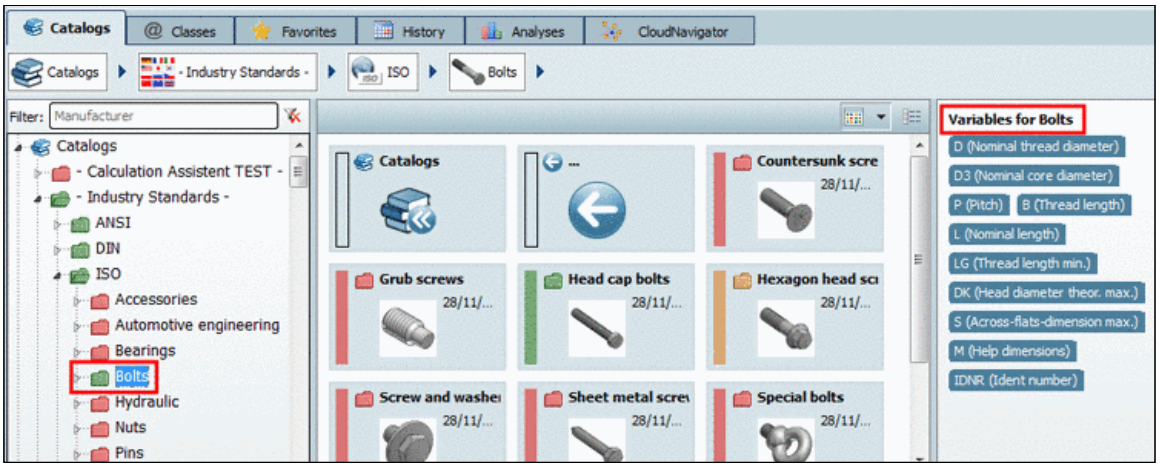
In this chapter at first you can find an example on variable search, afterwards the setting options and functions of the **Variables search** dialog box are explained.

2.1.1.4.3.1. Variables search Example 1: Call up from the "Common variables" section

In order to perform a **Variables search**, proceed as follows:

1. Limit the search at "**Current selection (Bolts)**"[5] and leave the setting "**Search for parts and part families**".

   -> On the right side, in the section **Variables for <directory name>** the common variables of the selected directory are displayed.

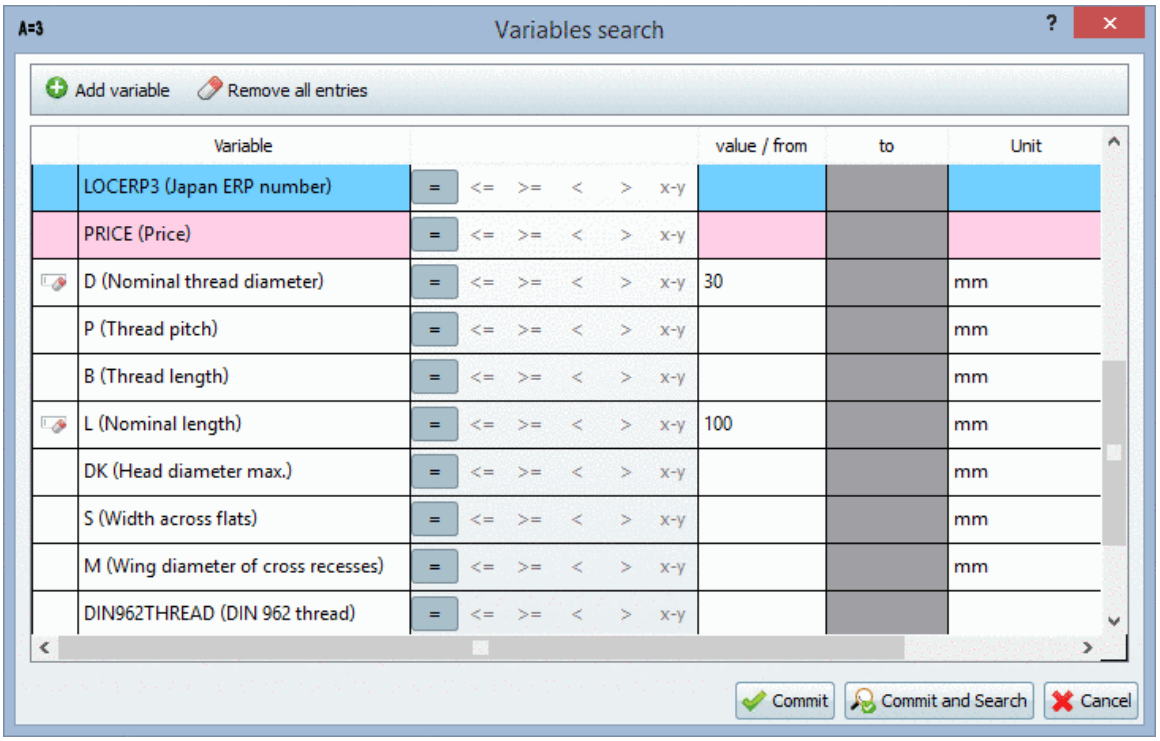


"Variables for" <directory>

2. Click on the variable **D**.

   -> The dialog box **Variables search** opens. The input field of the variable D is already selected.

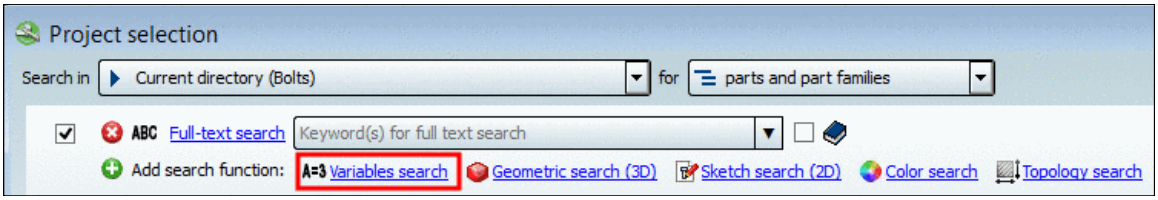
3. Enter the desired value for D, furthermore the desired value for **L**. Leave the **mathematical operator** on **equals (=)** and the **Unit** on **mm**.



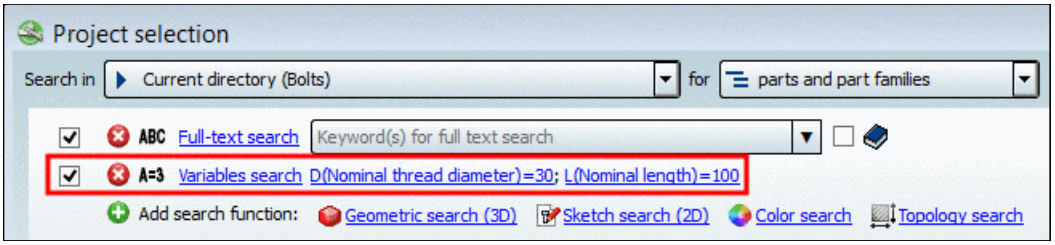
   -> The respective rows are marked with an icon .

   Alternatively the dialog box **Variables search** can be opened by clicking on the link Variables search or under **Add search function** on the button **Variables search**.

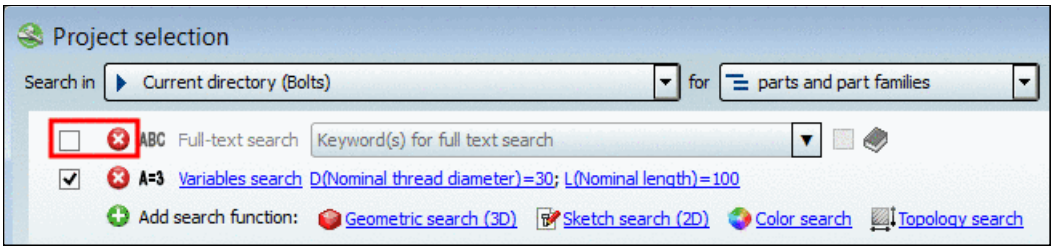
[5] The selection happened on the "**Catalogs**" tabbed page. If you selected the option "**Current directory**" under "**Search in**", this the respective directory is displayed in brackets.



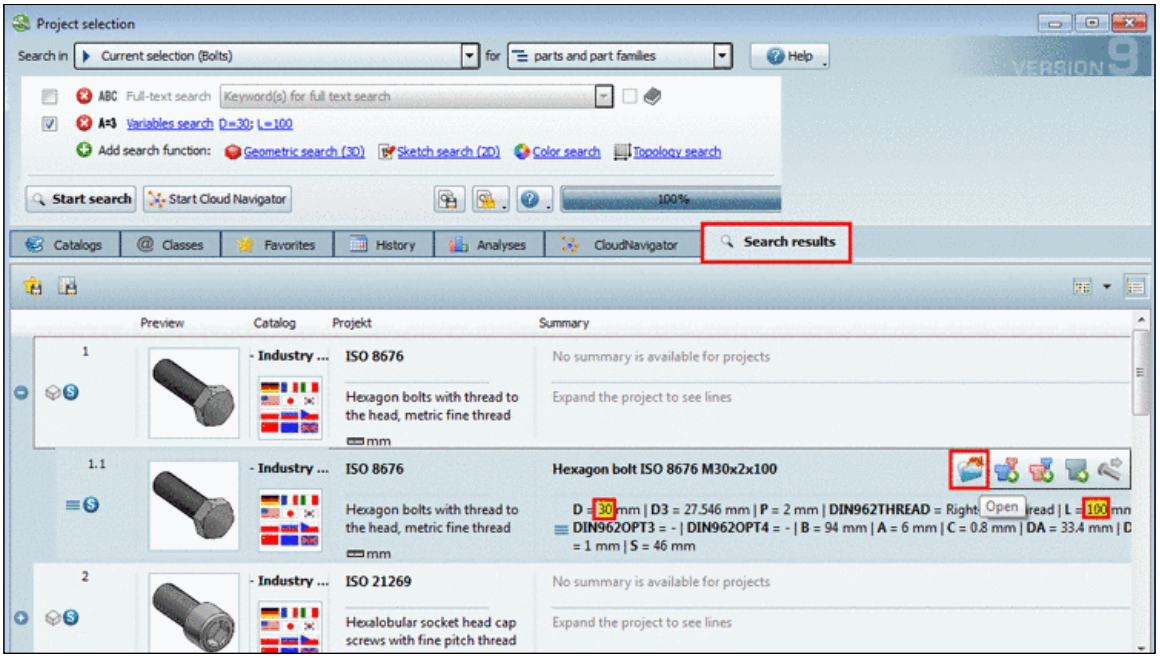
4. Click on **Commit**.
   -> Now the method is displayed with the currently chosen parameters.



5. You can use the variable search as only method or in combination with others. Not desired methods can either be deactivated (clear checkbox) or be deleted). In this example we will use the variable search as only search method. Deactivate or delete the **Full-text search**.



6. Click on the button **Start search**.
   -> The search results are listed on the **Search results** tabbed page. When you click on the plus sign, below the part family the single parts are listed. The following figure shows 1 line, which exactly meets the query (D equals 30 and L equals 100).

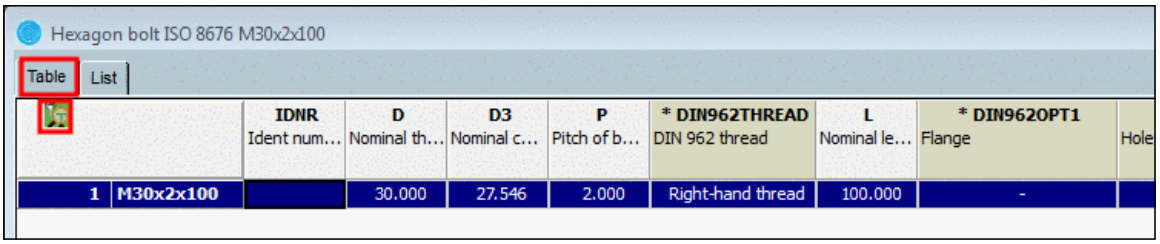


When you move the mouse over a result line, then different buttons are displayed.

7. In the single part line click on the icon **Open**.

   -> The view switches to the **Part view**.

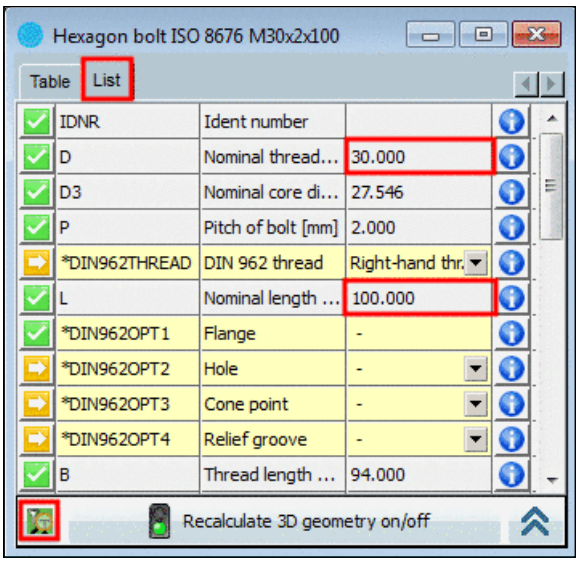
8. Select the **Table** tabbed page.



Part view in "Table" mode

Top left at the icon **Search filter on/off** you can recognize, that the characteristics have been filtered. If you want to see all characteristics, then click on the icon.

Select the **List** tabbed page.



Part view in "List" mode

Also here you can recognize at the icon **Search filter on/off** ,that the characteristics have been filtered. In this case at the filtered variables there is no list field displayed, via which you could select other values. When you want to remove the limitations, then click on the icon. Afterwards at D and L the list field is displayed again and you can select other values.

2.1.1.4.3.2. Variables search Example 2: Call up directly from variable value of a search result

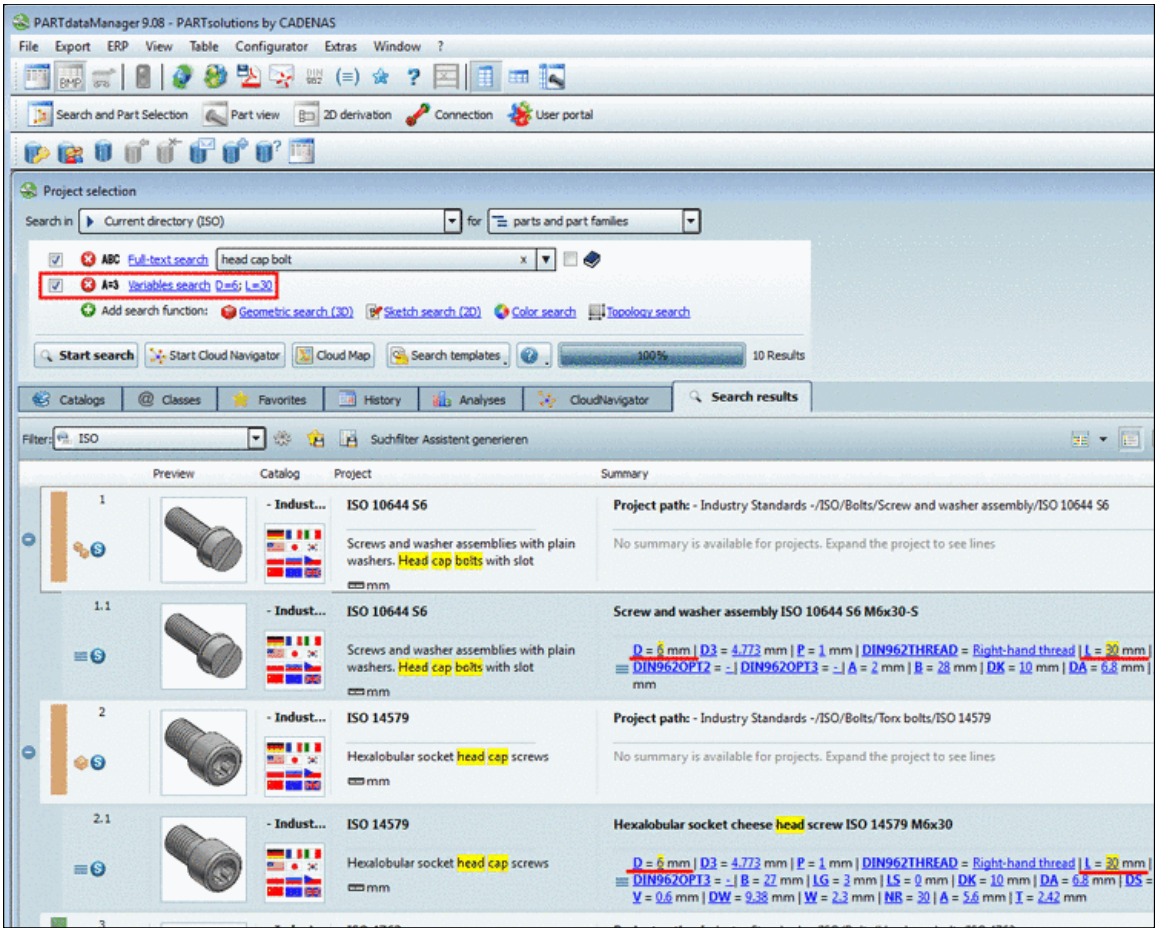
A **Variables search** can **directly be performed based on a search result**.[6]

In the following the possibilities are explained through a little example.

1. Conduct a **Full-text search** with the search term "Head cap bolt".
2. View a desired characteristic in the **Details** mode .
3. At the variable "**D**", click on the variable **value**.

   -> Now, based on the already existing settings an additional variable search with the clicked variable value is performed.
4. Repeat the procedure at the same project or any other (e.g. by clicking on the value 30 at the variable "**L**".

   -> Now you still see only characteristics according to the past search selections.

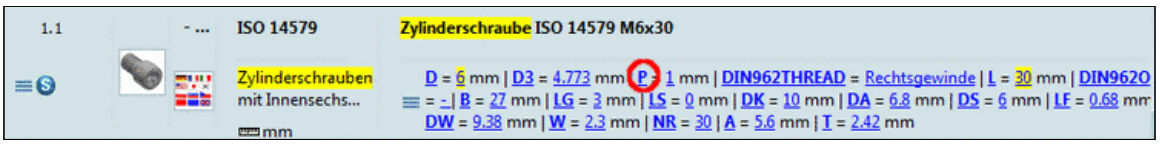


In the exemplary figure variable searches with D=6 and L=30 have been performed.

-> All search terms and variable values are highlighted with yellow.

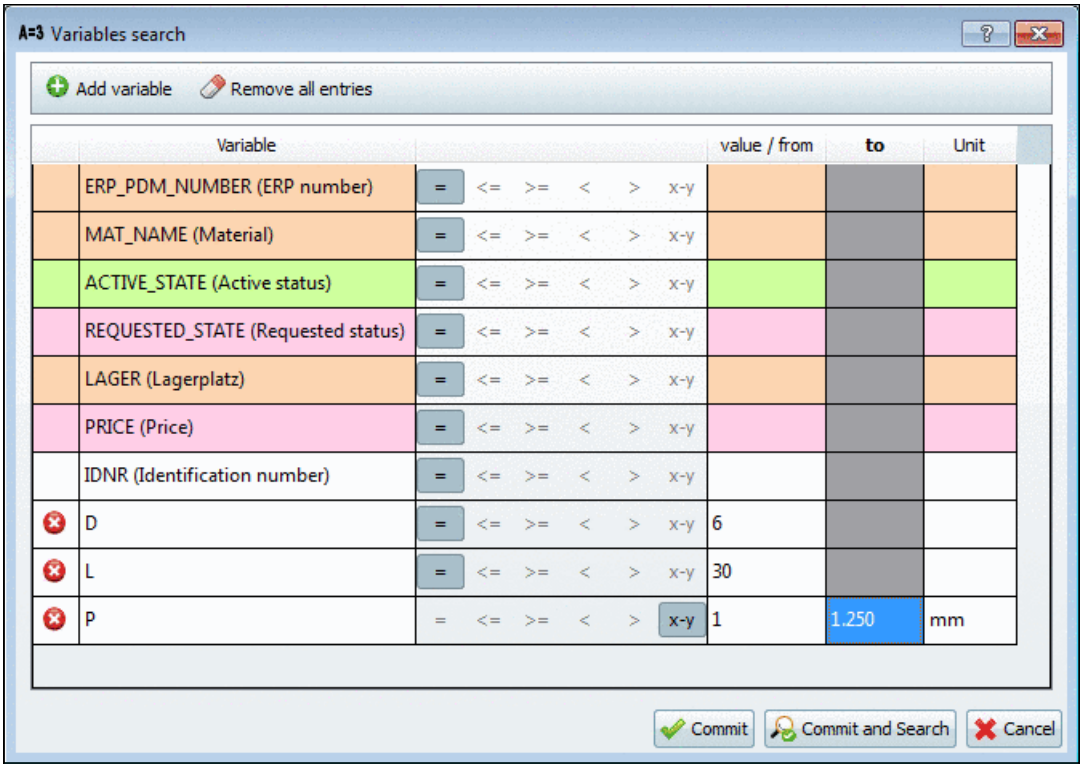
5. Now do **not** click on a variable **value**, **but** on a **variable**.

[6] You can configure the feature administratively (on/off). See Section 1.1.7.5.6.2.3, “Search result - Clickable variables and values” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.



Example: Click on the variable "P"

-> The dialog box **Variables search** opens.



Alternatively you could have opened the dialog box in the dialog area of search methods by clicking on **Variables search** just as well.

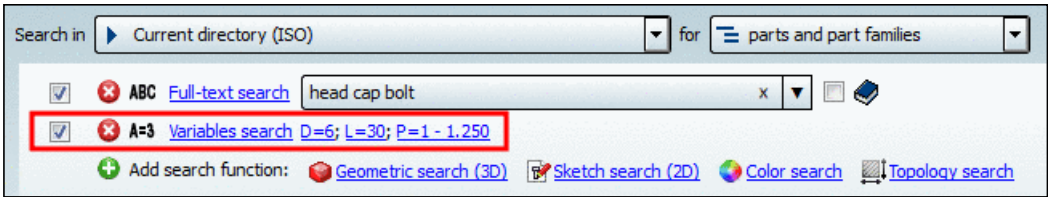
For "P" possibly change the mathematical operator from **equals (=)** to **Range (from-to)** and enter the desired values.

You can also change already made settings here.

Furthermore you have the opportunity to search for ERP variables in the dialog box here (e.g. for a certain prefix).

Click on **Commit**.

You will see all made settings above under **Variables search**.



Dialog area of search methods: Variables search

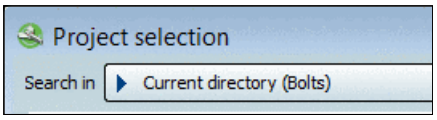
2.1.1.4.3.3. Variables search setting options and functions

In the following the setting options and functions in the **Variables search** dialog box are explained:

- Automatically displayed variables:

- **Geometric variables**:

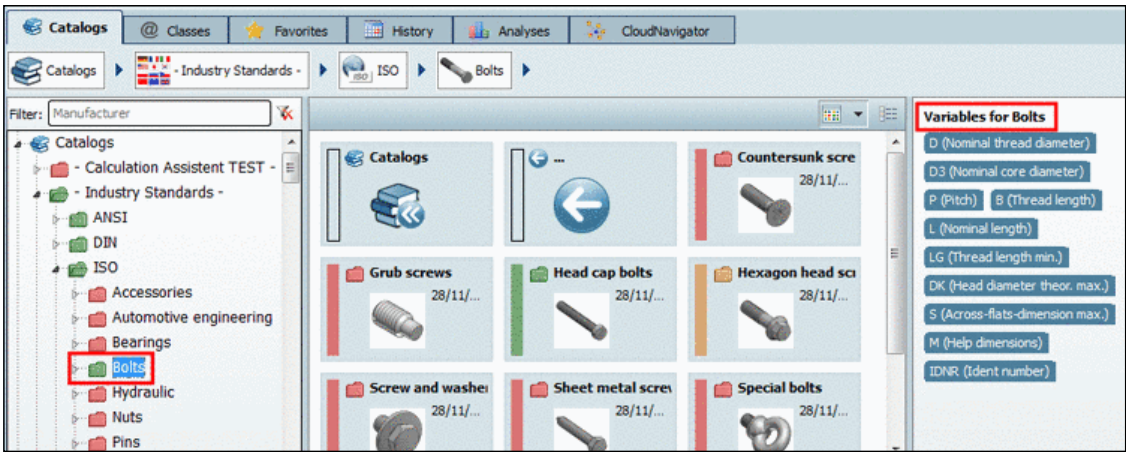
  The displayed variables (attributes) depend on the currently selected directory in the index tree.



Example: Current directory (Bolts)

When selecting via **Catalogs**, **Favorites**, **History** or **Analyses** tabbed page this are those variables, **which are shared by all parts of the selected directory level**.

The display is on the right side in the dialog section **Variables for <directory name>**.



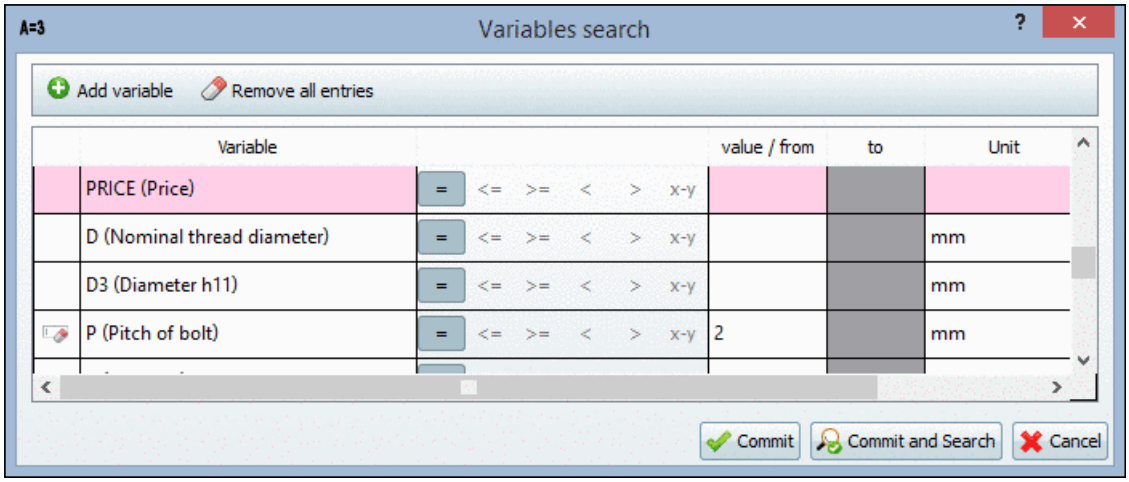
Variables for <directory name>

When selecting via **Classes** tabbed page this are those **attributes**, which are shared by all parts of the selected directory level (and the subordinated).

Insert values at the desired variables. Then the icon is displayed.

- Manually added variables:

  After click on **Add variable** an empty row is added. Insert the variable name and the value. With click on the entry can be removed again.



Example: The variable "P" has been added with the value 2.

- Select the desired **mathematical operator**:

  Possible operators are **equals (=)**, **less or equals (<=)**, **greater or equals (>=)**, **less than (<)**, **greater than (>)** and **Range (from-to)**.

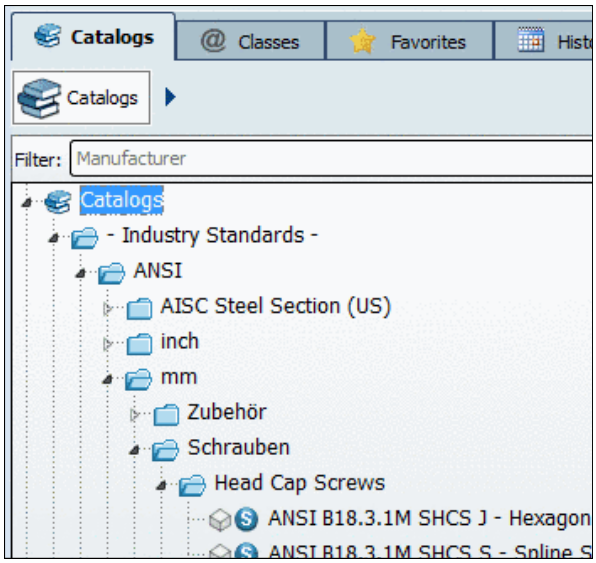
- **value / from** and **to**:

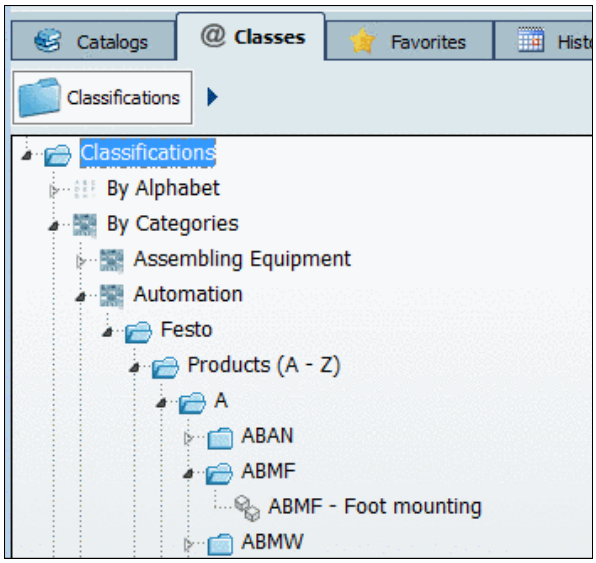
  Enter the desired value in the **value / from** column. When the option **Range (from-to)** is used, then please enter a value in the **to** column in addition. The **value / from** can contain both text and numeric values.
- **Unit**: Numerical values can occur with or without unit. In this column you can optionally determine, whether numerical values have to be displayed and if yes, with which unit. If needed select the desired unit in the list field.

2.1.1.4.4. Part selection via index tree

Manual search of index trees:

Select the **Catalogs** or **Classes** tabbed page for example and search the index tree for the desired part.





Starting interface of PARTdataManager is always **Part selection**. Via the **Search and Part Selection** button you can always return here.

Beside the search method selection section the user interface is subdivided into **3 main sections**.

1. **Tree structure** - The **Catalogs**, **Classes**, **Favorites** and **History** tabbed pages:

   Choose any tabbed page and browse the tree structure.

   In the tree structure you always **keep in view** on which level you are.

   When you single-click on a **directory** then on the right side you can see the respective **subdirectories** (or at the deepest level the projects) either in the **Symbols** or in the **Details** mode.

   Furthermore at each tabbed page you can specify in the index tree, for which catalog or which directory level a search has to be performed.

2. **Flat structure with preview images or details** - **Symbols** or **Details** mode:

   Here the **subdirectories** (or **projects**) according to the selection in the tree are displayed.

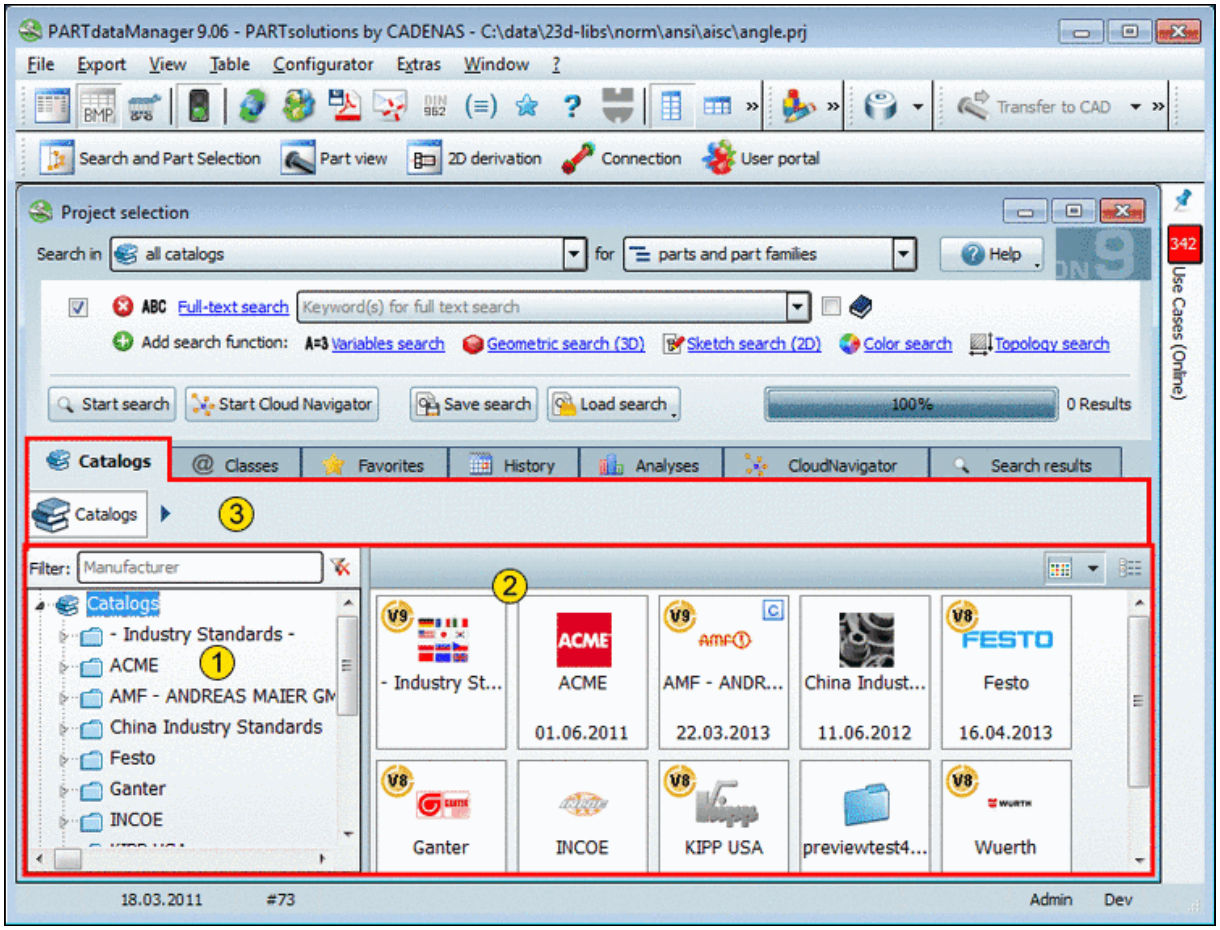
- In the **Symbols** mode preview images of the directories or projects are displayed. For more information see under Section 2.1.1.4.4.1, “ Symbols mode ”.
- In the **Details** mode you receive detailed information such as **Name**, **Description**, **Version**, **Unit**, **End date**, etc. in a table view. For more information see under Section 2.1.1.4.4.2, “ Details mode ”.

③ **Breadcrumbs** (navigation path)

The navigation path shows the path of the current selection.

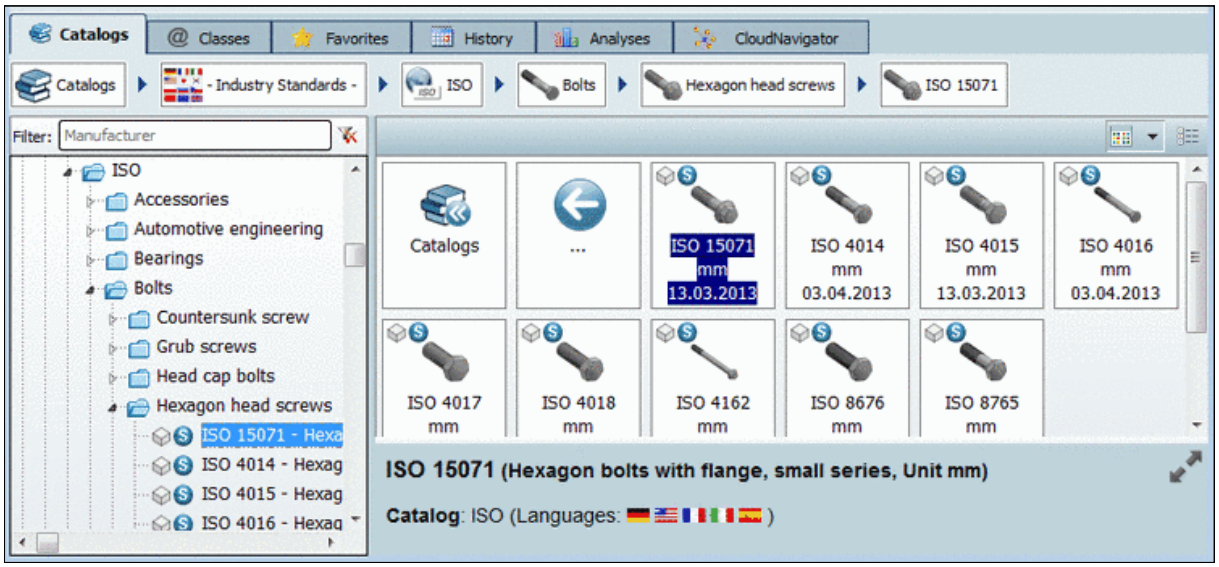
You can jump directly into a level by clicking on the directory symbol.

You can find more information under Section 2.1.1.4.4.7, “ Navigation via navigation path (breadcrumbs) ”.



Example: In the figure on the left side the root directory "Catalogs" is selected. On the right side the single catalogs are displayed.

On the last level of a directory branch a **project icon** (e.g. part or assembly) appears.



Via double-click on a project the user interface changes to the **Part view**. Detailed information concerning **Part view** is found under Section 2.1.2, “ Part view ”.

2.1.1.4.4.1. Symbols mode

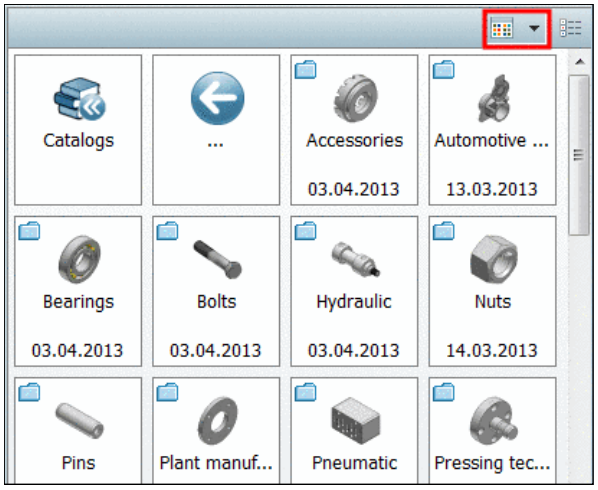
The **Symbols** mode represents the index tree selection with **preview images**. At the deepest level the projects are displayed.

Select the desired directory by double-clicking on the preview image.

Results after double-clicking:

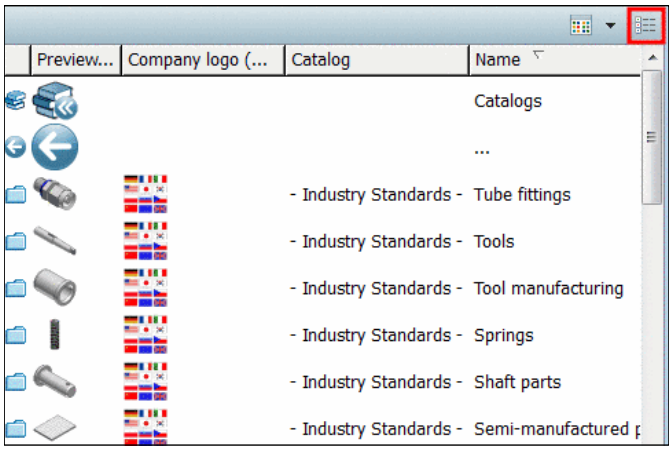
- The selected directory shows up in the breadcrumbs row. (See Section 2.1.1.4.4.7, “ Navigation via navigation path (bread-crumbs) ”)
- Under **Symbols** now the elements of the next lower level are displayed.

  You go one step back each time you click on the **back arrow button**.
- On the left in the tree the respective level is also selected.



2.1.1.4.4.2. Details mode

In the **Details** mode you receive more information such as **Name**, **Description**, **Version**, **Unit**, **End date**, etc. in a table view.



To navigate in the depths, double-click on a row.

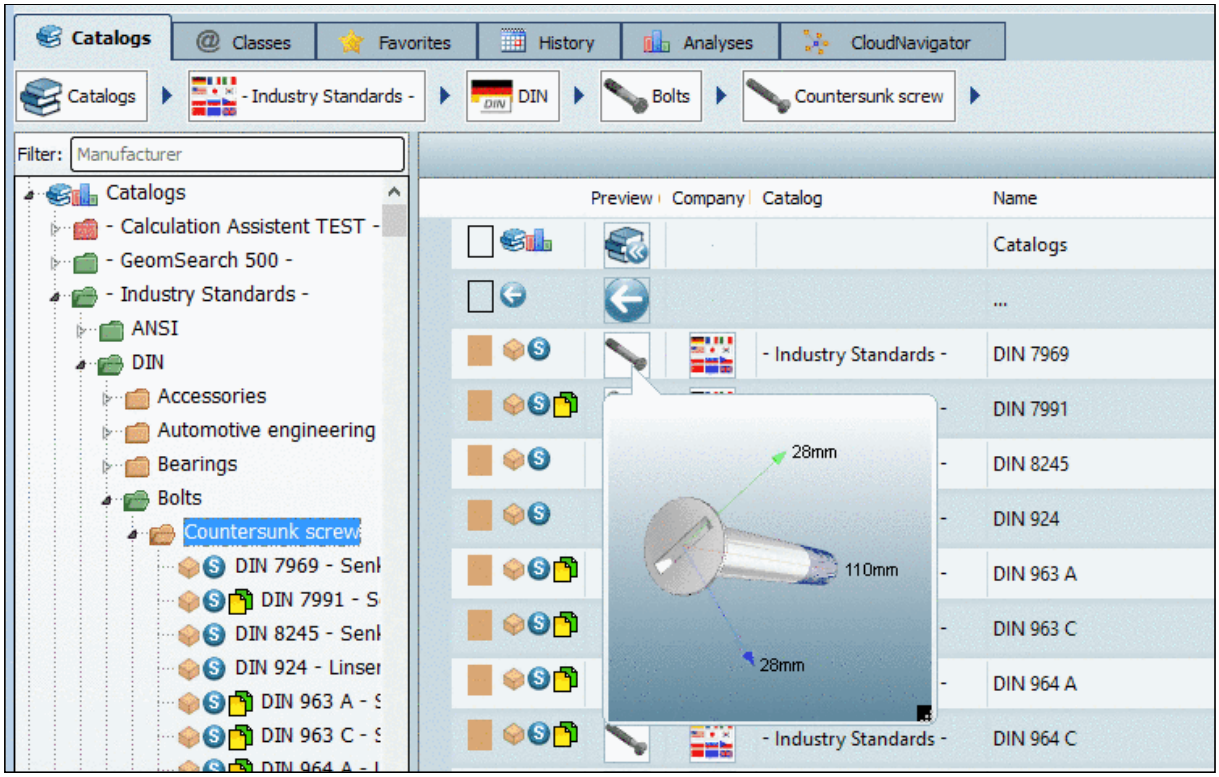
Results after double-clicking:

- The selected directory shows up in the breadcrumbs row. (See Section 2.1.1.4.4.7, “ Navigation via navigation path (breadcrumbs) ”)
- Under **Details** now the elements of the next lower level are displayed.

  You go one step back each time you click on the **back arrow button**.
- On the left in the tree the respective level is also selected.

Call up 3D Tooltip

Especially when **Preview** und **Company logo** are set on "small" it is helpful to move the mouse over the preview images in order to display the **3D Tooltip**.



Enhanced preview image

The 3D Tooltip is scalable and animated. In the down right corner you can find an icon to draw up the size. The extensions of X, Y and Z axis are automatically displayed.

Whether the **3D Tooltip** (size small, medium, large) or a **Preview image** shall be used, you can set in the **Extras** menu under **Preferences...** -> **Part selection** -> **3D Tooltip**:

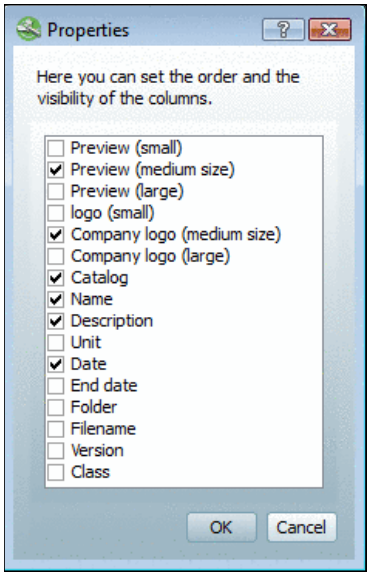
Under **PARTdataManager** -> **Extras** menu -> **Preferences...** -> **Part selection** -> **Show tooltip with previews** you can switch on and off the **Preview image**.

Order and visibility of columns

You can set the **order and visibility of columns**.

Right-click on a column head.

In the dialog box that shows up, you can activate/deactivate and move the desired columns.



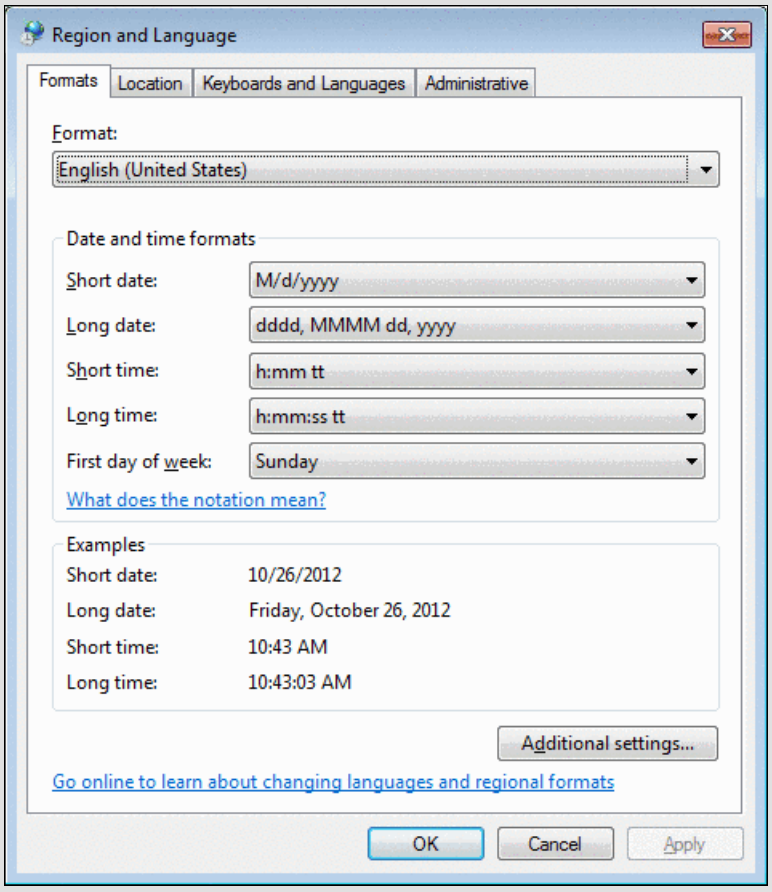
Set order and visibility of columns

Sorting

Via clicking on a column header you can sort the rows depending on the values of the desired column.

Note

The date format of Windows is used. You can define the format in the "Region and Language" dialog.

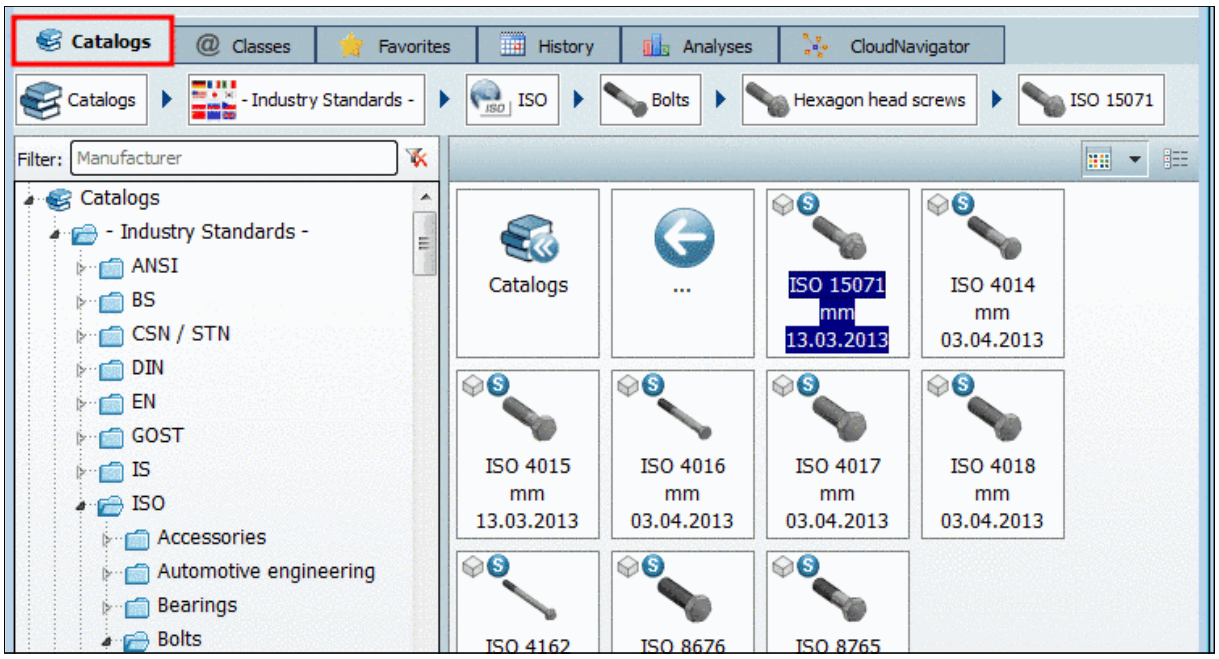


The date format is automatically adapted to the set $CADENAS_LANGUAGE. Using English for example "2011/05/02" is displayed.

2.1.1.4.4.3. Catalogs tabbed page

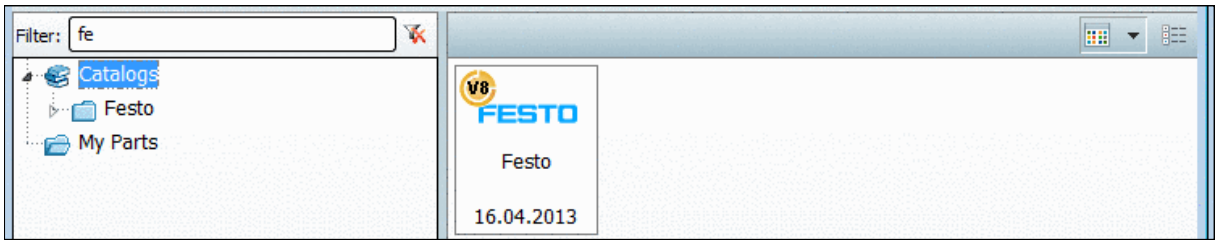
On the **Catalogs** tabbed page you can find the desired part via the catalog index with its sub-directories down to the project file. Successively open subdirectories. The branching symbol in the directory tree identifies those folders which contain other folders or projects.

To the right, on the **Symbols** or **Details** page, the next deeper level of subdirectories according to the selection on the left is displayed.



Catalogs

Use the **Catalog filter**, when many catalogs are installed.



Catalogue filter

Advantage: Overview and quick finding

You can also insert several suppliers comma separated.

```
ahp,afag,fibro
```

During typing under **Filter** the catalog view is already changed on the fly.

Delete entries via  .

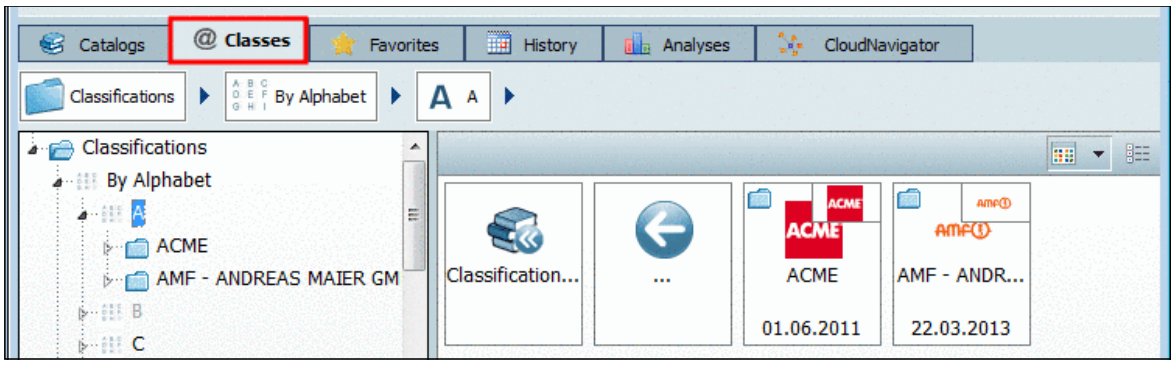
2.1.1.4.4.4. Classes tabbed page

On the **Classes** tabbed page you can find the parts classified according to different classifications:

- **By Alphabet**

  1. Click on **By Alphabet**.
  2. Click on the initial letter of your choice.

     --> Now catalogs are displayed whose name begins with the selected initial letter.
  3. Now select the desired catalog.

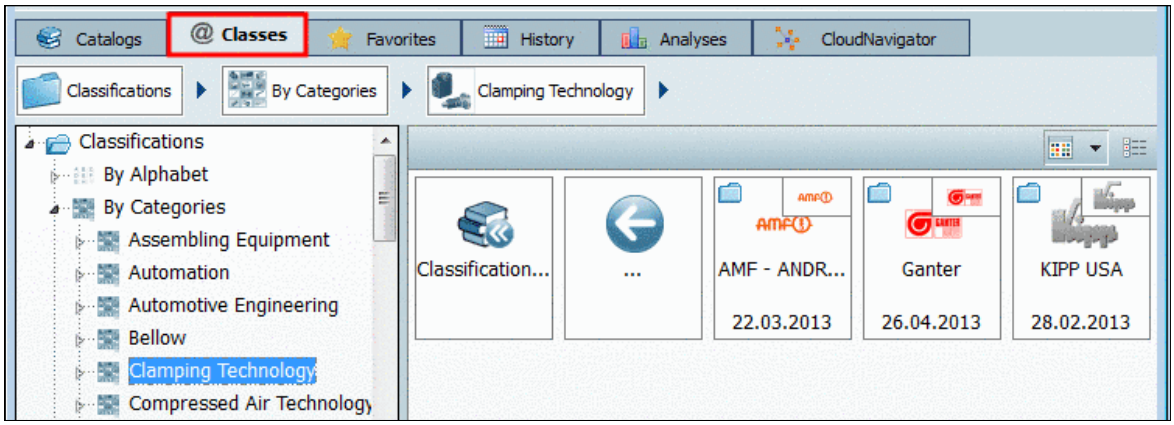


Classification: By Alphabet

- **By Categories**

1. Click on **By Categories**.
2. Select a category.

   --> Only those catalogs are shown which contain parts in the selected category.
3. Now select the desired catalog.

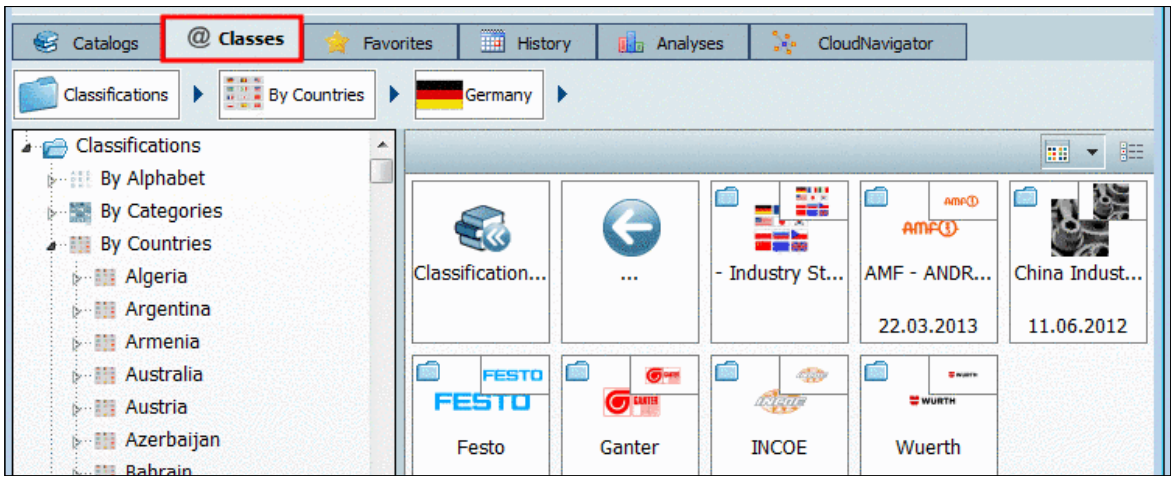


Classification: By Categories

- **By Countries**

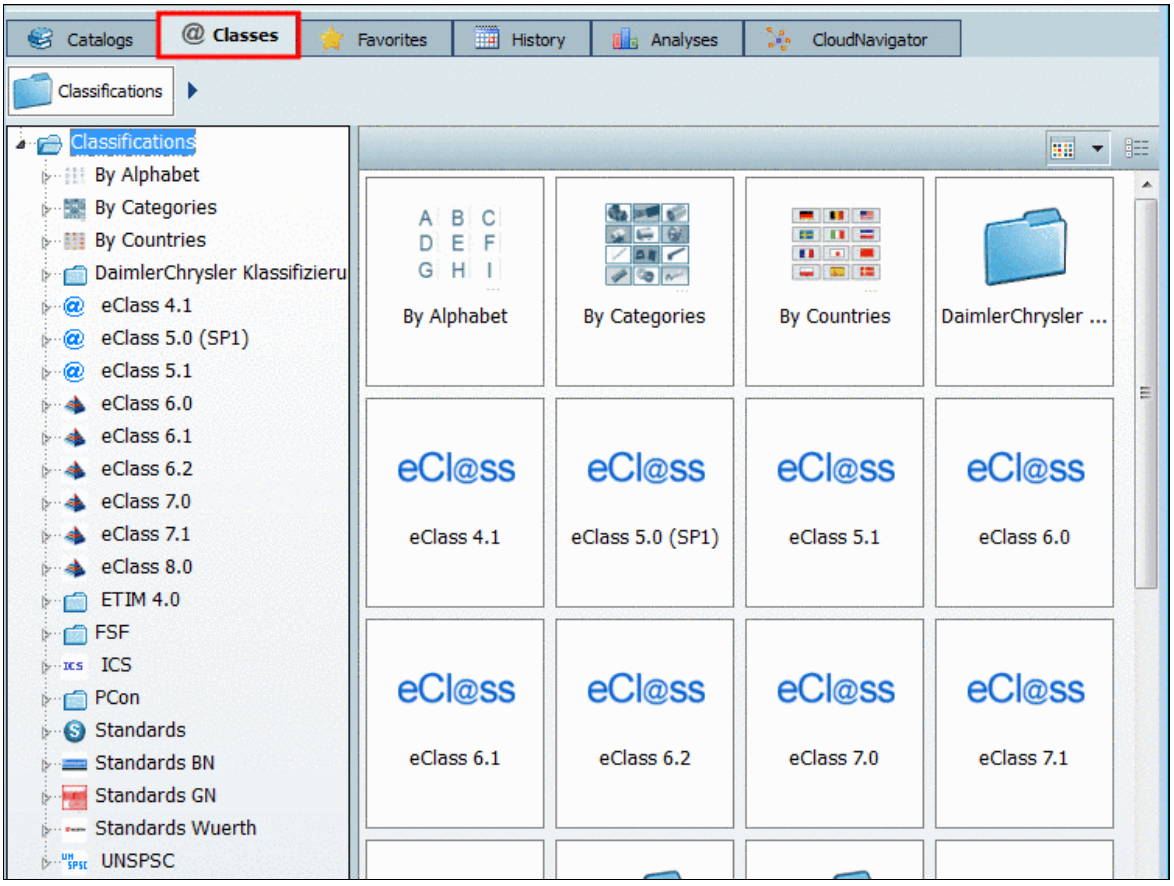
1. Click on **By Countries**.
2. Click on the country of your choice.

   --> Only catalogs are shown which deliver parts for the country you selected.
3. Select the desired catalog.



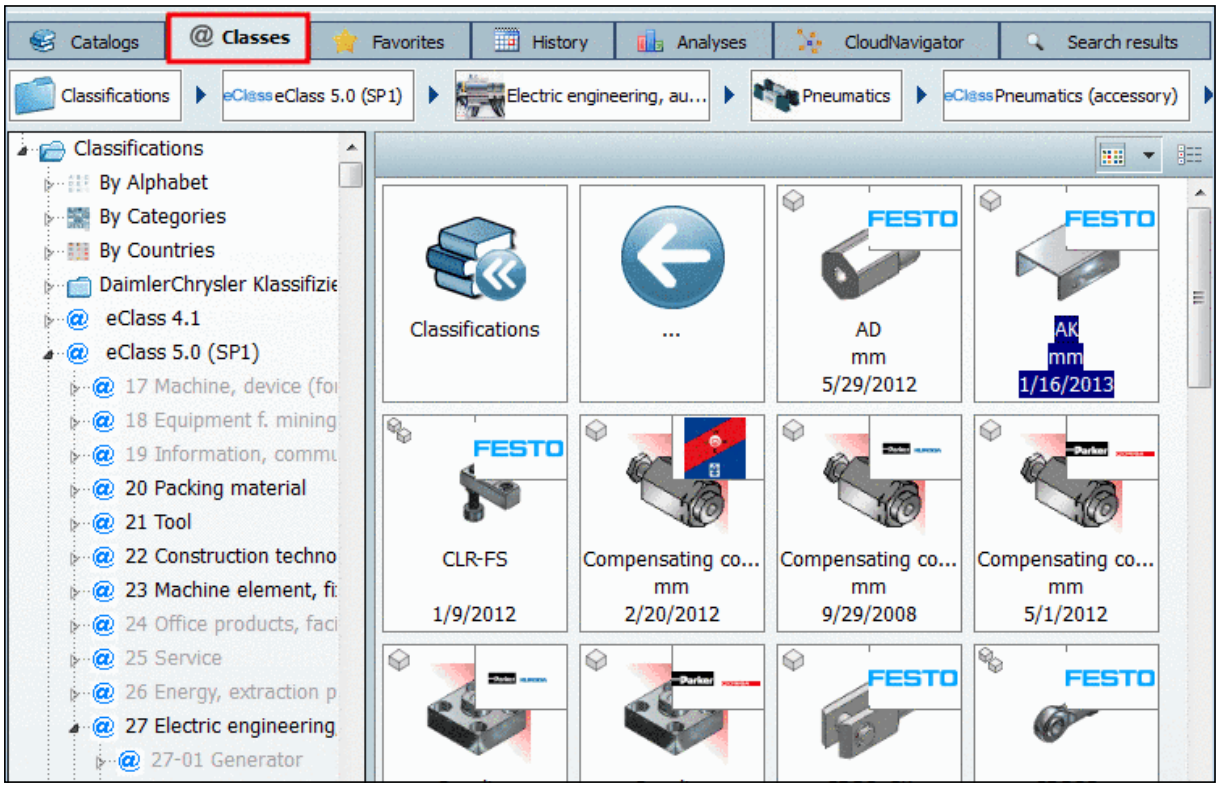
Classification: By Countries

- More classifications:
  - Daimler Chrysler classification
  - eClass 4.1
  - eClass 5.0 (SP1), 5.1, 6.0, 6.1, 6.2, 7.0
  - FDS
  - ICS
  - PCON: Connection classification
  - Standards
  - Standards BN - Bossard
  - Standards GN - Ganter
  - Standards Wuerth
  - UNSPSC



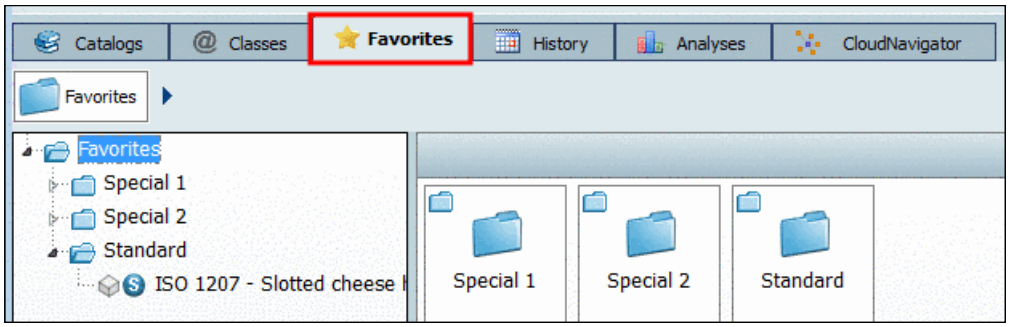
Classifications at a glance

As soon as you have clicked on a certain class in the index tree, the subclasses of the next lower level will be shown to the right under **Symbols** or **Details**.

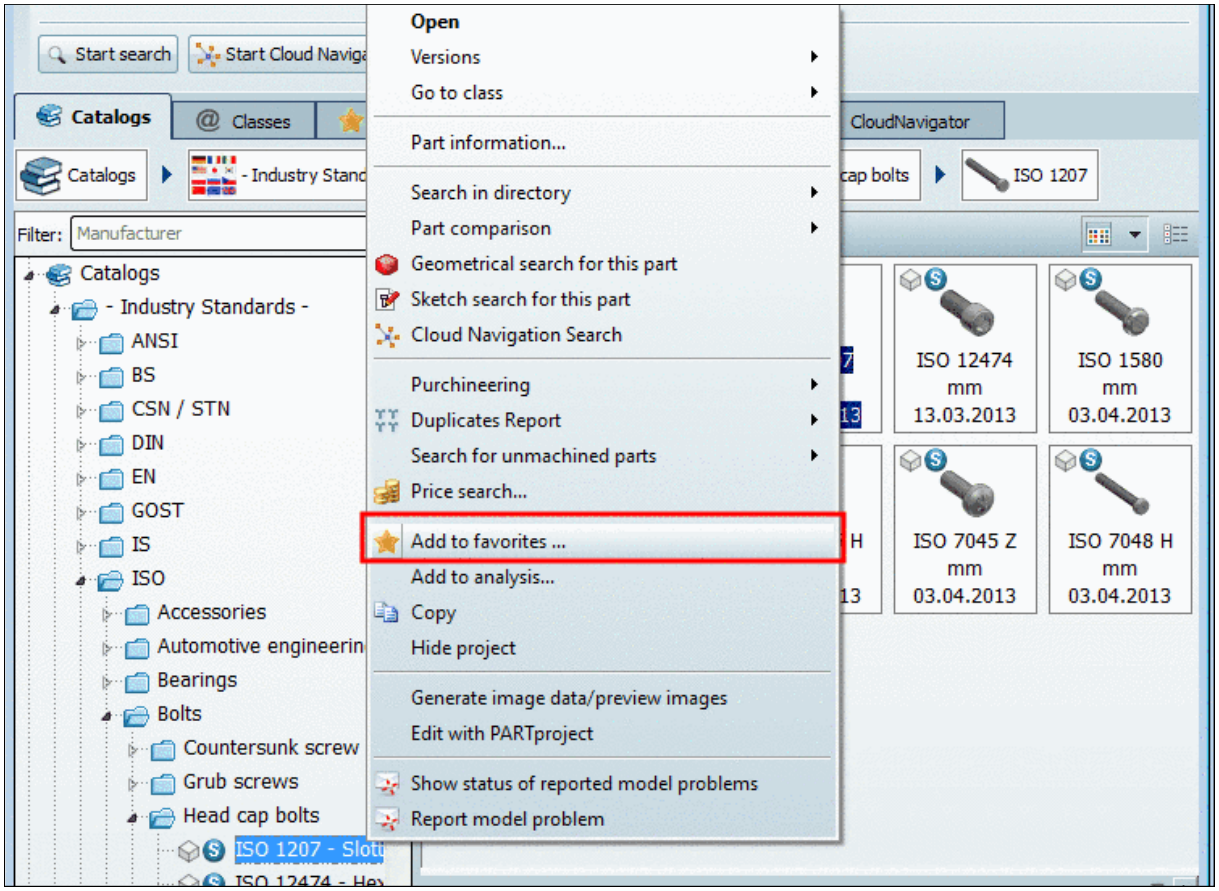


2.1.1.4.4.5. Favorites tabbed page

On the **Favorites** tabbed page you can remember often used directories or projects via the **Add to favorites** context menu command.



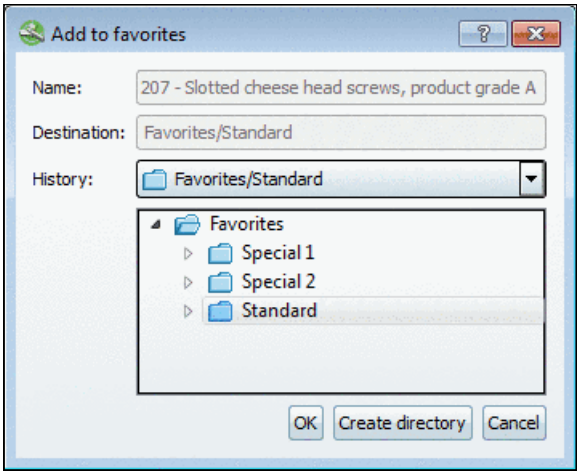
You can find the **Add to favorites** context menu command on the **Catalogs**, **Symbols**, **Details**, **Classes**, **History**, **Analyses** tabbed pages and in the **search results**.



"Add to favorites" exemplified under "Catalogs" or "Symbols"

Proceed as follows:

1. Select the project or directory to remember under the "Favorites" tabbed page.
2. Click on the **Add to favorites** context menu command.
3. -> The **Add to favorites** dialog box opens.



In the dialog box the already existing directory structure is displayed.

Now you have the following options:

- Select the desired directory in the index tree or at first create other directories via the **Create directory** command.
- Select the desired storage path under **History**.

  At each saving the history of the target directories is also saved.

4. Finally confirm with **OK**.

-> Now your selection is available on the **Favorites** tabbed page.

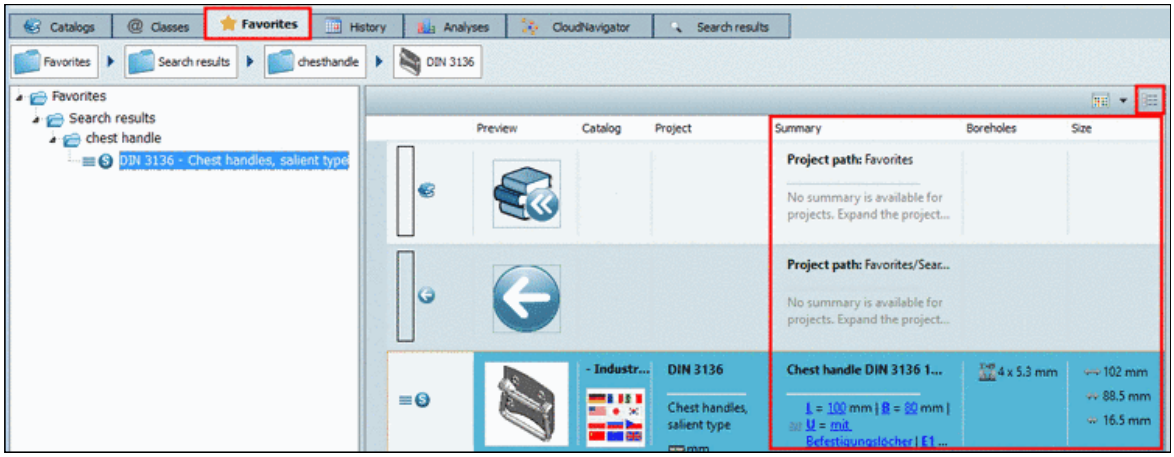
Export favorites / Import favorites

On the **Favorites** tabbed page on directory level you can find the **Export favorites** / **Import favorites** commands.

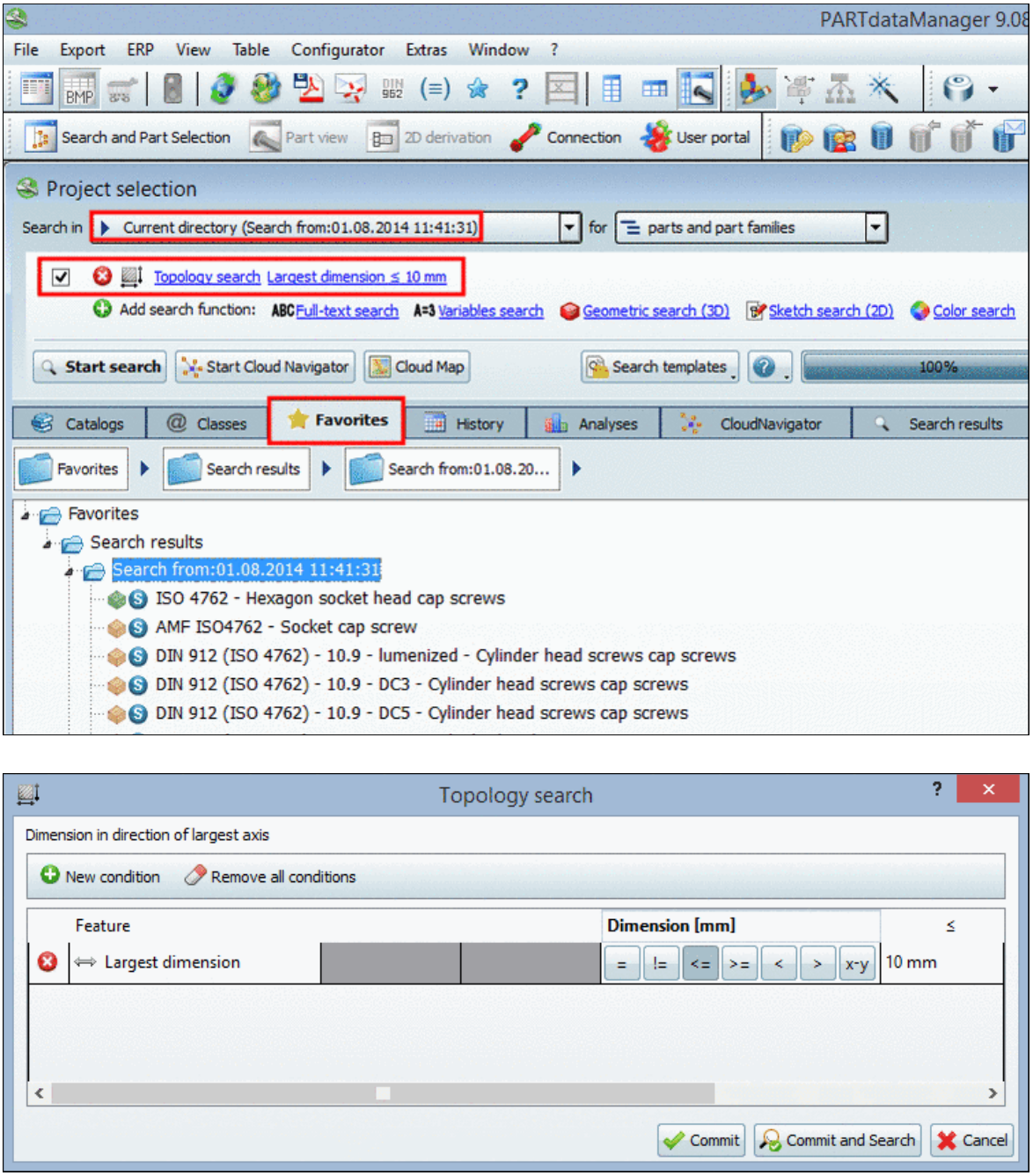
This will help you easily transfer your personal favorites onto another computer.

Tips:

- For favorites, which have been saved on the tabbed page **Search results** with the method **Save search results in favorites**, you have the same column information available here again. Also see Section 2.1.1.6.1, “ Save search results: in favorites / in file”.



- On the tabbed page **Favorites** you can perform any further searches based on the results.

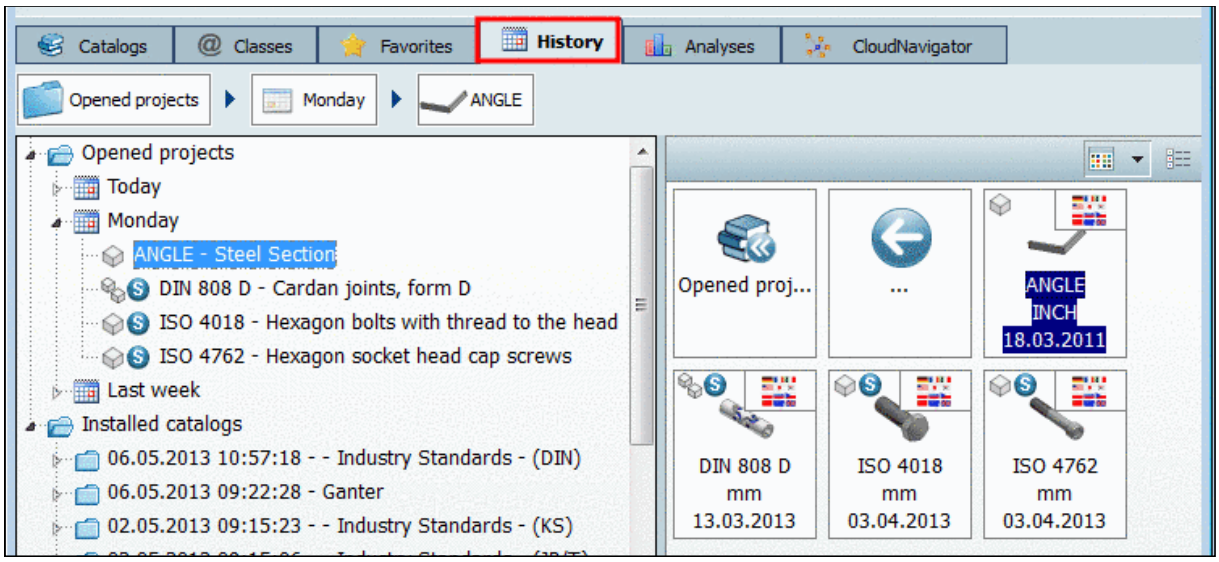


Example: Topology search with "Largest dimension" <=10

2.1.1.4.4.6. History tabbed page

On the **History** [7] tabbed page, all parts and/or assemblies that have already been opened are listed in calendaric order.

[7] The history can be deleted optionally. On this please see under Section 1.1.4.4.5.3, " Cleanup versions " in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.



2.1.1.4.4.7. Navigation via navigation path (breadcrumbs)

Note

For orientation and navigation purposes the navigation path ("Breadcrumbs") is displayed.

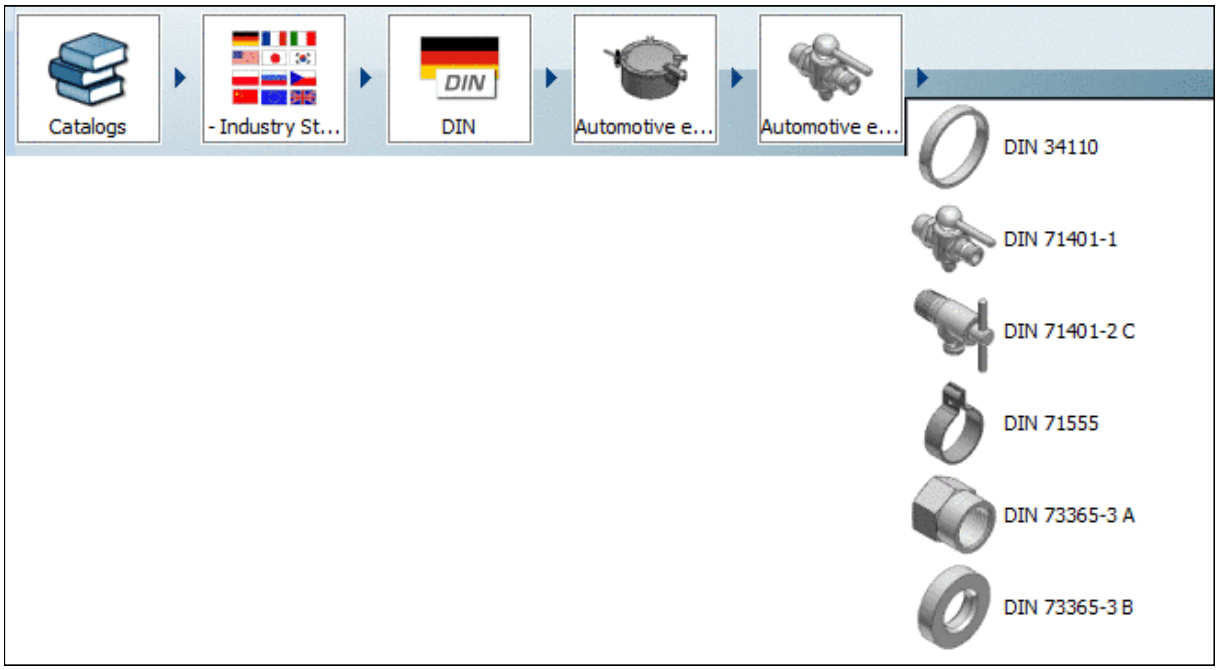
As you go deeper into the directory structure, the selected directory is added to the **breadcrumbs row** (navigation path), so that you can see the current selection directly in front of you.

Breadcrumbs

You can jump directly into a level by clicking on the directory symbol.

Via the **arrows** you can hide/show the respective subdirectories. Move the mouse over the desired directory (the selected is then highlighted).

To jump into the highlighted directory, simply click once.



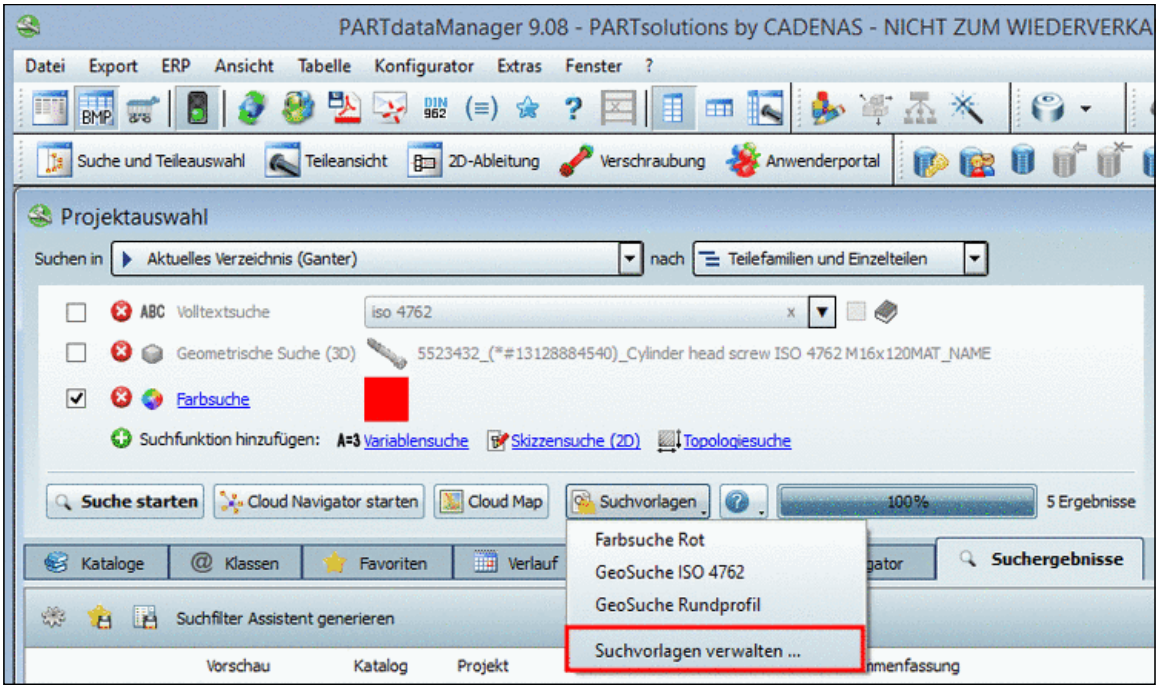
Breadcrumbs with subdirectories

2.1.1.5. Search settings: Save as template / load

Do you often use the same search settings?

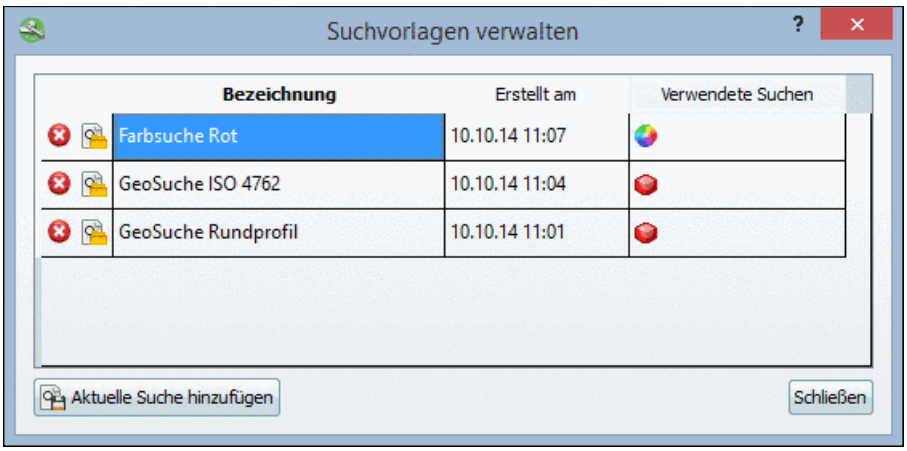
Especially when complex settings are used you can save time when using **Search templates**:

1. Perform all desired settings. (As many methods as you like can be used.)



2. Open the list by clicking on the small black arrow of the button **Search templates** and then click on the list item **Manage search templates ...**.

   -> The dialog box **Manage search templates** opens.

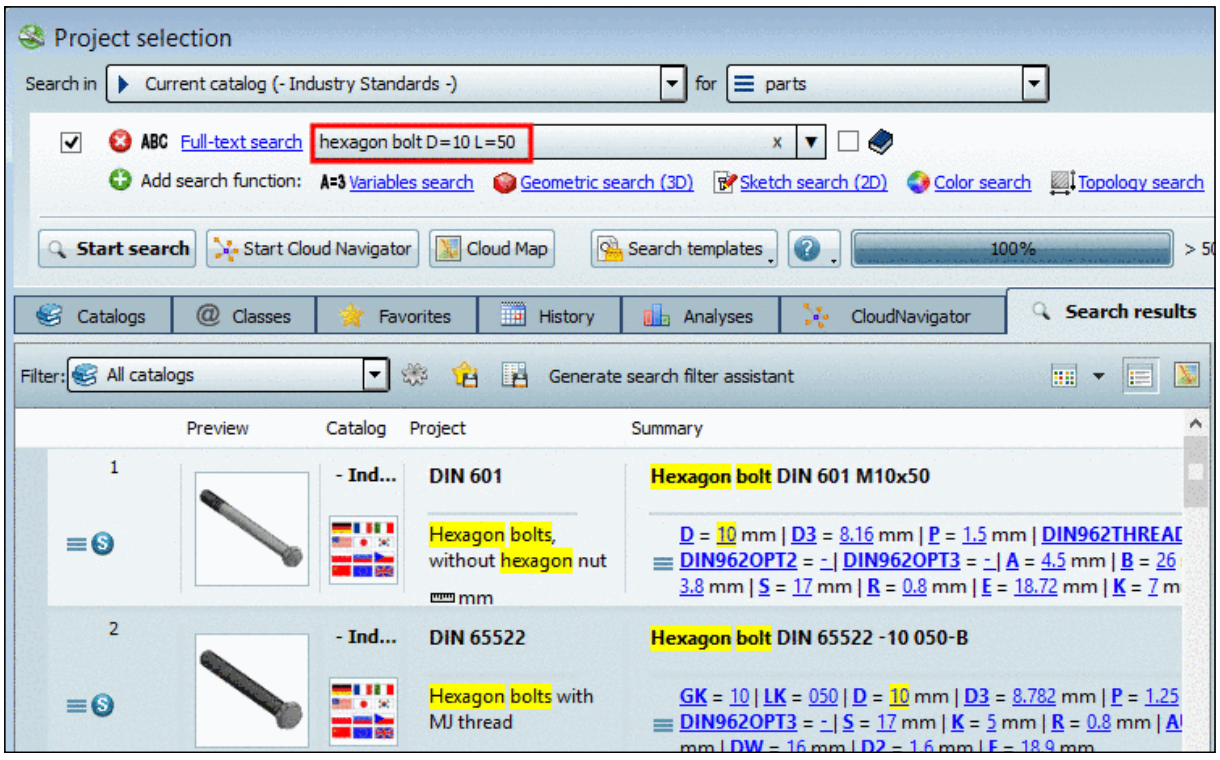


3. Click on the button **Add current search**.
   Enter the desired **Description** for the new created search template and confirm with **OK**.
   -> The template is saved.
4. When you want to load the saved template again, then click on the button **Search templates** and then in the list on the desired search template.
   Alternatively you can open the dialog box **Manage search templates ...** again and there click on the icon **Load search** at the desired template.
   -> The dialog box automatically closes and the search settings are loaded.

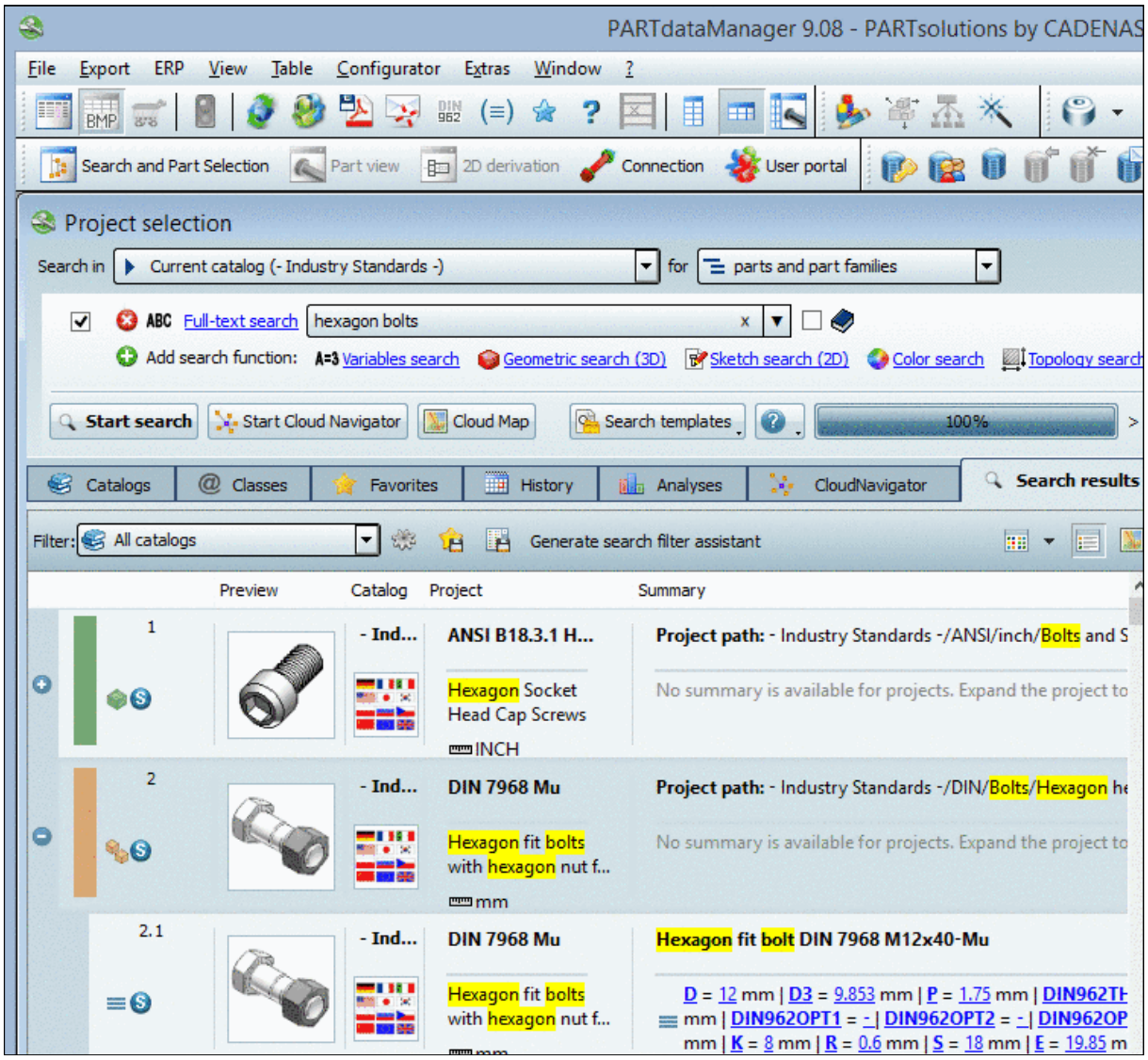
By clicking on you can delete templates which are not needed anymore.

2.1.1.6. Search results

The search results are displayed below on the **Search results** tabbed page (mode **Symbols** or **Details** or **Cloud Map**).



Search for "parts" : Search results in Details mode: The search results are highlighted in yellow.



Search for "part families and parts" : Search results in Details mode: The search results are highlighted in yellow.

You can recognize which of the options **Show parts** (= show characteristics) or **Show parts and part families** had been chosen for the search at the icons at each part (part family, part , part family, assembly , certain characteristic of a part or assembly). Compare Section 2.1.1.3, “ Search for Parts | Part families and Parts ”.

Enhanced information in popup window:

In the following cases you can find more information in the popup window:

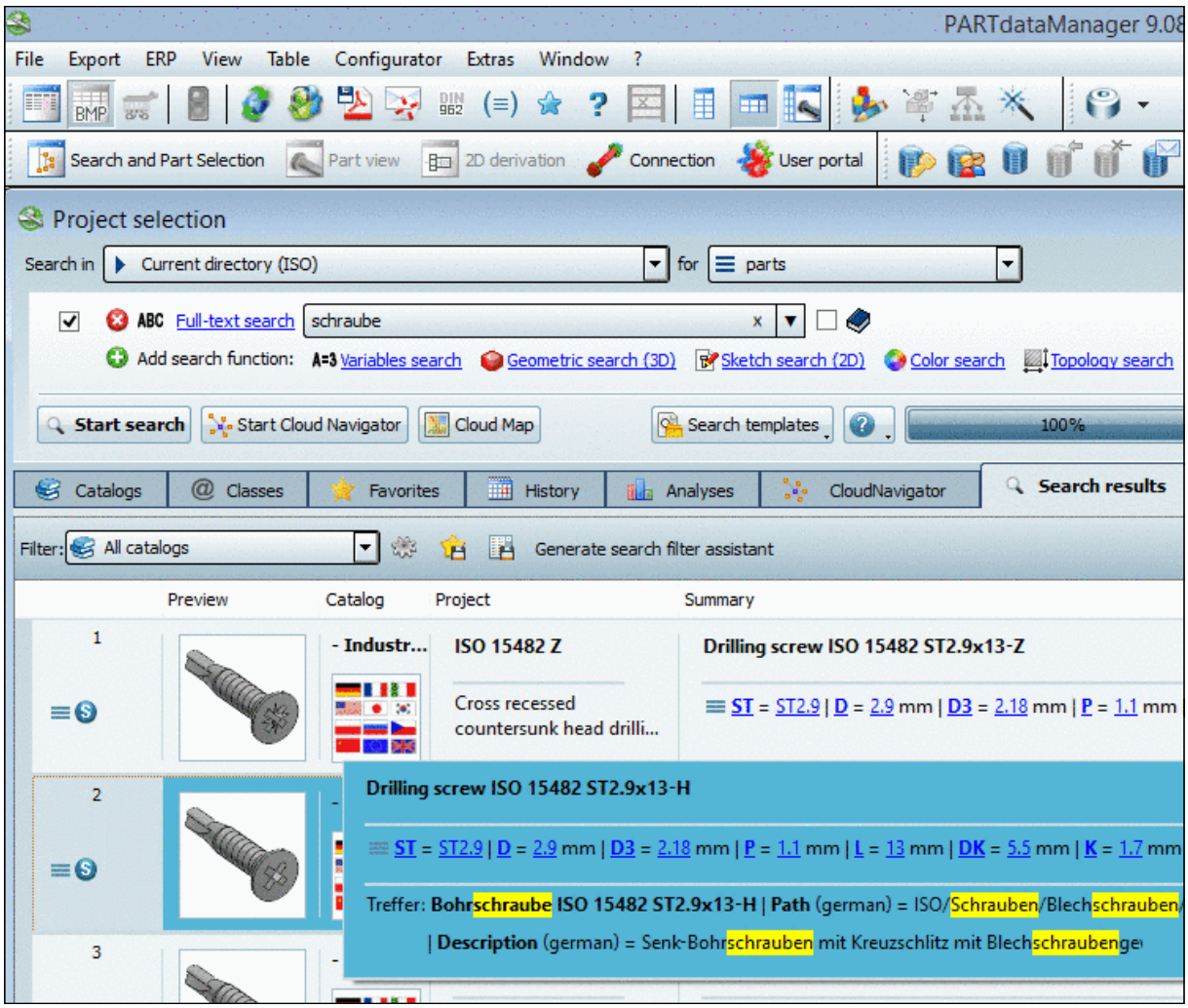
- Table cell too small
- Hit resulted from an accordance in an other language
- Hit resulted from an accordance in path

> **Note**
>
> **Standard text** (NT), **Standard number** (NN), **Standard description** (NB), the **project path**, **textual table fields** and also **numerical table fields** are searched in **all languages**.

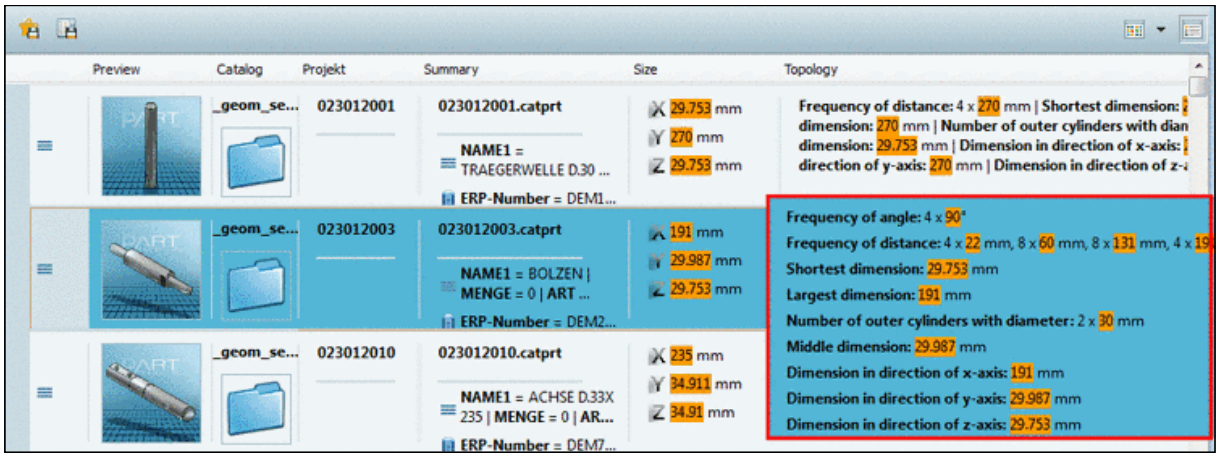
Popup window

When you want to open the popup window in order to see all information, click into the respective cell of the column **Summary**.

Examples:



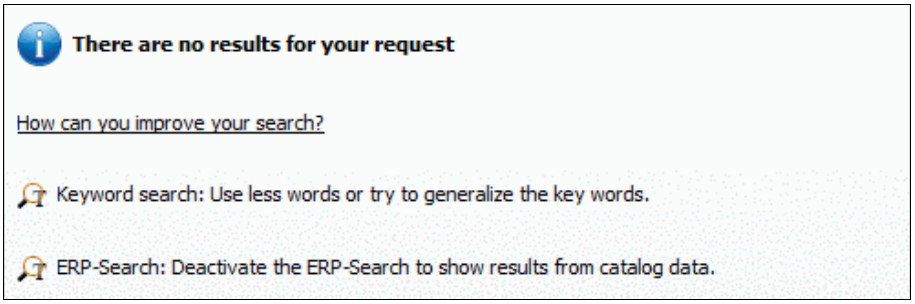
When searching for "schraube" in an english user interface in the popup window you can see that the hit is based on an accordance in path and description.



Topology search with "Any parameter" delivers a lot of values. In order to see all values, click into the cell. The single values are highlighted in orange.

More information on Search results:

- **No search results**:



- Use less keywords or try to generalize the keywords.
- Limit the search area less.

- **More precise (AND) / Broaden search**

  If you get insufficient search results, please regard the notes under Section 2.1.1.6.2, “ "Related results" - Specify / broaden search ”.

- **Show more results ...**:

  If there are more than 50 results[8] below at the page end the **Show more results ...** button is displayed. Normally the desired results are under the first hits. However if you want to see more results, then successively click on **Show more results ...** or **Show all results...**.

2.1.1.6.1. Save search results: in favorites / in file

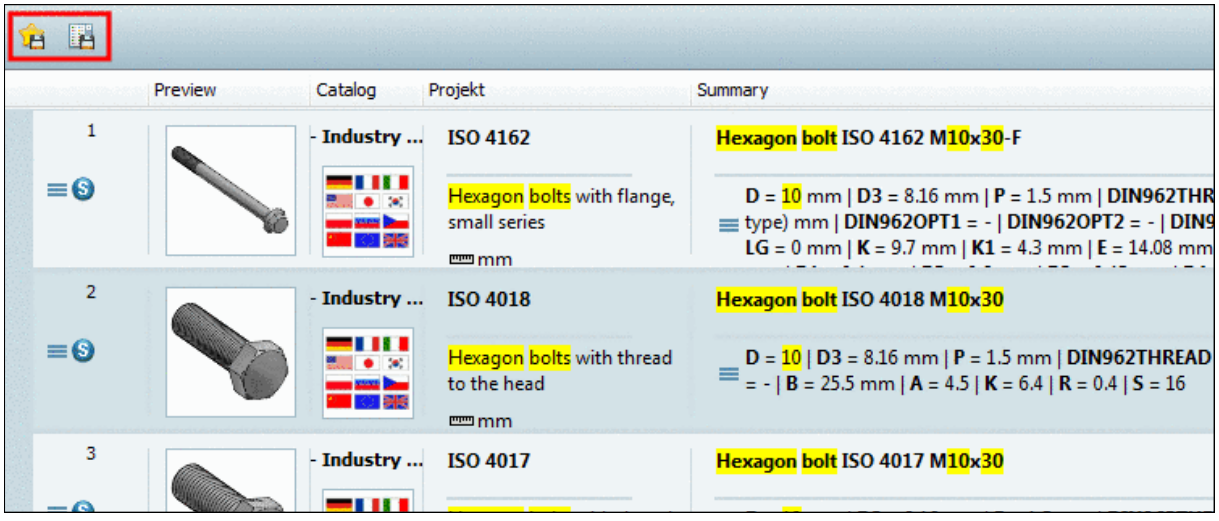
You have found parts which you often use?

Then select all or some of them (selection via Ctrl key) in the search results and save them under your **favorites**.

Perhaps you want to pass the results along and/or process in an external program?

Then save the results (with all desired table information) in a **text file**.

You can find the **start commands** in form of two icons top left above the search results.

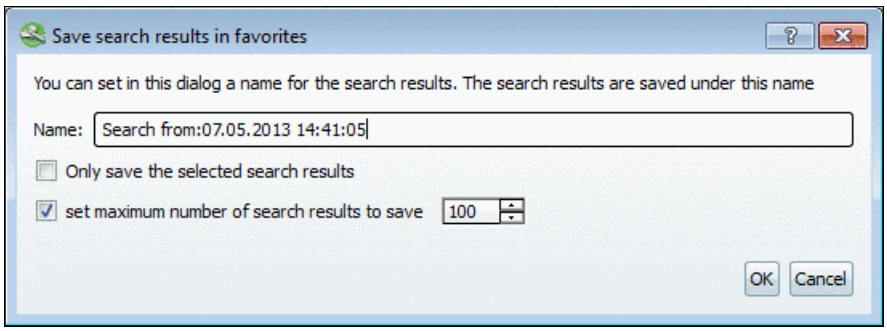


- **Save search results in favorites**:

  1. Click on the icon.

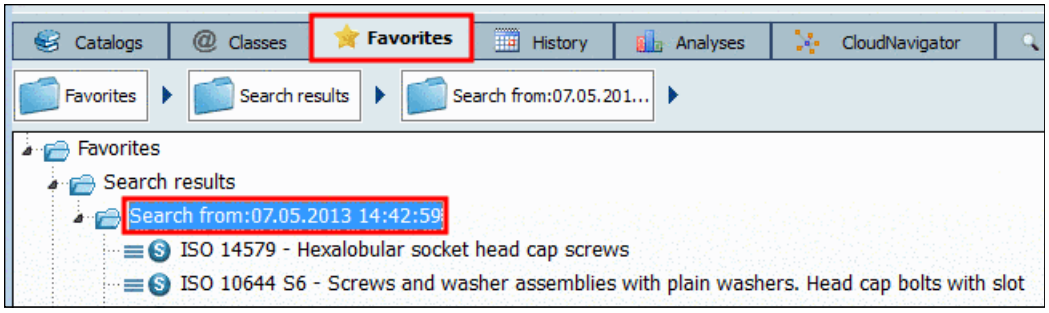
     -> The same named dialog box opens. A name (date per default) is already entered. You can change this entry.

[8] If you like to adjust the presetting click on the **Settings** button downright and select the **General** tabbed page.



If you only want to save special search results then select these with the **Ctrl key** and activate the option **Only save the selected search results**.

2. Confirm with **OK**.
   -> The view changes to the **Favorites** index page.



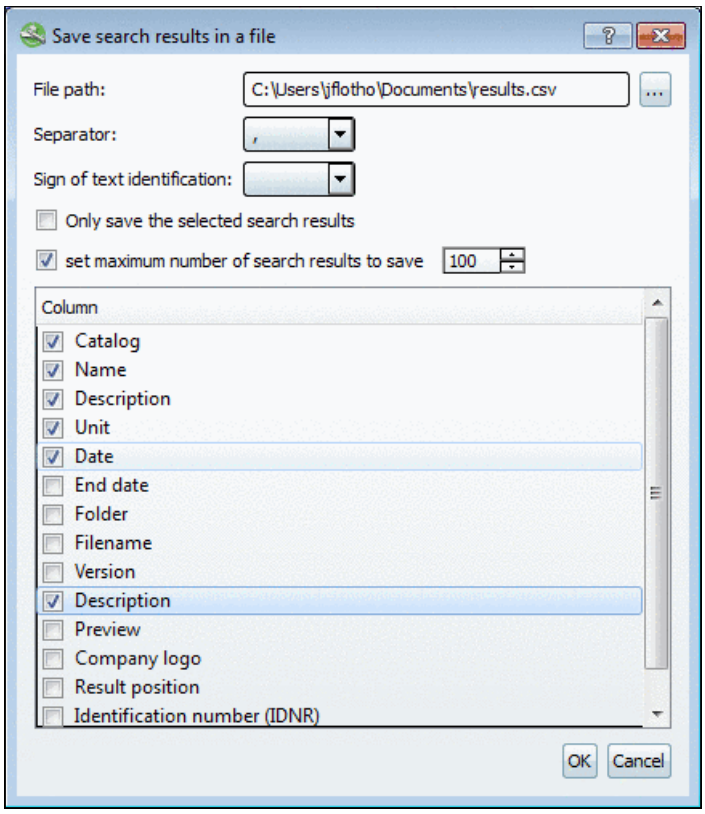
From there you can open the desired parts anytime again. Also compare Section 2.1.1.4.4.5, “ Favorites tabbed page ”.

Note

There, you have the same column information available as here (see above e.g. "Size").

- **Save search results in a file**:

1. Click on the icon.
   -> The same named dialog box opens.



If you only want to save special search results then select these with the **Ctrl key** and activate the option **Only save the selected search results**.

2. At the desired columns activate the checkbox. This information will be overtaken from the search results table.
3. Confirm with **OK**.

   -> The Explorer opens.
4. Determine the storage location.

2.1.1.6.2. "Related results" - Specify / broaden search

After conducting a textual search, you can further modify your results using **related terms**.

To do so, click on one of the displayed "related terms".

A dialog window with the following selection options opens:

- **Improve search**:

  Run a more precise search in conjunction with the previous search terms.

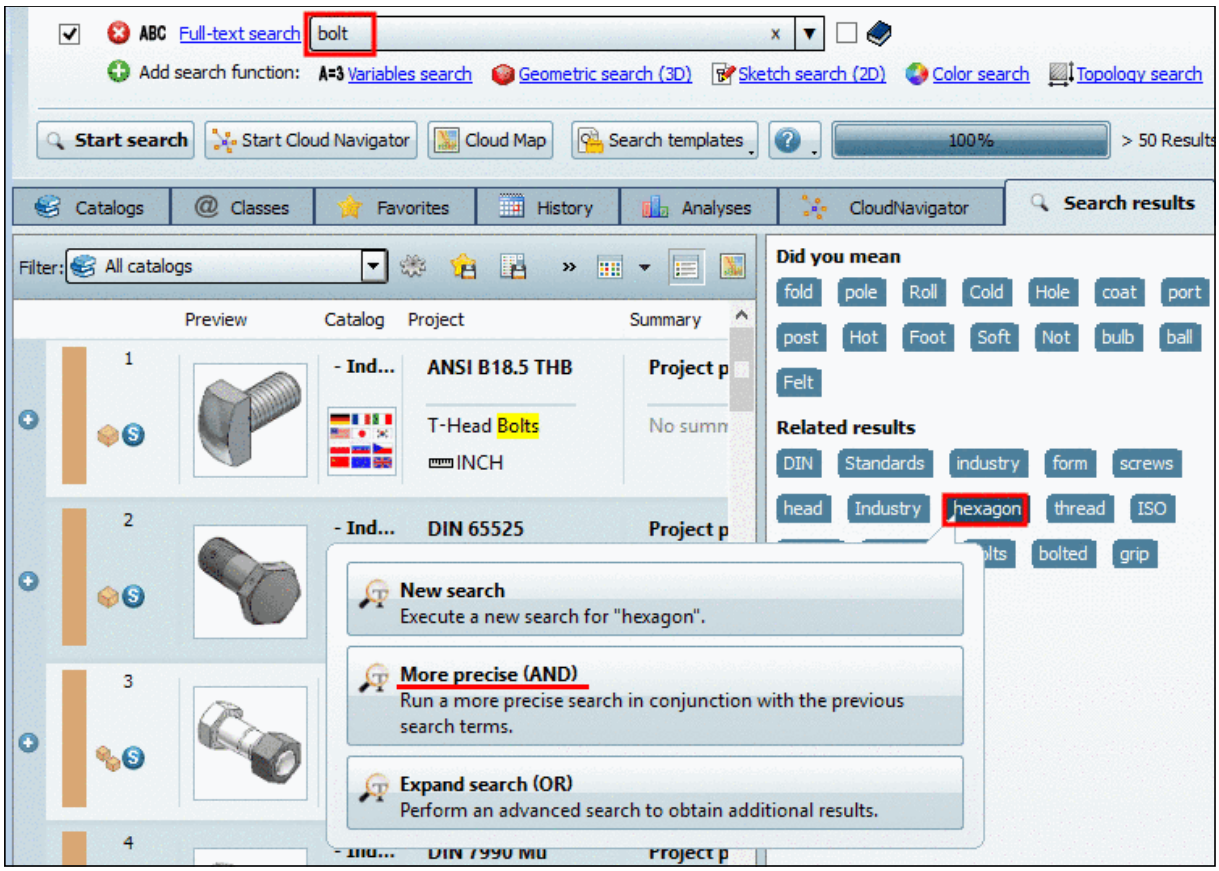
  This refers to an AND combination of the two terms. The originally searched for one and this one must both be accurate.
- **New search**:

  Conduct a new search with the term "example standard".

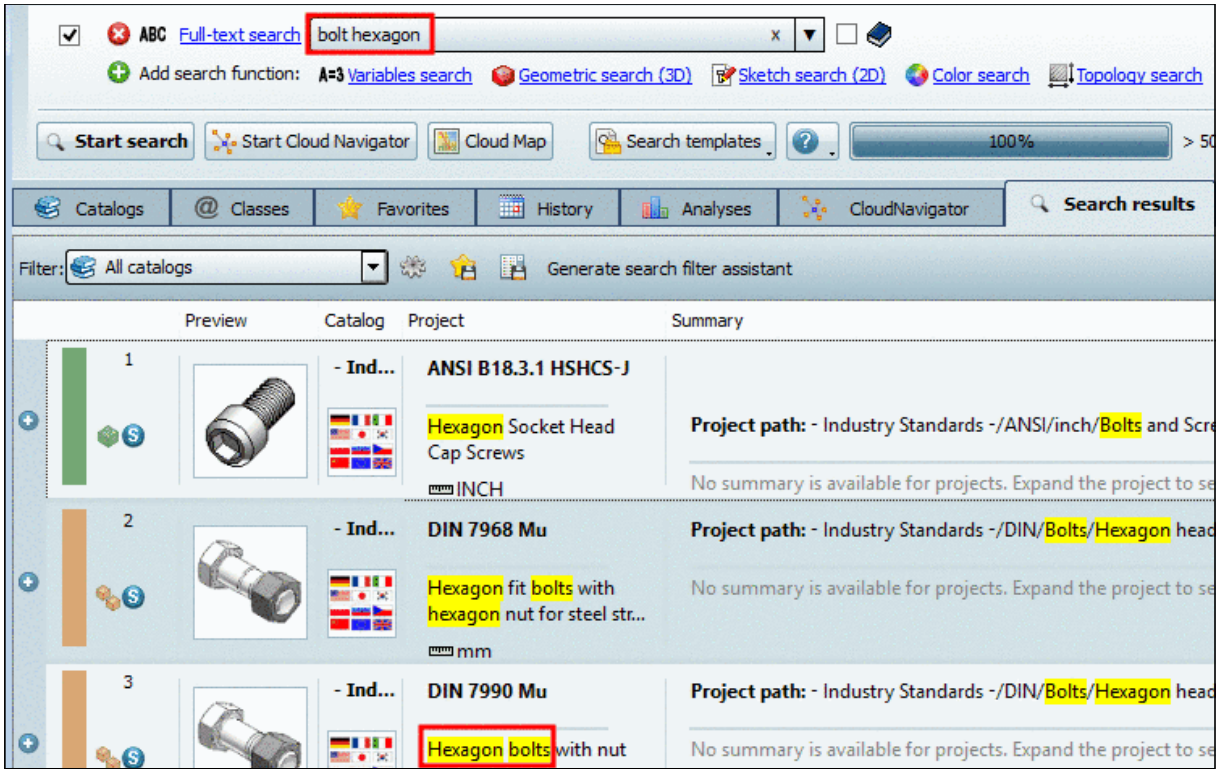
  The old search term is discarded.
- **Broaden search**:

  Perform an advanced search to obtain additional results.

  This refers to an OR combination of the two terms. At least one of the two must be accurate.



Modify search according to related terms (example: "Specify search")



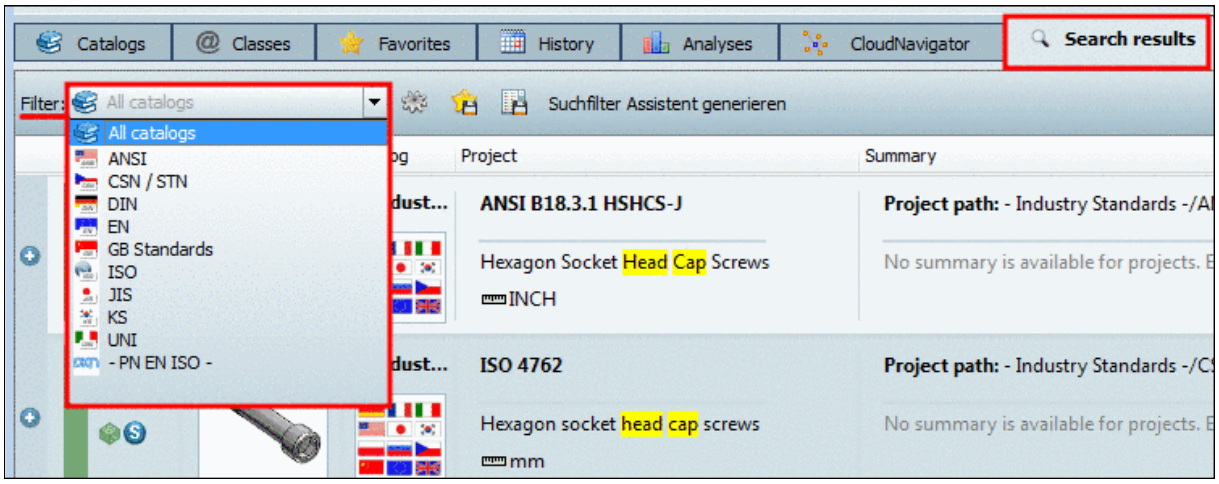
Result after specification of search term

Note

In the **Extras** menu under **Settings...**, list selection **Search**, index page **Text search** you can set whether and how many **Related results** should be displayed.

2.1.1.6.3. Catalog filter

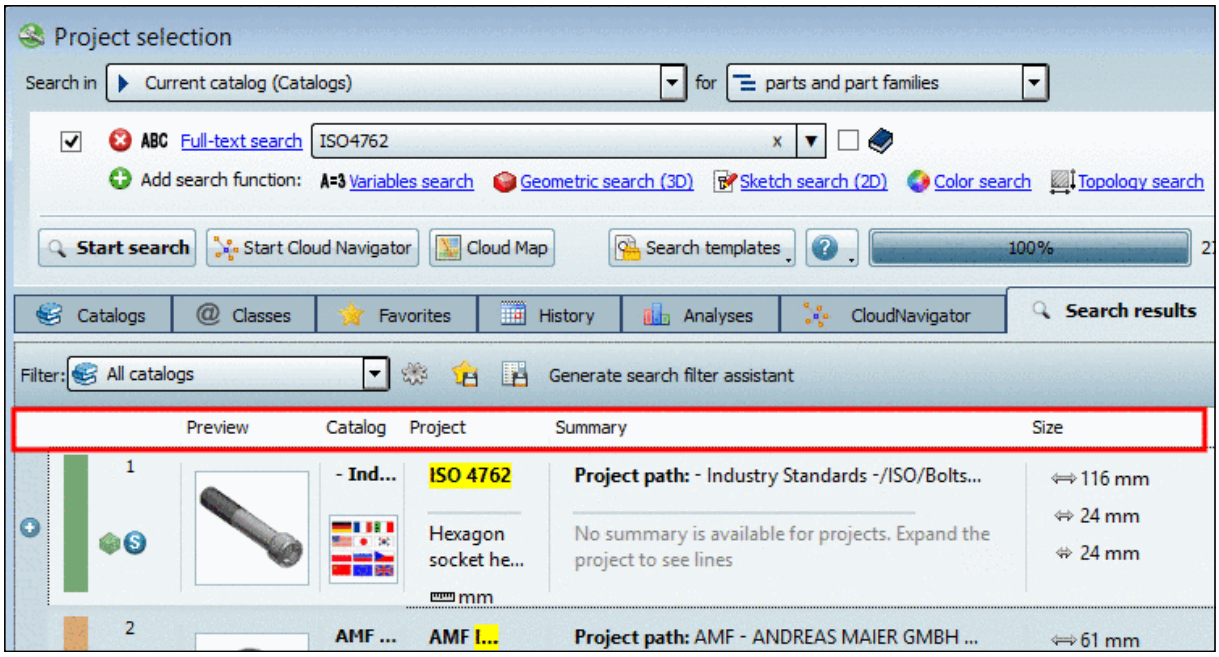
After a **Full-text search** or **Variables search** a **Catalog filter** is displayed. If hit occurred in several catalogs, then you can restrict the results subsequently to a certain catalog.



After each new search the filter is reset.

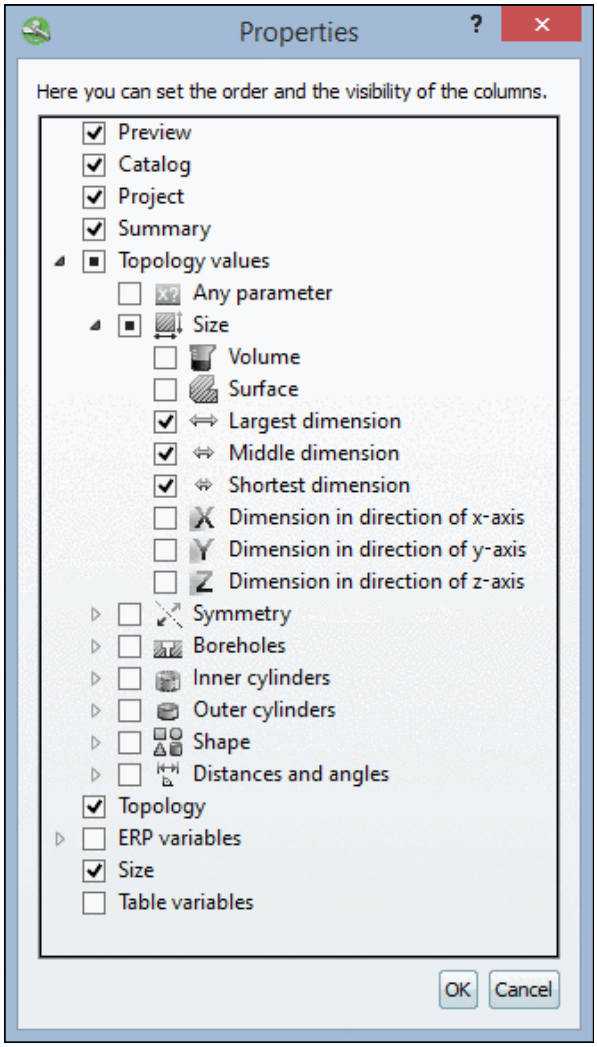
2.1.1.6.4. Columns show/hide

In the **Details** mode you can set the **visibility of columns**.



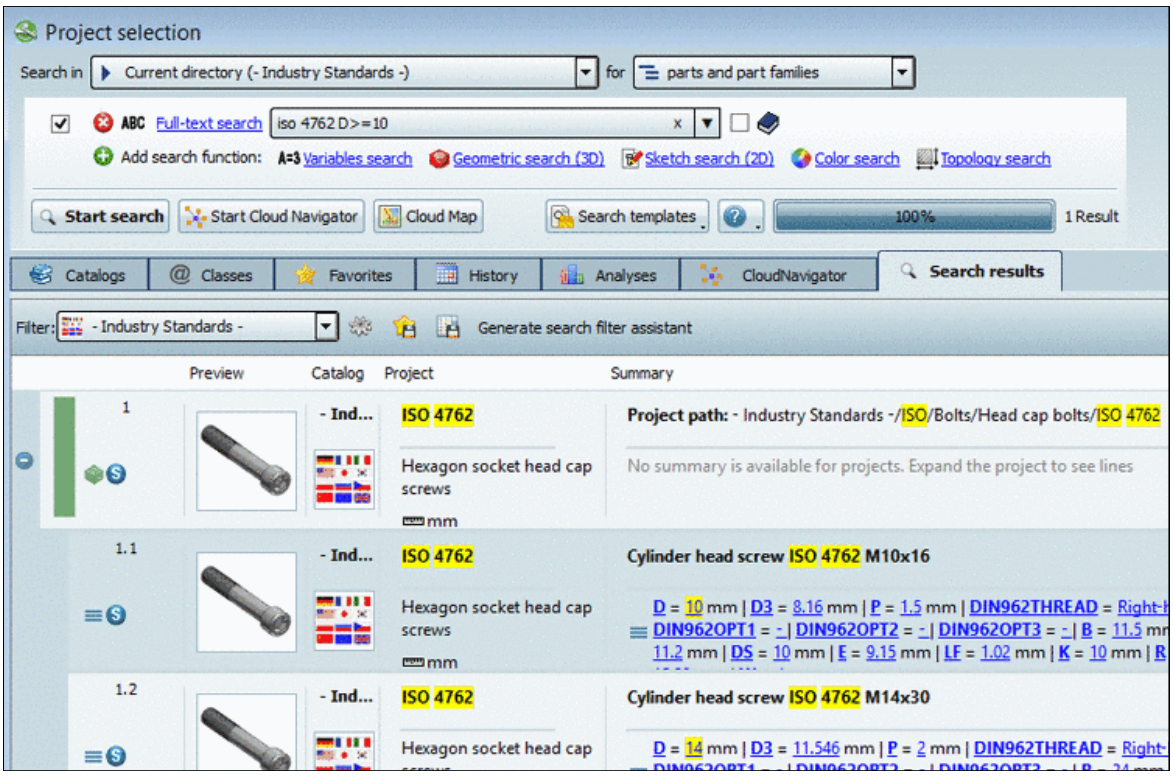
Hereto right-click on a column header.

In the opened dialog box **Properties**, you can activate or deactivate the desired columns.



Set visibility of columns

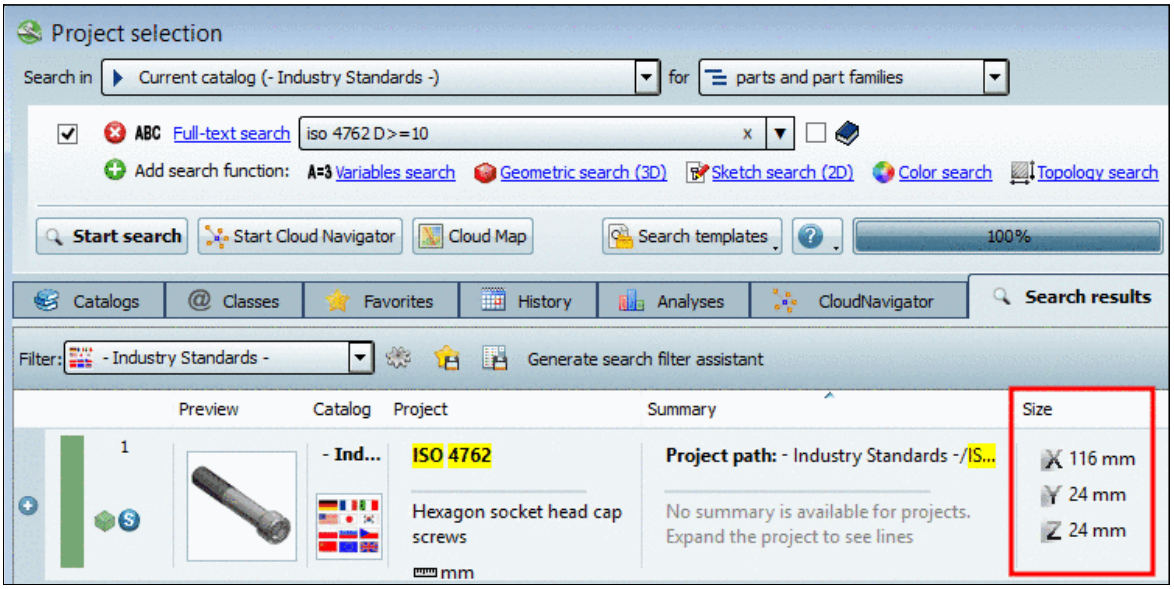
- **Preview** | **Catalog** | **Project** | **Summary**: The first three columns are self-explaining. In the column **Summary** all table variables are shown with values.



- **Topology values**:

  When using the option **Topology values**, these are not only displayed at the Topology Search, but also **at all other search methods**. Open the tree in order for all categories to be shown and select the checkboxes at the desired topological values.

  May be you want to see how many holes a part has for example, because this is not visible in the preview or you want to see **Largest dimension**, **Middle dimension** and **Shortest dimension** by default for example.



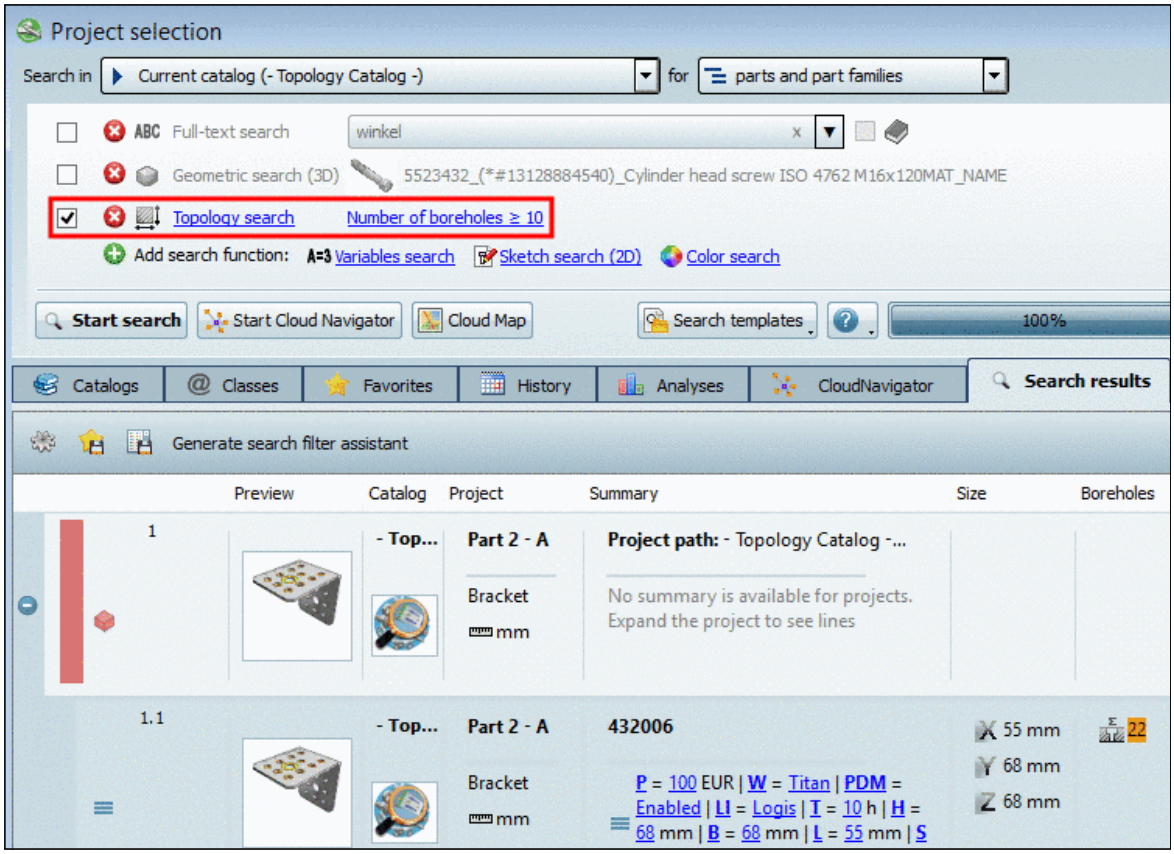
Under Topology values -> Size the options Dimension in direction of x-axis, Dimension in direction of y-axis and Dimension in direction of z-axis are exemplarily displayed.

- **Topology**:

  When enabling the option **Topology** it is only relevant for a **Topology search**.

  If the option is enabled, then for all searched topological values, the respective columns are displayed.

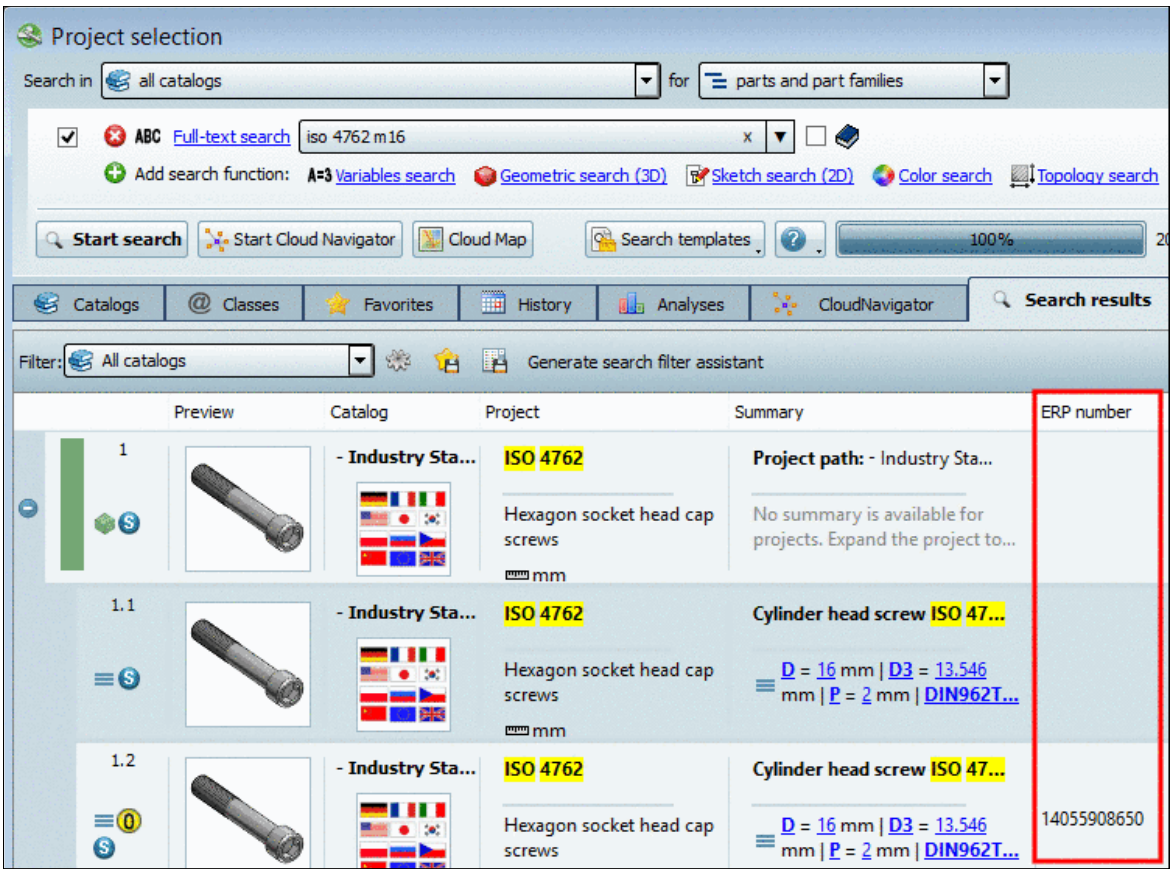
The column **Size** with values for extension in X, Y and Z axis is automatically displayed at the **Topology search**.



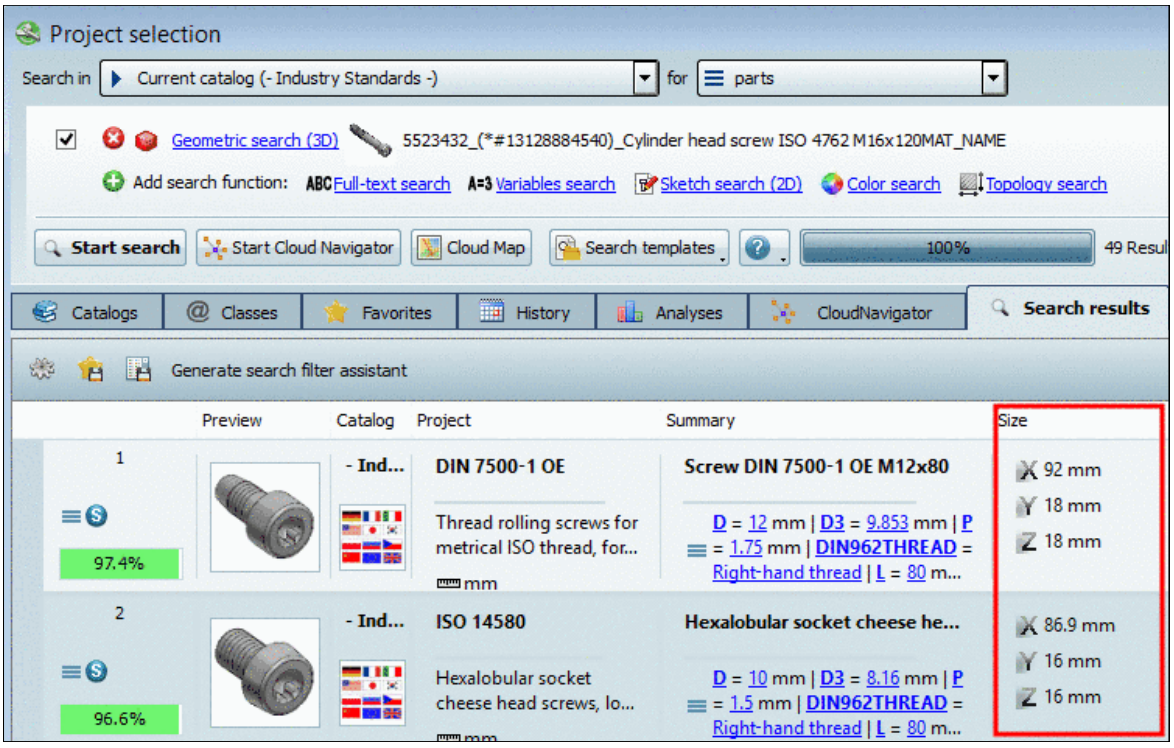
In this example a Topology search with "Boreholes >=10" has been performed. The number of boreholes is displayed in the respective column.

- **ERP variables**:

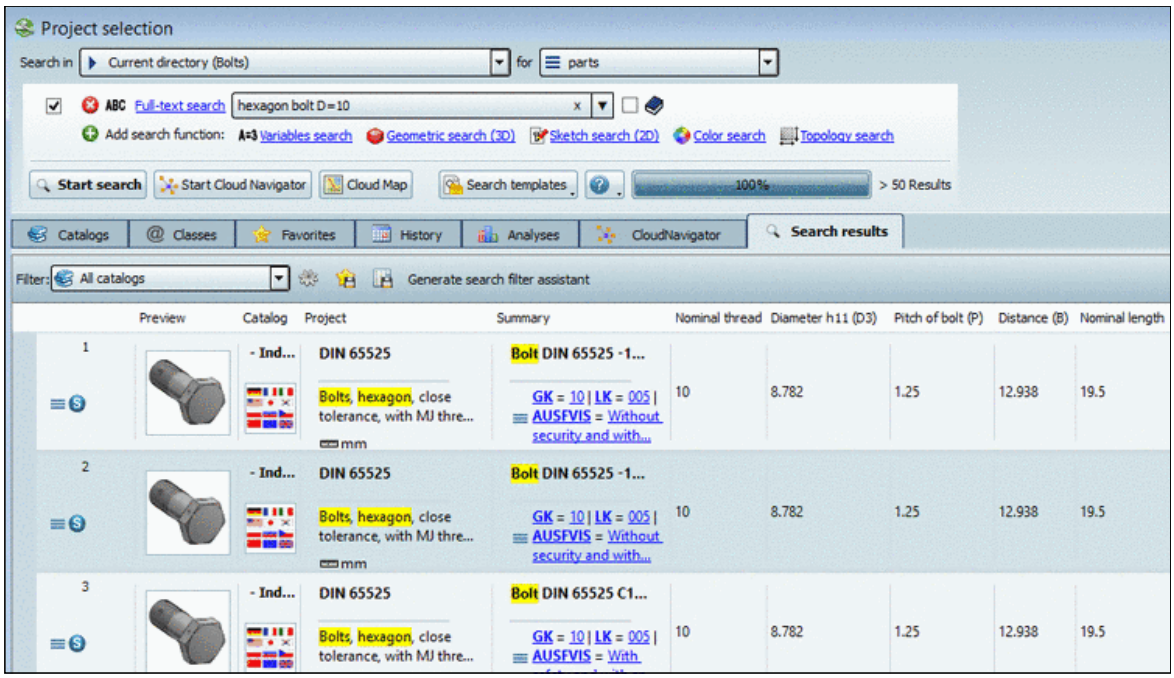
  All ERP variables and values are displayed, namely in the column **Summary**; however, possibly it is more comfortable to display special values like **ERP number** for example in an own column.



- **Size**:
  The option **Size** displays the column **Size**, however only at **Geometric search (3D)**.



- **Table variables**:
  "Table variables" are displayed for those variables, which are **common** to all searched projects, for example under `Industry standards\DIN\bolts`.



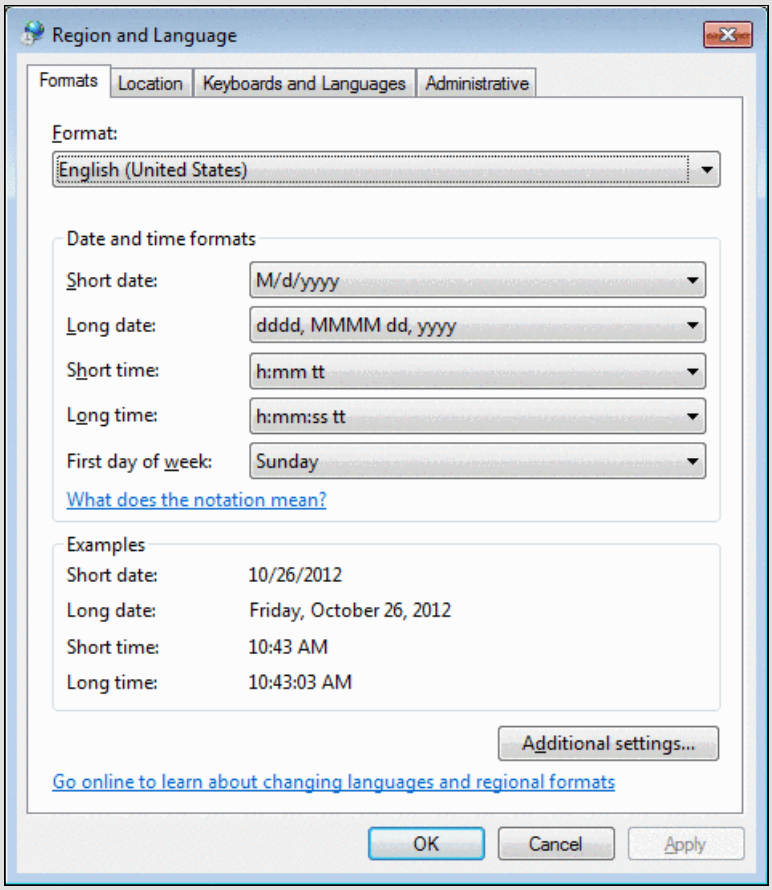
x

2.1.1.6.5. Sort table lines

With click on a column header you can sort the lines according to the values of the desired column.

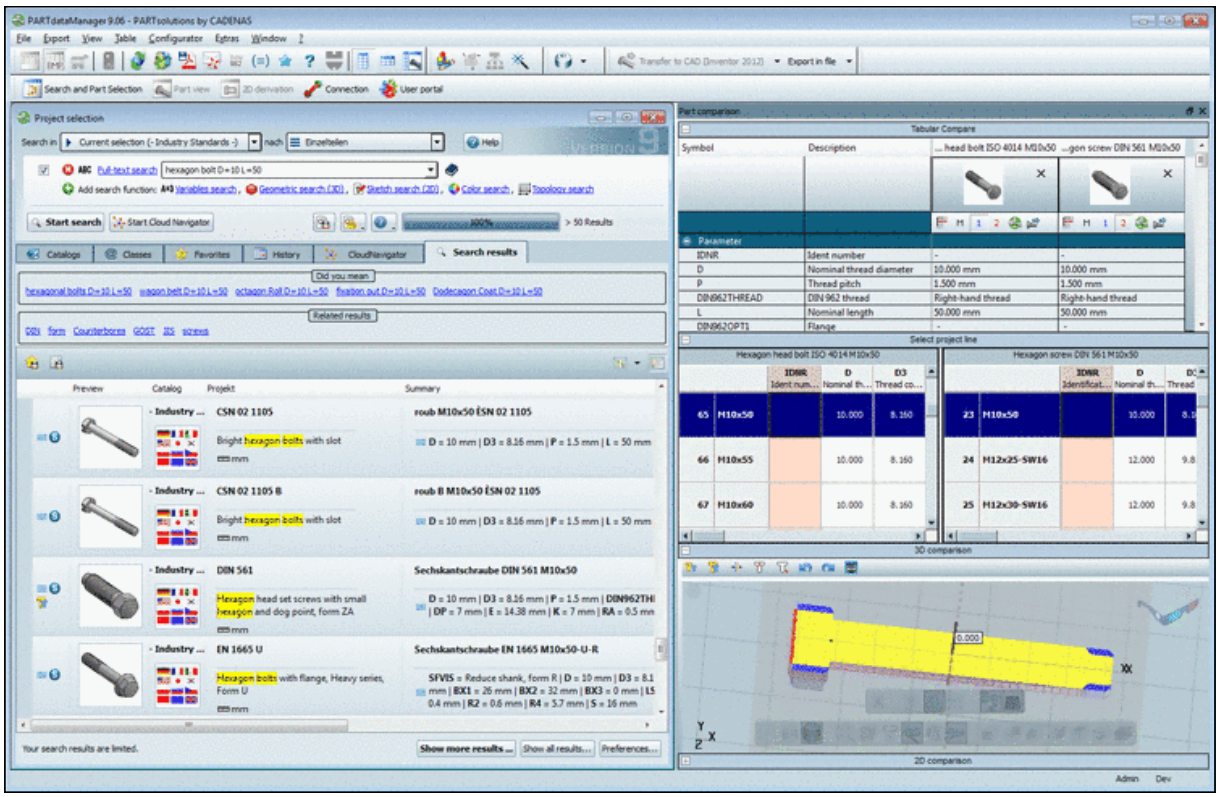
Note

The date format of Windows is used. You can adjust it in the "Region and Language" dialog box.



The date format is automatically adjusted to the set $CADENAS_LANGUAGE. At English this would be "2011/05/02" for example.

2.1.1.7. Part comparison



- All projects that are loaded into the part comparison show up in the Tabular Compare section.

Note

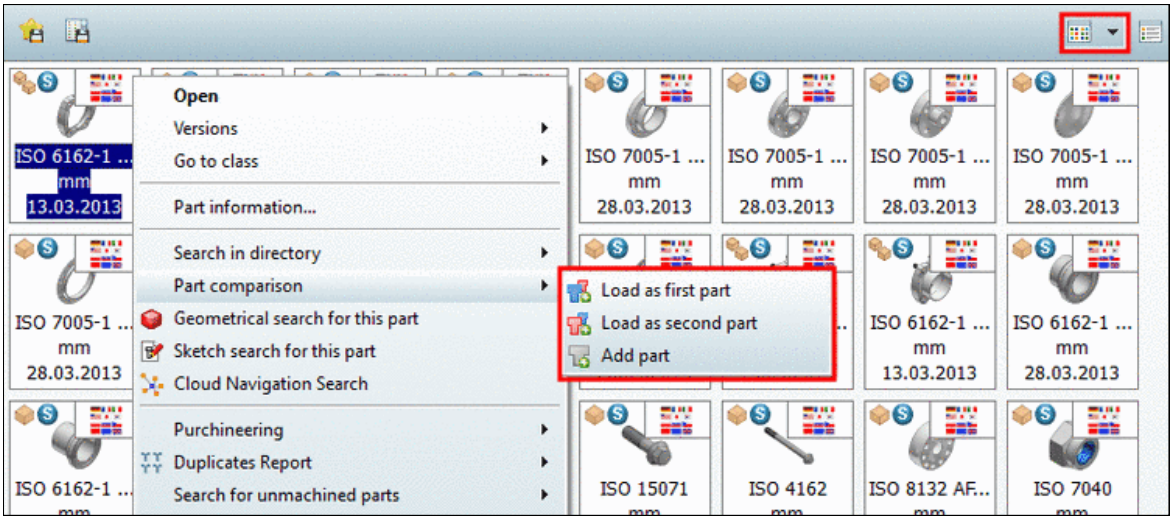
The part comparison can support up to 10 opened projects.

- Via the context menu command "**Load as 1st / 2nd project**" in the Tabular Compare section (see Fig. „ Tabular Compare - Context menu commands“ you can load or change the parts to be compared in the **3D comparison** and **2D comparison** sections (if more than two were loaded into the tabular compare).
- Adjust the objects in the Select project line section, if desired.
- Compare sections 3D comparison and 2D comparison geometrically.

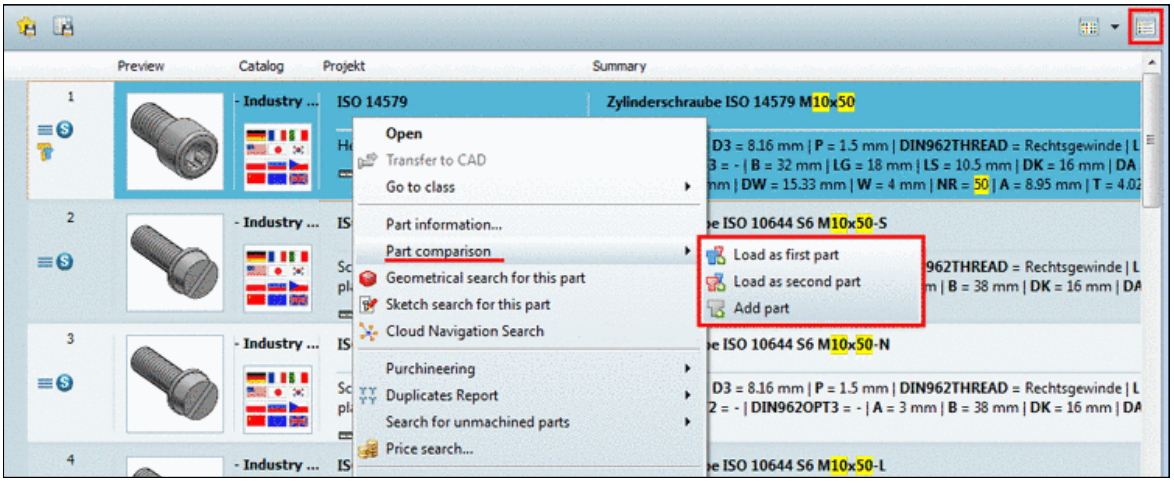
2.1.1.7.1. Start

The following figures show the start from **Symbol view** and **Details view** .

- Call up **Part comparison** in the **Symbols** mode

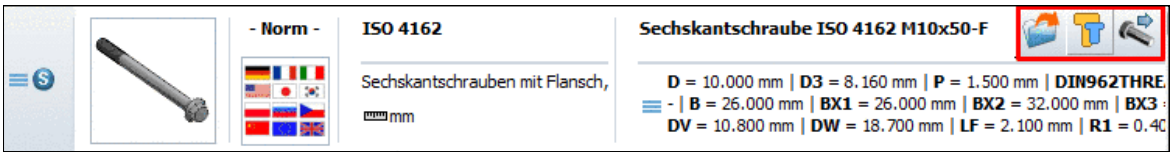


- Call up **Part comparison** in the **Details** mode



Parts which have been transferred to the part comparison show the respective icon .

When you move the mouse over a line, buttons are displayed:
(The number of displayed buttons is context depending.)



Open: With click on the icon the part is opened in the **Part view** of **PARTdataManager**

Load as first part

Load as second part

Add to part compare

Compare with search-part

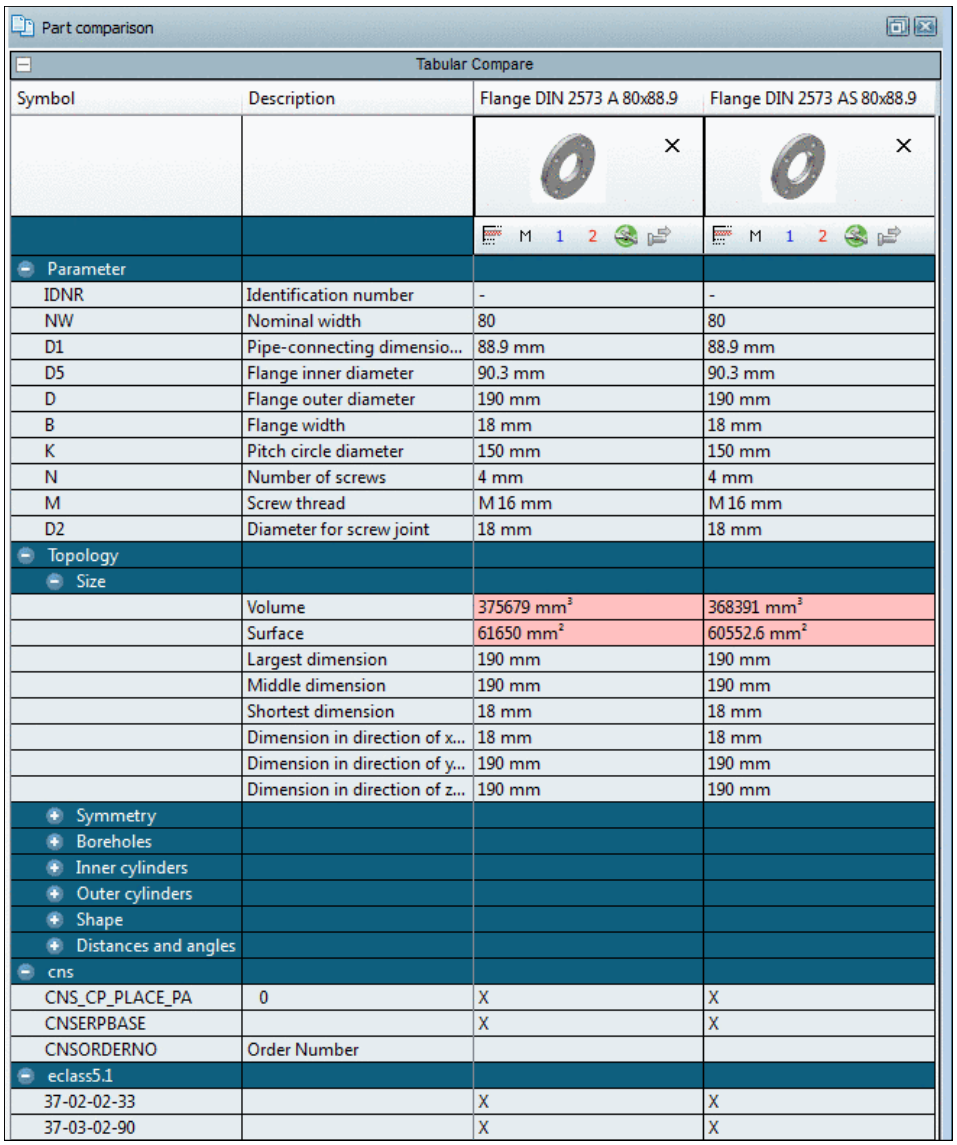
This part is loaded in part compare As soon as a part is loaded into the part comparison the icon is displayed.

Export to CAD: This icon is only displayed at single parts (characteristics), not at part families. With click on the icon the respective part is transferred to the CAD system.

2.1.1.7.2. Tabular Compare

The table view shows the comparison for:

- **ERP data** (if available)
- **Classification data**
- **Topology**
- **Parameter** of geometry



Part comparison

Tabular Compare

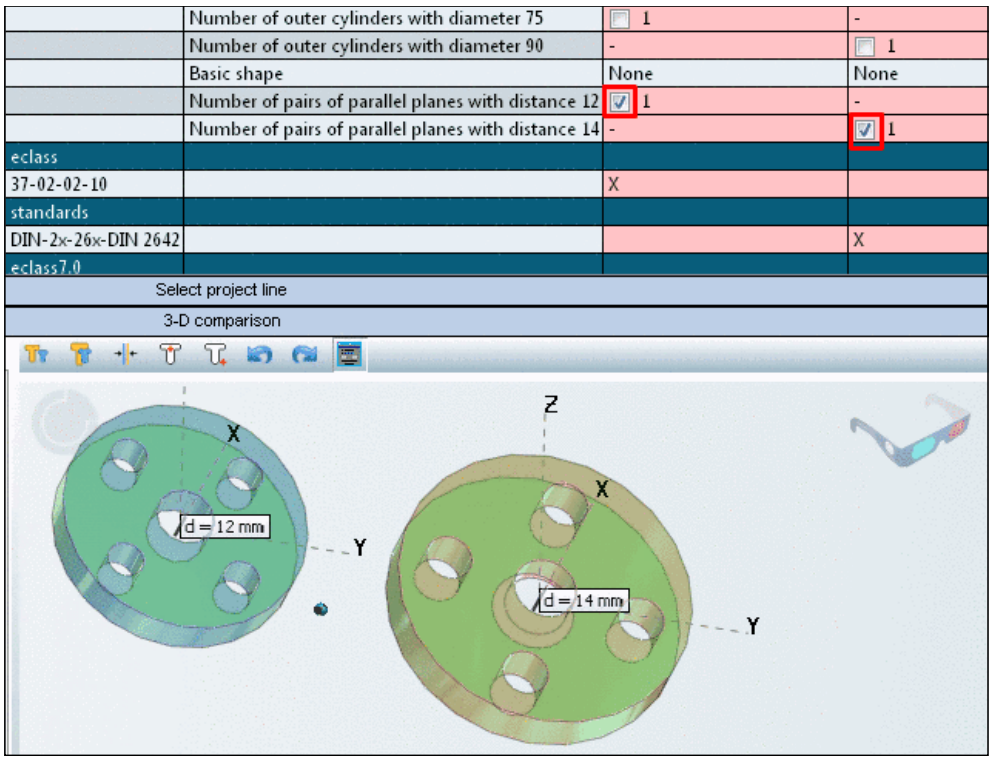
Symbol	Description	Flange DIN 2573 A 80x88.9	Flange DIN 2573 AS 80x88.9
		M 1 2	M 1 2
Parameter			
IDNR	Identification number	-	-
NW	Nominal width	80	80
D1	Pipe-connecting dimensio...	88.9 mm	88.9 mm
D5	Flange inner diameter	90.3 mm	90.3 mm
D	Flange outer diameter	190 mm	190 mm
B	Flange width	18 mm	18 mm
K	Pitch circle diameter	150 mm	150 mm
N	Number of screws	4 mm	4 mm
M	Screw thread	M 16 mm	M 16 mm
D2	Diameter for screw joint	18 mm	18 mm
Topology			
Size			
	Volume	375679 mm^3	368391 mm^3
	Surface	61650 mm^2	60552.6 mm^2
	Largest dimension	190 mm	190 mm
	Middle dimension	190 mm	190 mm
	Shortest dimension	18 mm	18 mm
	Dimension in direction of x...	18 mm	18 mm
	Dimension in direction of y...	190 mm	190 mm
	Dimension in direction of z...	190 mm	190 mm
Symmetry			
Boreholes			
Inner cylinders			
Outer cylinders			
Shape			
Distances and angles			
cns			
CNS_CP_PLACE_PA	0	X	X
CNSERPBASE		X	X
CNSORDERNO	Order Number		
eclass5.1			
37-02-02-33		X	X
37-03-02-90		X	X

Note

Divergent table values show a red background color.

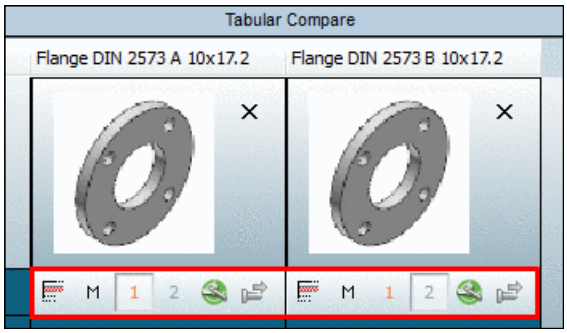
In the **Tabular Compare** window beside the attributes checkboxes are displayed.

When you activate a checkbox, then in the **3D comparison** the respective attribute is visualized.

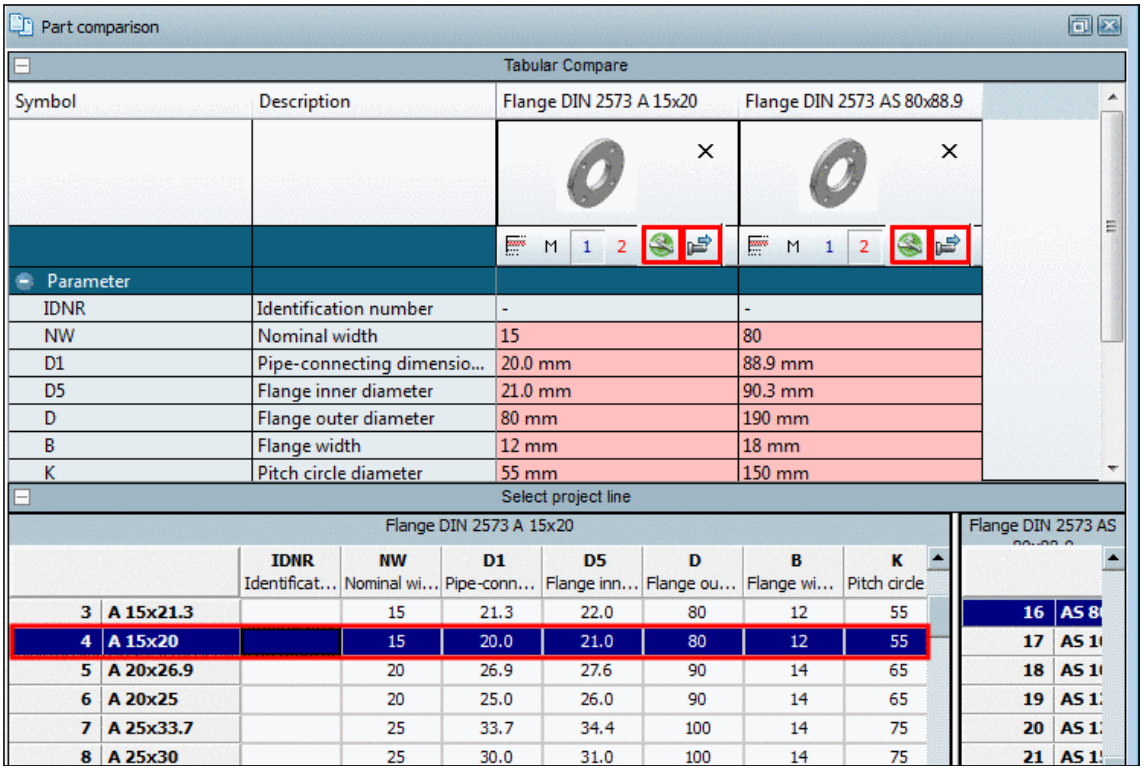


Icons

In the column header you can find the following icons:



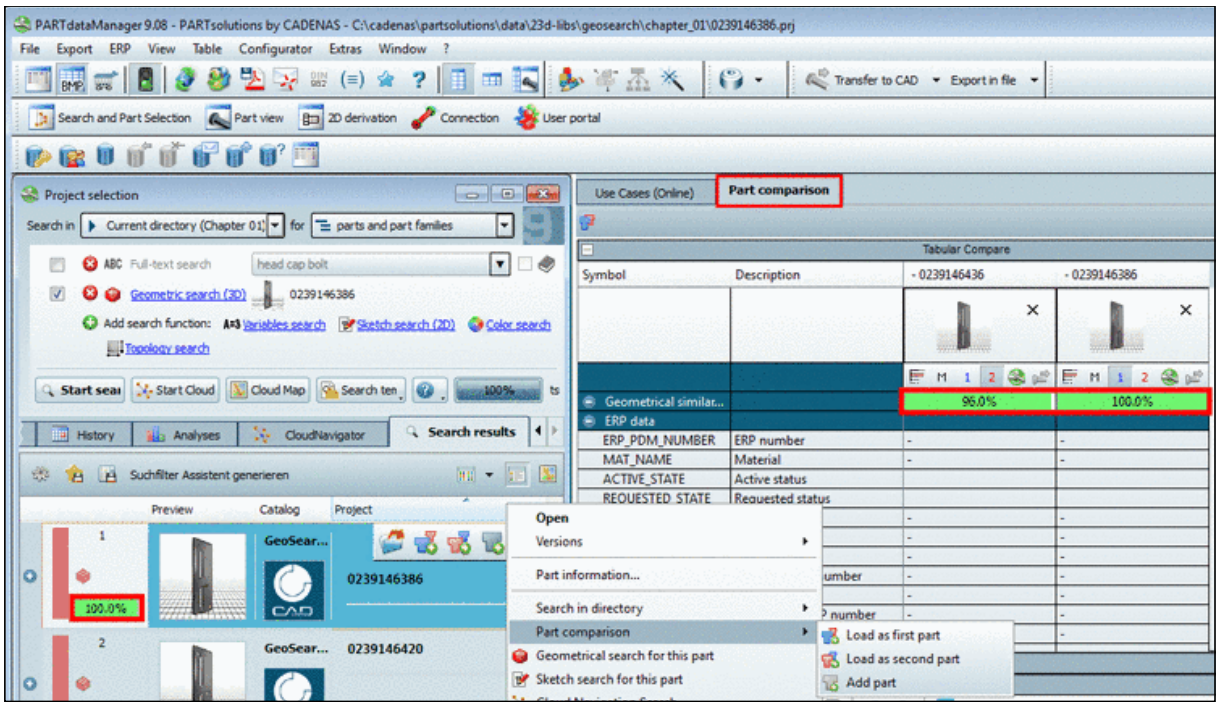
	**Select project line** (see identic context menu command)
M	**Select as master**: The respective column is displayed with green background color.
1	**Load as first project** (in the 3D, 2D comparison)
2	**Load as second project** (in the 3D, 2D comparison)
	**Open selected line in PARTdataManager** First select the desired row in the **Select project line** dialog.
	**Export to CAD**: First select the desired row in the **Select project line** dialog.



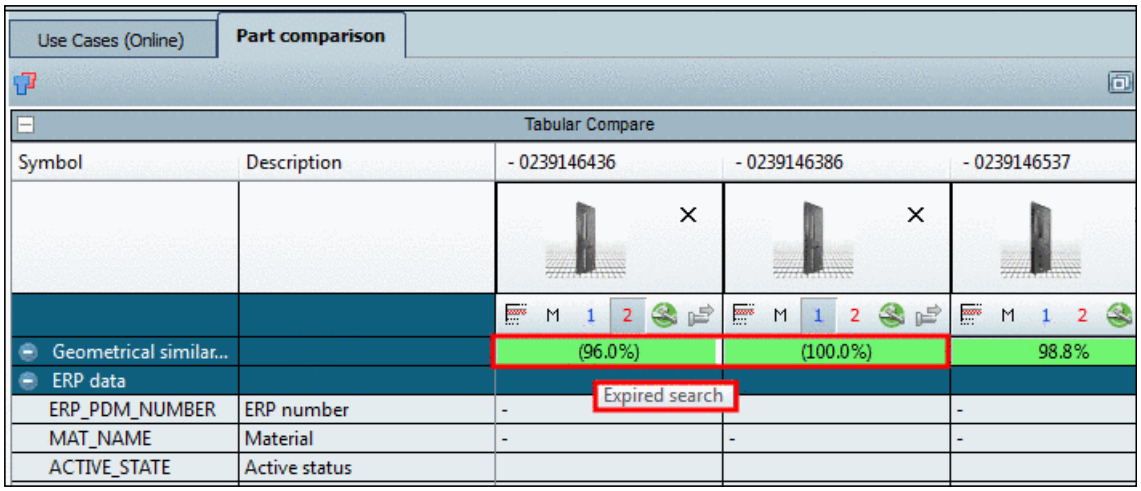
Geometric similarity

At parts, which are found via **Geometric search (3D)** and are transferred into the **Part comparison**, there, in the **Tabular Compare** section the geometric similarity is overtaken and displayed as well.[9]

[9]You can configure, whether the geometric similarity shall be displayed. See Section 1.1.7.5.4.1, “ Tabular Compare - Display geometric similarity ” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.



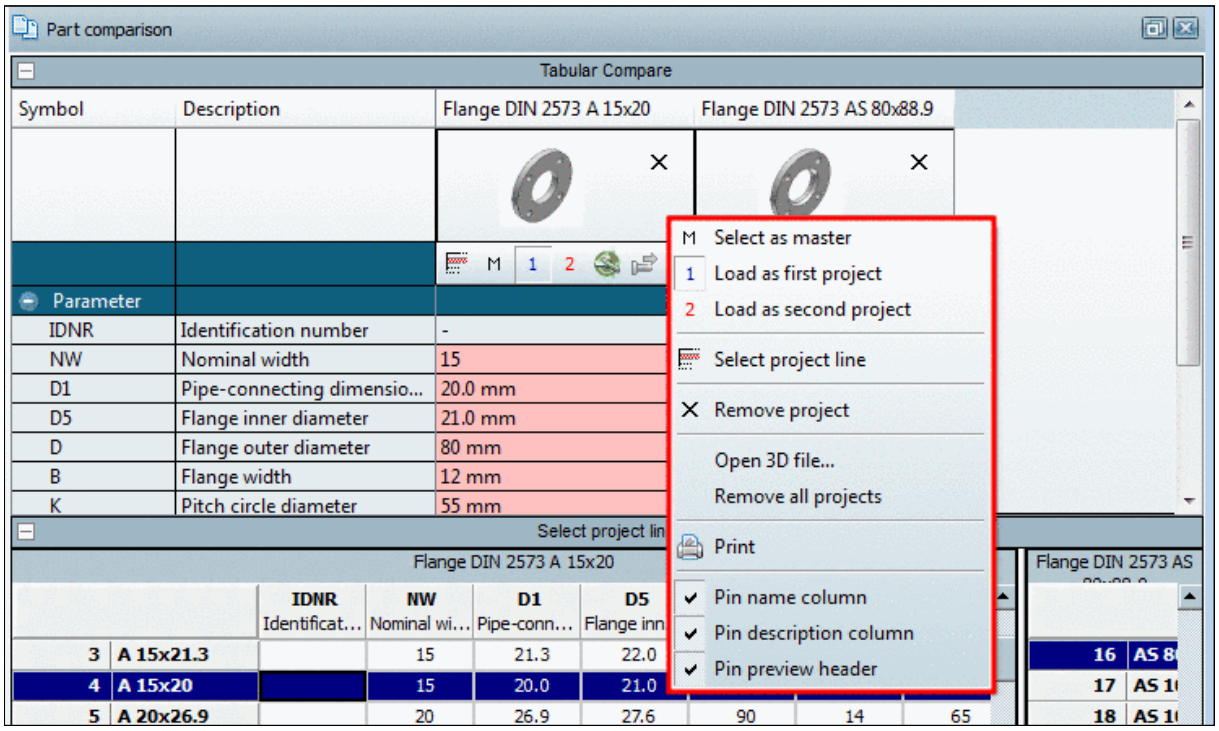
If several searches are performed one after another, the percent values of previous, outdated searches are displayed in brackets. At mouseover on an outdated value, the respective information is displayed.



Values of an outdated search are displayed in brackets.

Context menu

Open: Right-click anywhere in the desired column.



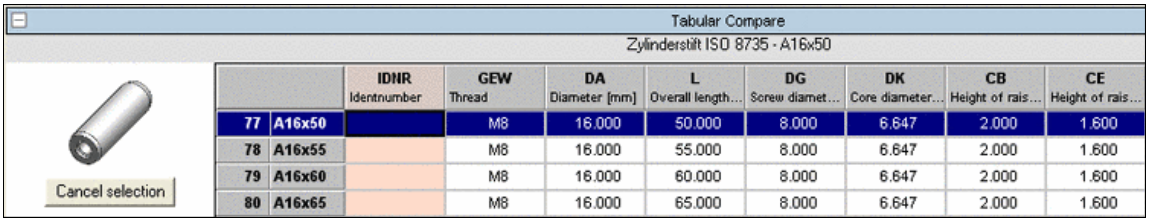
Tabular Compare - Context menu commands

In the **context menu** the following **commands** are available:

- **Select as master** [compare icon above]
  The corresponding column is displayed with a green background color.

- **Load as first project** (in the 3D, 2D comparison) [compare icon above]
- **Load as second project** (in the 3D, 2D comparison) [compare icon above]

- **Select project line** [compare icon above]
  Switches to the **row view** (see following figure)
  By clicking on **Previous**, the display changes to the export state.
  For a logical 3D comparison, change the properties so that the compared parts possess about the same dimension.



Tabular Compare - row view

- **Remove project**
  Removes the selected project from the "**Tabular Compare**" section.
- **Open 3D file...**
  Load any **native file** (**specific CAD file** or **neutral format**) in the **Compare** dialog.

Note

Precondition: The CAD system has to be started.

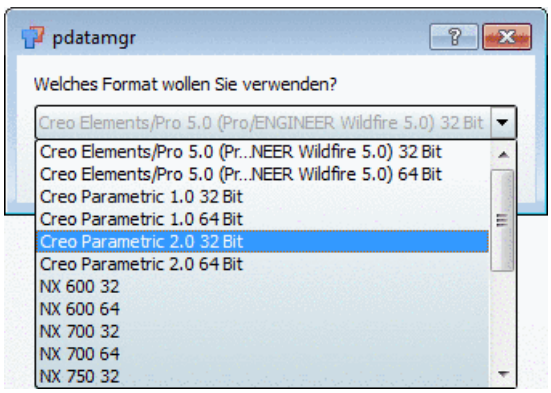
1. Click on the menu item **Open 3D file...**.
   -> An Explorer window opens.
2. Browse to the desired file.
   A number of formats can be opened: [10]
   A selection of formats:

   - IGS (*.igs)
   - STL (*.stl)
   - Inventor 2010 (*.ipt, *.iam)
   - NAT (*.nat)
   - PS3-V2 3D (*.ps3)
   - PartJava 3D (*.zjv)
   - Pro/Engineer Wildfire version 3 32 Assembly (*.asm)
   - Pro/Engineer Wildfire version 3 32 Part (*.prt)
   - Pro/Engineer Wildfire version 3 32 UDF (*.gph)
   - SAT ascii 3D (*.sat)
   - STEP (*.step, *.stp)
   - SolidDesigner PKG File (*.pkg)
   - SolidDesigner PKG/STL File (*.stl)
   - Solidworks 2010 (*.sldprt, *.sldasm)
   - U3D (*.u3d)
   - *.zjv

   Note

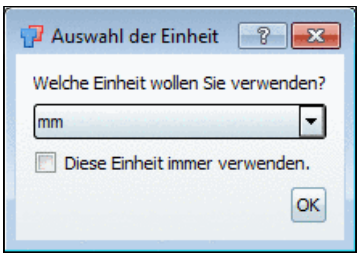
   Make sure that when selecting CAD formats, the CAD application has been started.

3. If there is an **ambiguity** for a **file extension**, an additional dialog box appears.
   Ambiguities are possible for a file extension such as `.prt` for example, which is used by Creo Elements and NX as well, furthermore for several versions of a CAD system.
   In the list field select the desired system and the desired version.



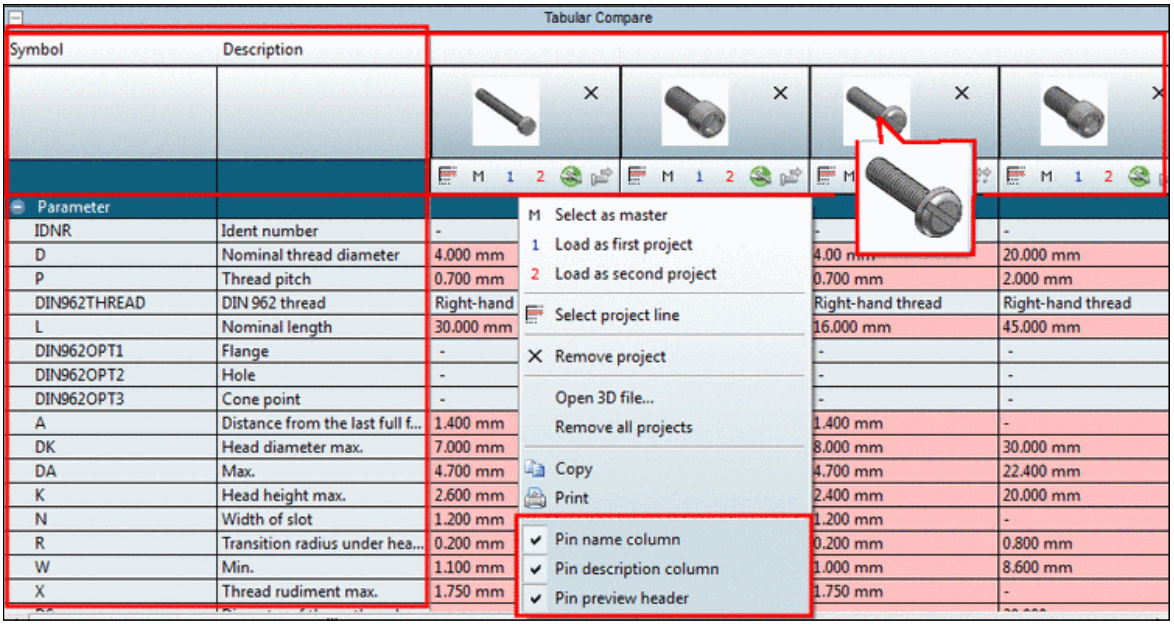
4. Then the dialog box **Selection for unit** opens.

[10] The number depends on the installed CAD systems.



In the list field, select the correct unit: mm, cm, dm , m, INCH, FEET, INCH/10, INCH/100
Confirm by clicking on **OK**.
-> The file is loaded in the **Tabular Compare** section.

- **Remove all projects**
  Removes all projects from the "**Tabular Compare**" section.
- **Copy** (only displayed over table cells)
  Open the context menu via the desired table row and select the **Copy** command.
  Now you can insert the **cell content** in a text editor.
- **Print**
  The complete table is printed.
- **Pin name column** | **Pin description column** | **Pin preview header**

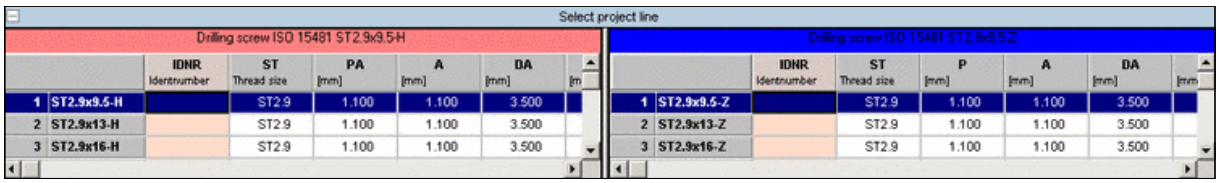


In order to keep in view the important during vertical and horizontal scrolling, it possibly makes sense to **fix** the columns "**Symbol**" and/or "**Description**" [horizontal scrolling] and/or the complete **preview line** [vertical scrolling].

In the **Tabular Compare** section call the context menu and activate the desired option.

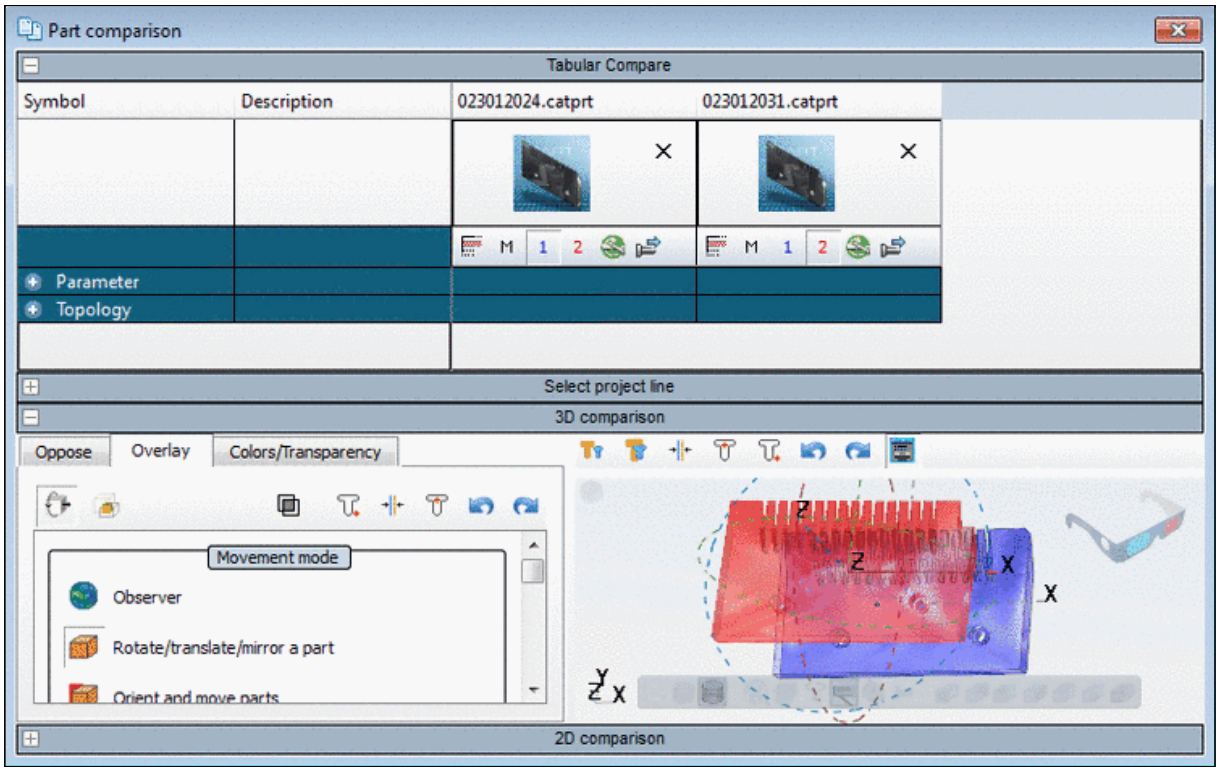
2.1.1.7.3. Select project line

For a useful 3D comparison, change the property so that the parts to be compared exhibit roughly the same dimension.



Select project line

2.1.1.7.4. 3D comparison



Part comparison -> 3D comparison

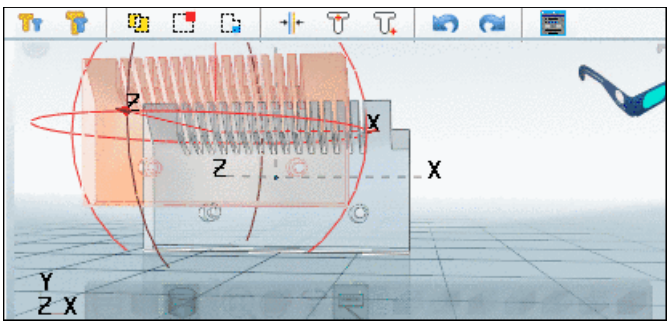
2.1.1.7.4.1. Standard functions

Parts can simply be aligned:

- **Align parts**
  - **Manual alignment**

    In order to manually align a part do the following:

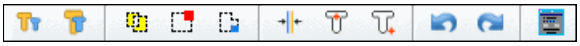
    1. Click on a part, so that the rotation circle and rotation axes appear.



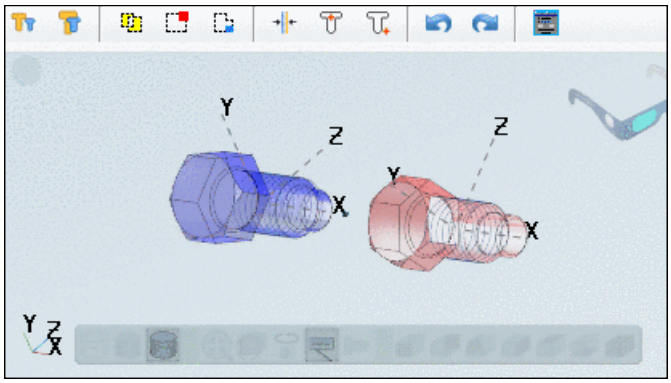
    2. At the desired part select a rotation circle or a rotation axis and move the part with pressed left mouse button.

- **Automatic alignment**

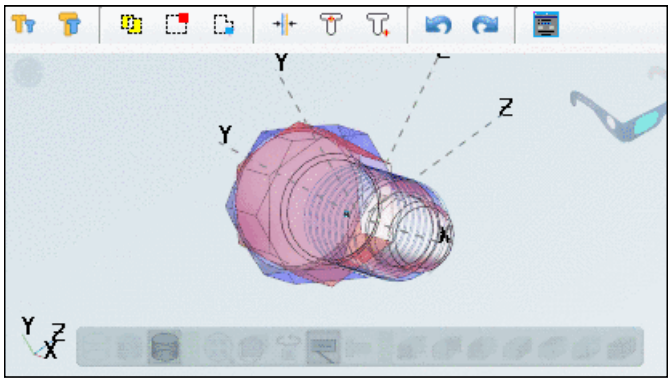
  The functions for automatic alignment are found in the **3D comparison** section top left in the toolbar:



Oppose components



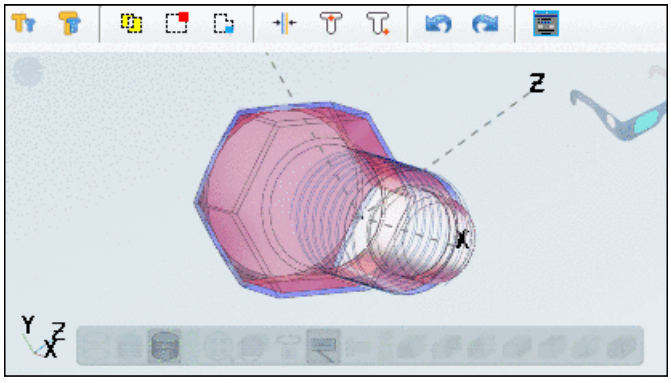
Overlay components : Possibly the functions **Original rotation and centered position** and **Original rotation and position** more effective.



Here in the example the overlay along the main axis is not yet sufficient.

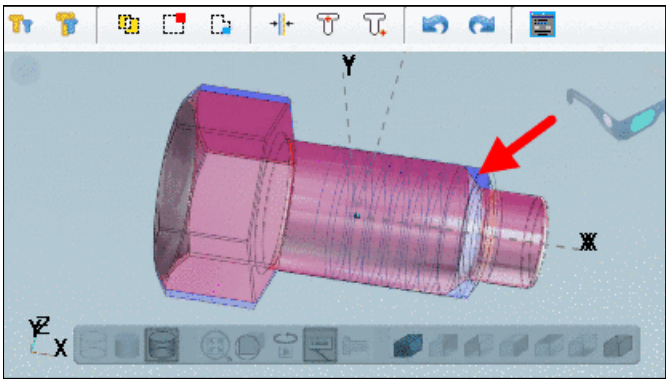
Automatically calculate aligned rotation and position: Is according to the context menu command **Center parts**.

Original rotation and centered position (best fit)



Here in the example the parts are optimally aligned.

In the side view you can see, that the parts are not 100% identic.



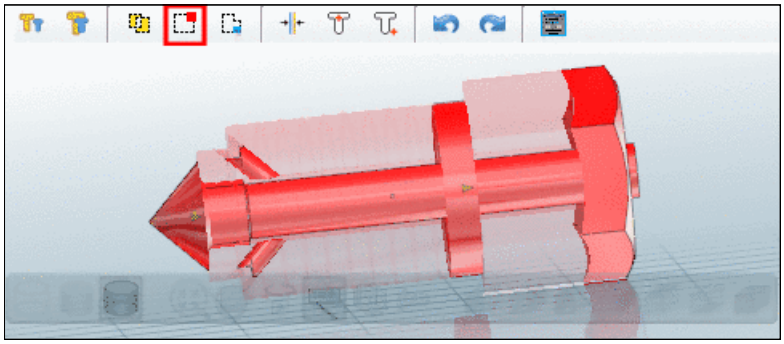
In the section view you can optimally see the differences. See ???.

Original rotation and position (Zero point overlayed)

- **Comparative operations**

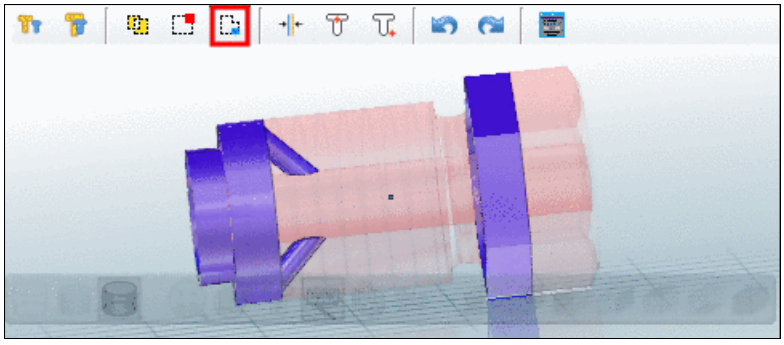
Show difference 1-2

Difference of part 1 minus part 2



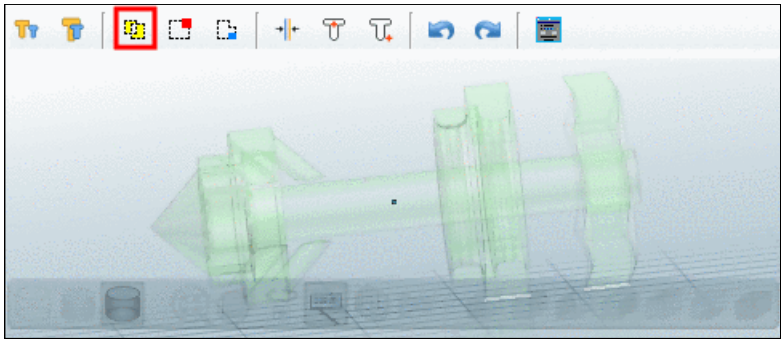
Show difference 2-1

Difference of part 2 minus part 1



Show symmetric difference:

Sum of differences between part 1 and part 2

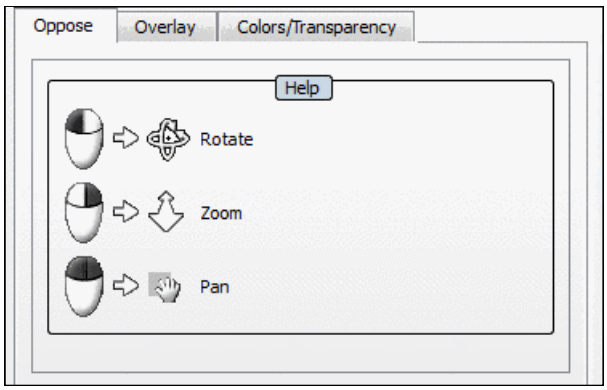


- **More functions**

  Undo

  Restore

  Expert mode: With click on the button at the left side a section with the **Oppose**, **Overlay** and **Colors/Transparency** index pages is displayed.



  Detailed information on this is found under ???.

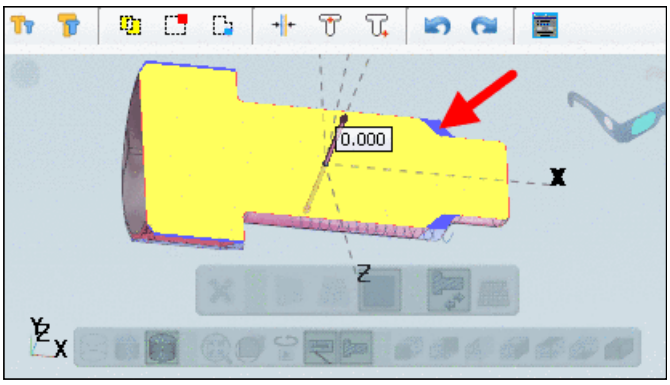
- **Context menu "3D comparison"**

  In the context menu of **3D comparison** you can find the following menu items:

  - **Zoom all**
  - **Isometric view**
  - **Measure...**
  - **Define section cut...** [11]

    In the sectional plane the part differences are quite clear at a glance.

[11] as of V9.05

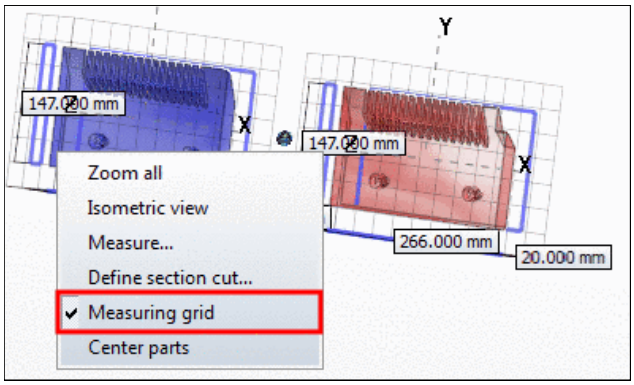


A detailed description of the functionality is found under ???.

- **Measuring grid** [12]

In the context menu of **3D comparison** activate the **Measuring grid** menu item.

-> The **maximum extensions** are displayed.



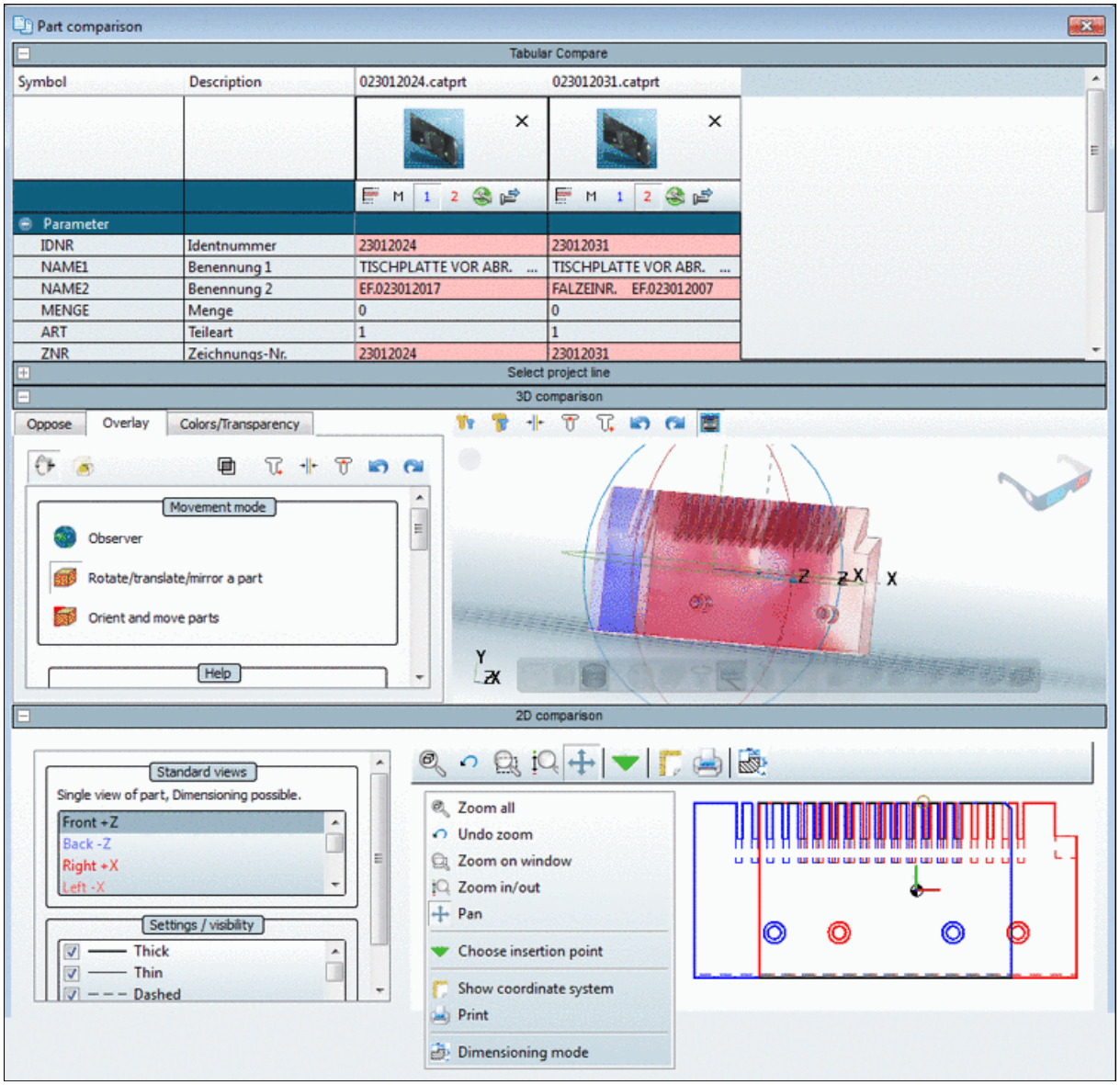
- **Center parts**

  Is according to the icon (see above):

2.1.1.7.5. 2D comparison

The parts comparison can be done in 3D as well as in 2D.

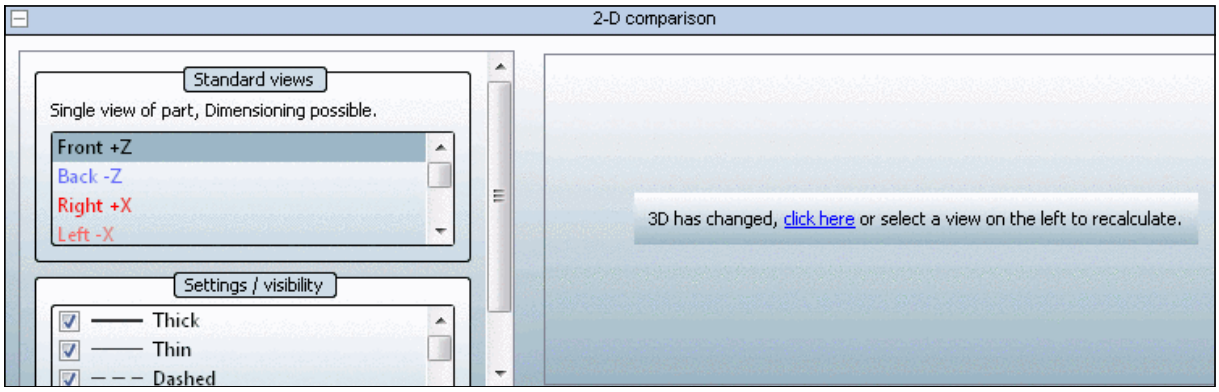
[12] as of V9.04



Part comparison -> 2D comparison

2.1.1.7.5.1. 3D & 2D synchronization

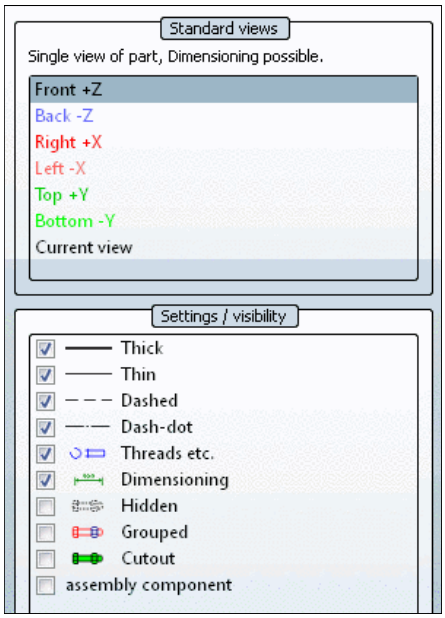
In order to synchronize the **2D comparison** and **3D comparison** simply click on "click here".



-> All derivations are calculated. You can select them in the dialog window.

The **Front**, **Back**, **Right**, **Left**, **Top** and **Bottom** views are independent from the settings in the **3D view**.

With **Current view** you take over the exact depiction from the 3D comparison.

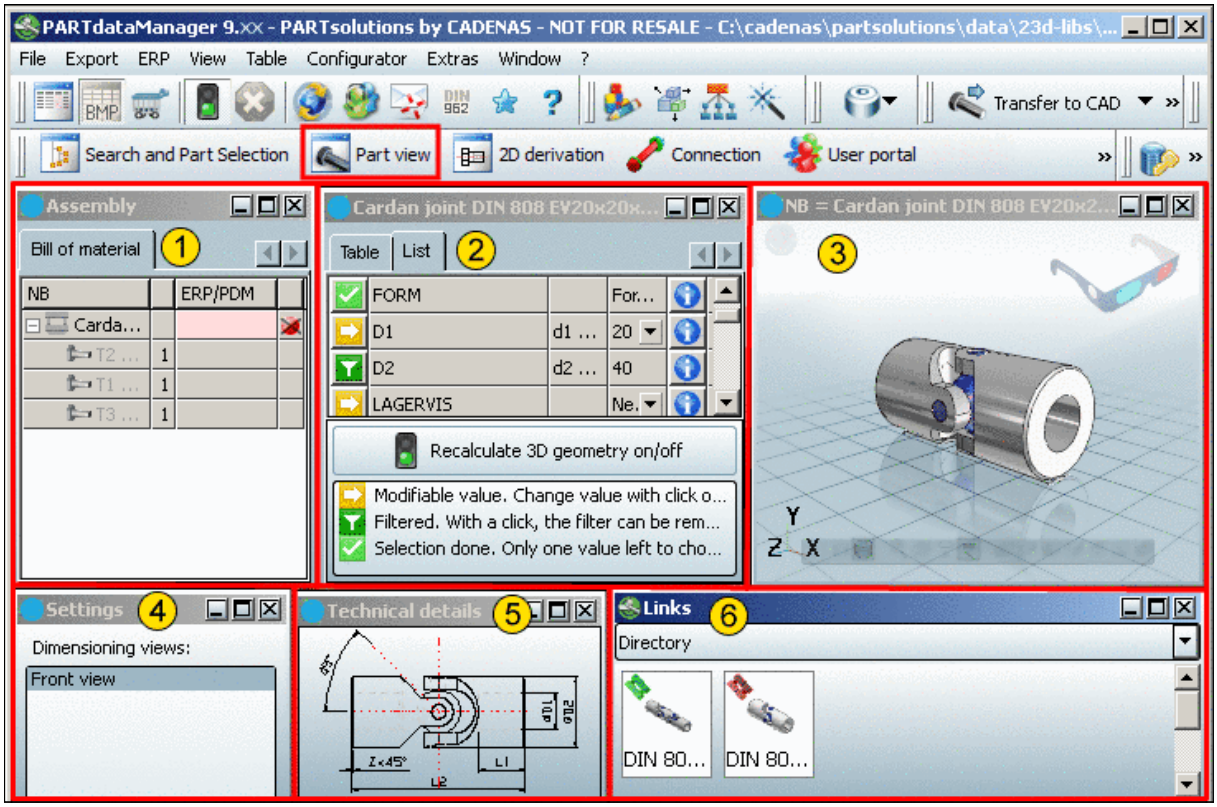


2.1.2. Part view

As soon as a new row with a **part bitmap** (for example, (part) or (assembly) has been clicked on, the interface changes to **Part view**.

In part view the characteristic of the part will be specified.

The following figure shows all dialog areas at a glance. The appearance may differ slightly see Section 2.1.2.2, “ Determine display mode ”).



Part view

In **Part view** you will see the following dialog areas:

1. **Assembly** / **Bill of material** (see Section 2.1.2.4, “ "Assembly" window ”)
2. **Table** and **List** tabs (see Section 2.1.2.3, “ "Table" / "List" window ”)

   Here you will determine the **characteristic** of the part.
3. **3D preview** of the object (see Section 2.1.2.5, “ "3D preview" window ”)
4. **Settings** : List of different **Dimensioning views**; the chosen **Dimensioning view** will be shown in the **Technical details** window (see Section 2.1.2.6, “ "Settings" window ”)
5. **Technical details** with **dimensioning views** (see Section 2.1.2.7, “ "Technical details" window ”)
6. **Links** to similar objects (see Section 2.1.2.8, “ "Links" window ”)

2.1.2.1. Part naming

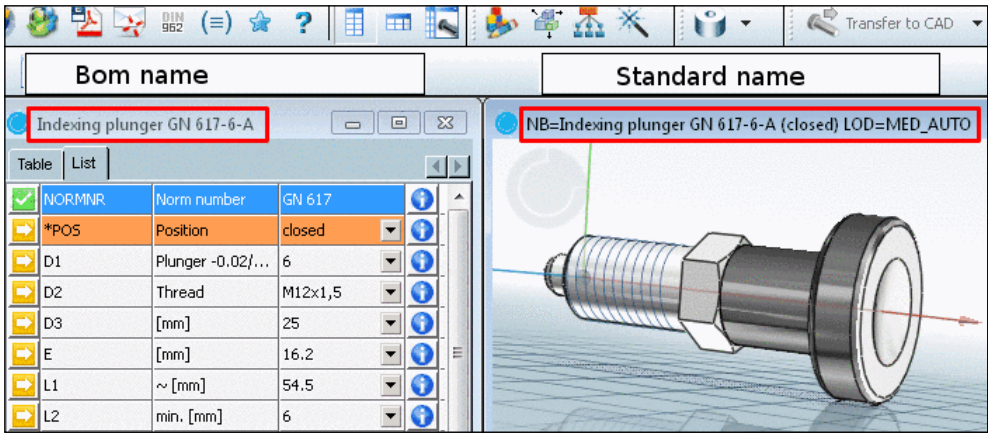
A **part naming** is found in the window title of the table and the 3D view:

- In the table window the **BOM name** is displayed.[13]

[13]The **BOM name** follows the specification of the catalog supplier.

In contrary to the standard name the **function attribute** (such as rod position for example) is **not part of the name**.

- In the 3D window the **Standard name** is displayed.[14]



Part naming

2.1.2.2. Determine display mode

There are different modes for determining the characteristic of a part:

The following are available in **Part view**:

Table view (see Section 2.1.2.3.1, “ Determine characteristic in table view ”)	• **Table** index page The selection via **Table** index page corresponds to the selection via the **Table view of parameters** button.	• **Table view of parameters** The **Table** tab is automatically selected.
List view (see Section 2.1.2.3.2, “Determine characteristic in list view ”) This comfortable option has been added with V9.	• **List** index page The selection for **List** index page corresponds to the selection using the **display table list view** button.	• **display table list view** The **List** tab is automatically selected. • **List view with large 3D view** The **List** tab is automatically selected.

The following section explain the individual dialog areas.

2.1.2.3. "Table" / "List" window

In the dialog area for the specification of the **characteristics** you see two tabs. Herewith you can switch between table and list view:

- Table
- List

In the following sections these two index pages are described in detail.

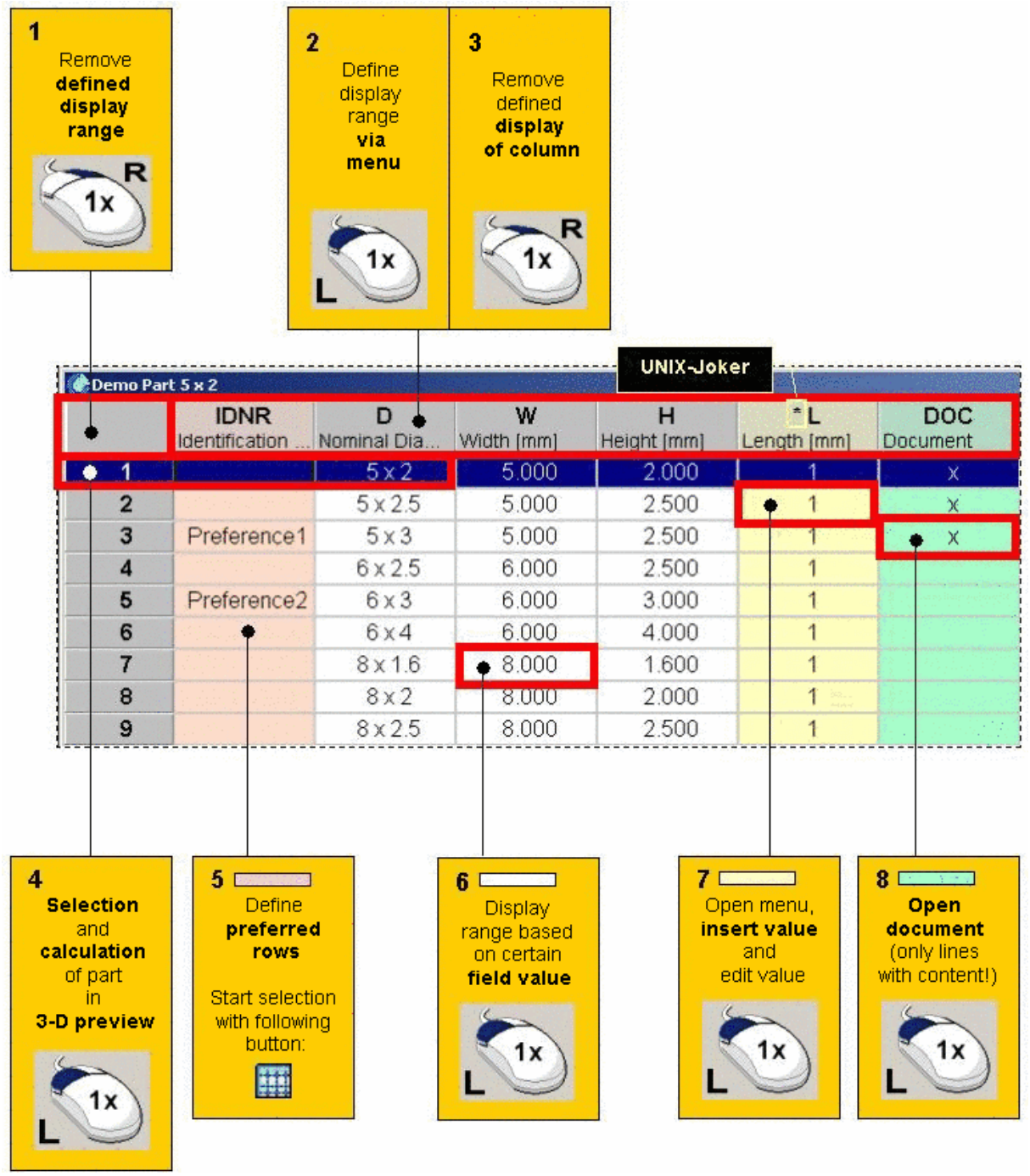
[14]The **Standard name** also follows the specification of the catalog supplier.

2.1.2.3.1. Determine characteristic in table view

Different characteristics of the currently selected element are displayed in the table.

Especially with large parts, the restriction of characteristics to specific values is helpful.

The possible functions of the table view are shown below.



1. Cancel all restrictions

   There are two possibilities tables can be displayed with limited lines and so there are two different filter symbols:

   a. Limitations which result from a search (Examples: A variable search filters certain table lines, also a geometric search, which is based on a certain characteristic.)
   b. Limitations which have been performed in the table itself.

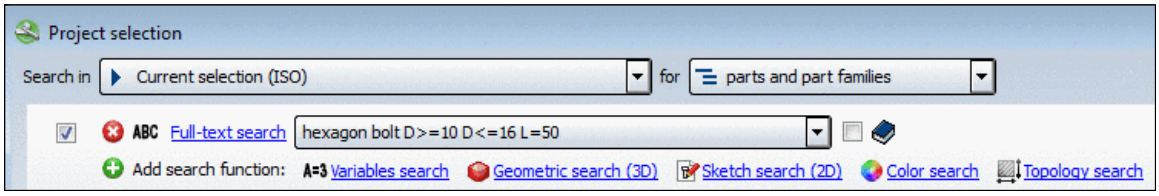
   In order to remove limitations click on the respective filter icon top left.

The filters can work together or each for itself.

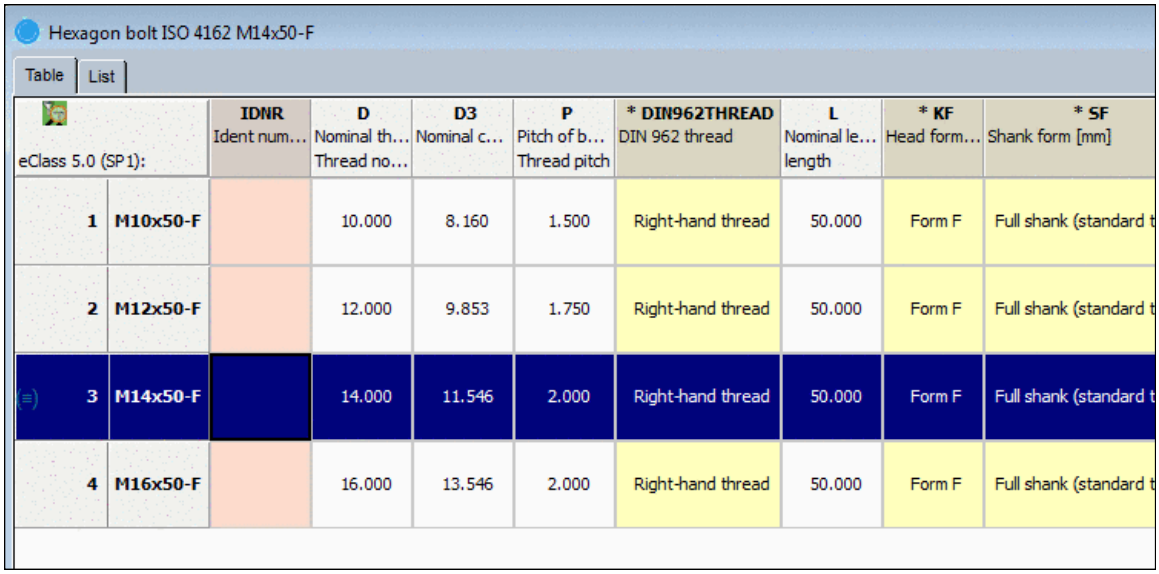
Example:

A **Full-text search** with the current selection "**ISO**" with the following search term is performed:

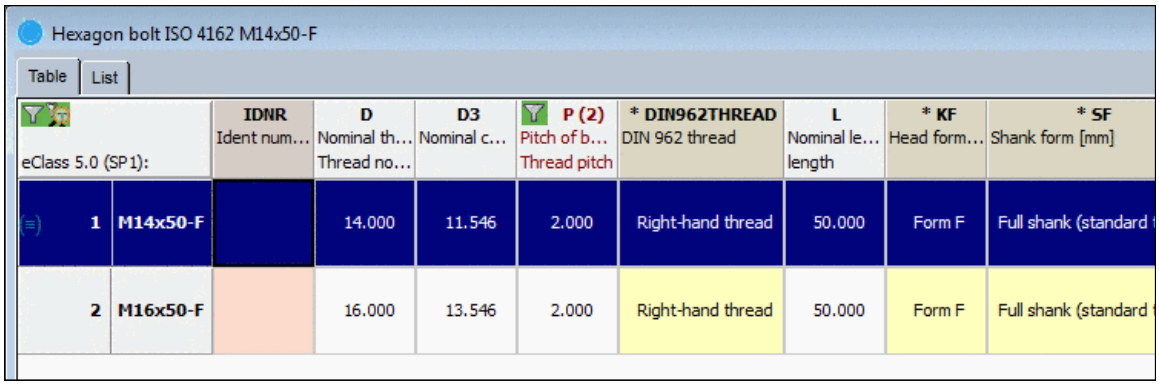
```
hexagon bolt D>=10 D<=16 L=50
```



This results in filtering all table lines which do not meet the condition. The icon signalizes this.



With click on a table value only lines with this value are displayed. The following fig. shows the status after click on the value **2.000** in the column "**P**". (Both filters work together.)

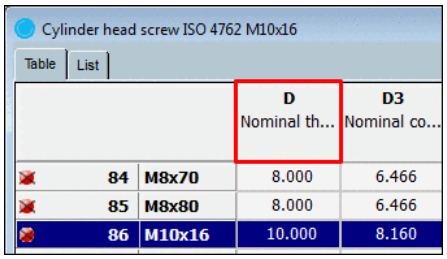


The following fig. shows the table after deactivation of the search filter .

eClass 5.0 (SP1):		IDNR Ident num...	D Nominal th... Thread no...	D3 Nominal c...	P (2) Pitch of b... Thread pitch	* DIN962THREAD DIN 962 thread	L Nominal le... length	* KF Head form...	* SF Shank form [mm]
1	M14x30-F		14.000	11.546	2.000	Right-hand thread	30.000	Form F	Full shank (standard t
2	M14x35-F		14.000	11.546	2.000	Right-hand thread	35.000	Form F	Full shank (standard t
3	M14x40-F		14.000	11.546	2.000	Right-hand thread	40.000	Form F	Full shank (standard t
4	M14x45-F		14.000	11.546	2.000	Right-hand thread	45.000	Form F	Full shank (standard t
5	M14x50-F		14.000	11.546	2.000	Right-hand thread	50.000	Form F	Full shank (standard t
6	M14x55-F		14.000	11.546	2.000	Right-hand thread	55.000	Form F	Full shank (standard t
7	M14x60-F		14.000	11.546	2.000	Right-hand thread	60.000	Form F	Full shank (standard t

2. A possibility for restriction is the dialog **Choose display range**.

Open the dialog with a **single click** into the respective column headers.

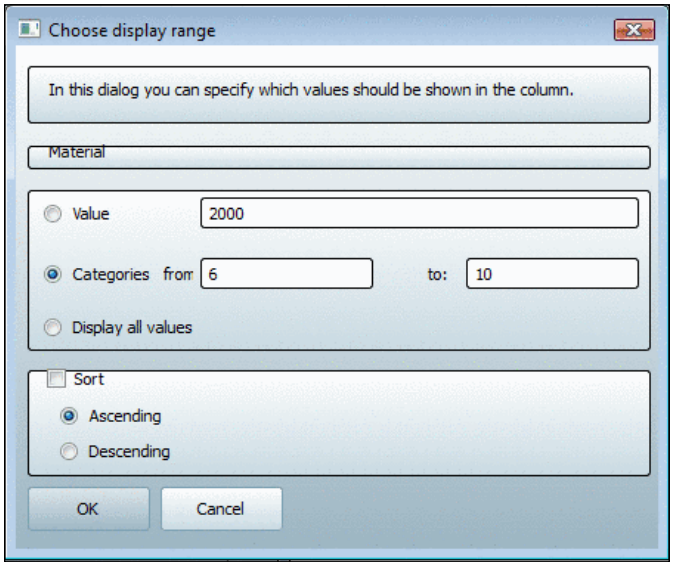


Single-click into the column header

Select the option **Value** or **Categories**.

Select a value in the list field

or define **Categories from** ... **to**.

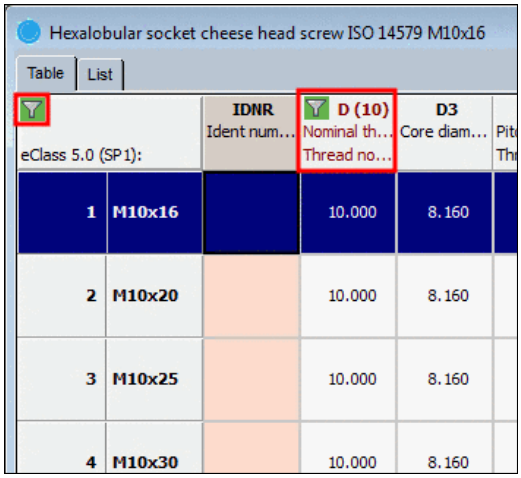


- **Sort**
  - **Ascending**
  - **Descending**

Ascending/descending sorting of the characteristics is possible using the respective option field.

With a restriction to a value of **10,000** for column **D** the displayed table minimizes according

-> The filter value in the column header is displayed in brackets; the font color changes to red and the green filter symbol is displayed .



3. Cancel column restriction

   In order to display all characteristics unfiltered...

   - ...click on the green filter symbol

     or

   - call up the context menu with the right mouse button and click on the **Reset viewing area** command.

   A click on the filter symbol top left removes all restrictions within the table.

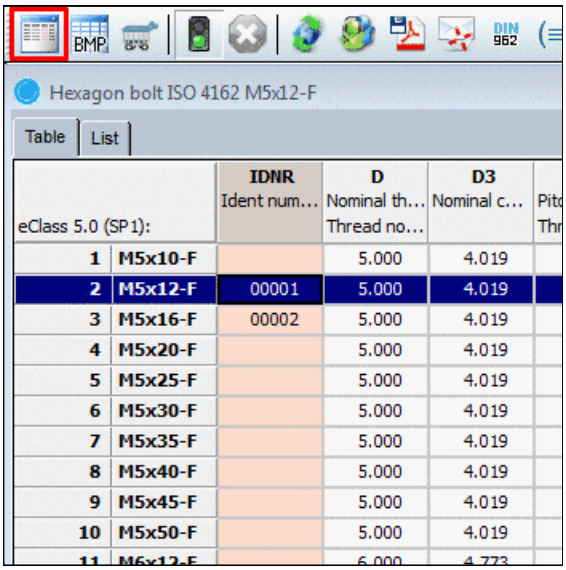
4. Variant selection and calculation of the part in the **3D preview**

   By clicking on the **line number** or on the **row description text** a row is selected.

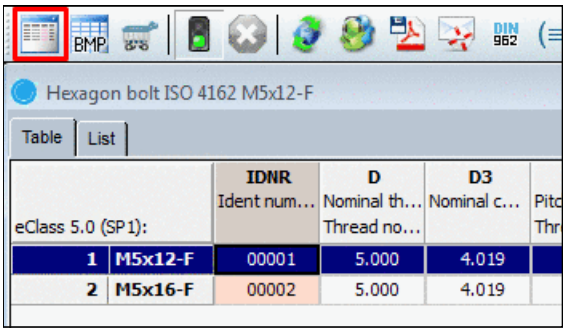
   The chosen characteristic is immediately recalculated and shown in the 3D window.

5. Turn on **Preferred ranges**

   A specific column can optionally be defined administratively as a preferred row column. In this case by clicking on **Preferred rows on/off** only those rows are shown which have an entry in said column. (Often it is the column for the article number)



Preferred rows off

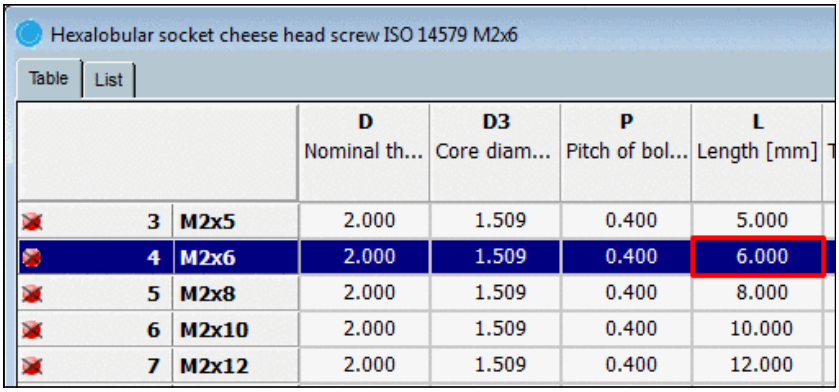


Preferred rows on

Under **Extras** -> **Preferences...** -> **Table** -> **Variable for preferred rows** you can determine the variable for the preferred row.

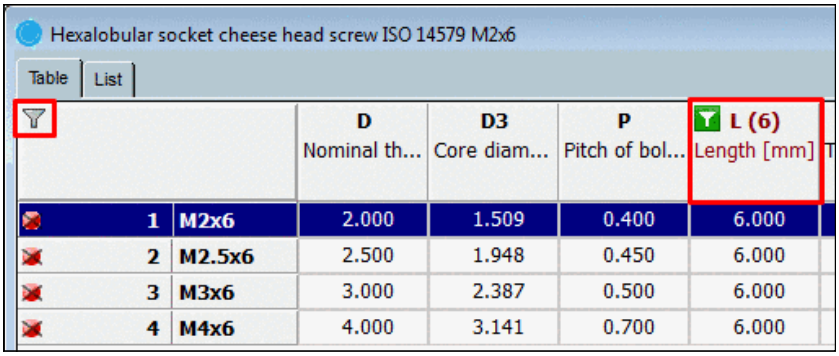
6. Restriction of a specific field value

   Click on a specific **field value** directly whose value you would like to restrict. Now only characteristics with this value will be shown.



   You can recognize the restrictions due to

   - the red color in the column header
   - the additional indication of values next to the variable.
   - the filter icon in the column header
   - the filter icon top left



7. Open the **Enter value** menu and edit the value.

   Certain parts have **Value range variables**. They do not have a fixed value.

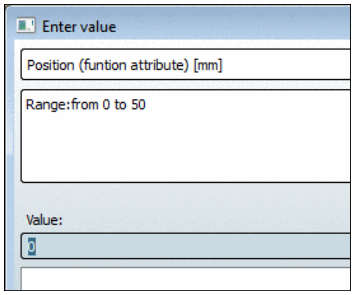
   In order to enter a certain value in a value range column, click on the respective field.

   -> The **Enter value** dialog opens.

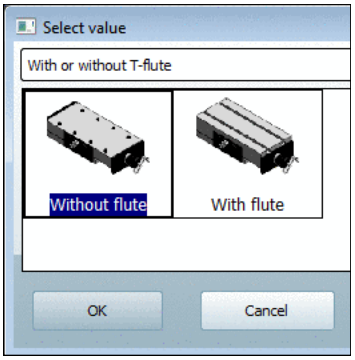
   The display of the value range selection can be conducted in different ways depending on the particular part:

   - **Value range**
   - **Value range with images**
   - **Name of values**

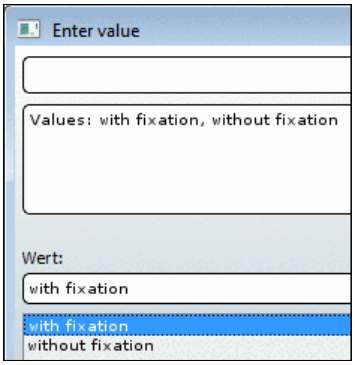
Value range	Value ranges with images	Name of value



Value range



Value ranges with images



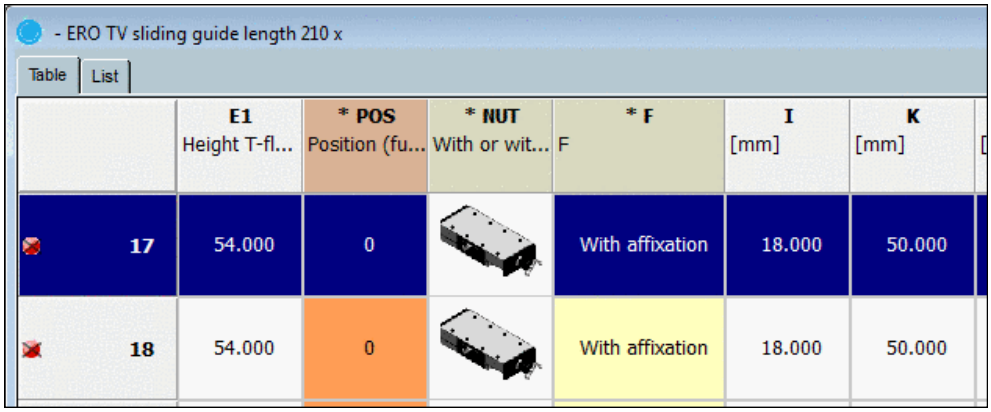
Name of value

Enter the desired value in the default area.	To clarify the selection options in the value range fields, graphics may also be used. Click on the respective preview image.	Choose one of the default values.

--> By changing the table entry, the display in the 3D view changes as well.

Possibly existing graphics can be displayed in the table column.

Via the **Show graphics in table** button select the desired modus.

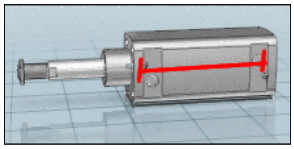


Example: Value ranges with graphic

Value range columns feature different **background colors**:

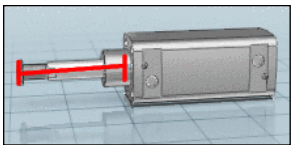
- Yellow = **Geometry attribute**

  The **Geometry attribute** is used for attributes that have an influence on the geometry; for example, if the geometry of the part or assembly changes due to the variable (e.g., maximum stroke length), or components are added/subtracted (e.g. "sensor yes/no" or "option on/off).



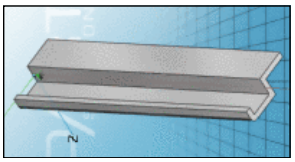
- Orange = **Function attribute**

  The function attribute is used for rod positioning and angularity, everything which defines a mechanical movement in a part/assembly (for example, the rod positioning of a cylinder).



- Dark yellow = **Dimension attribute**

  The dimension attribute is used for half finished parts and profiles that are manufactured in running meter.



8. Open document with additional information.

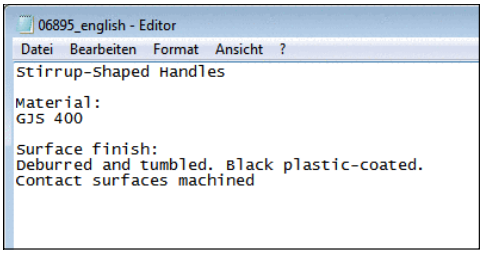
   Some tables contain green highlighted columns (in this example **"BS"**) , in which additional information about parts is contained. Behind fields marked in green, documents in form of text, image or internet file formats are hidden, but additional programs can also be opened this way.

- 06895-14012

Table | List

	BEST Order No.	AUSF version	A Length [mm]	D Internal thr...	BS Description
1	06895-10006	tumbled	100	M 6	Infotext
2	06895-11208	tumbled	112	M 8	Infotext
3	06895-12510	tumbled	125	M 10	Infotext
4	06895-14012	tumbled	140	M 12	Infotext
5	06895-100061	tumbled,black plastic-coated	100	M 6	Infotext

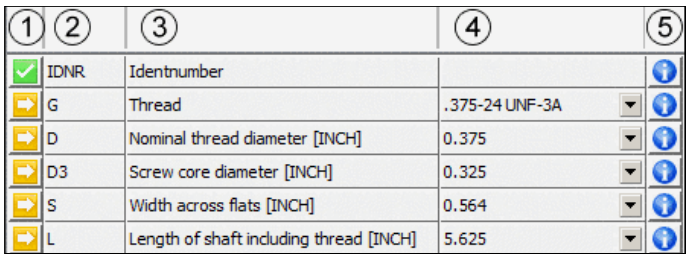
   In the example the text files have been deposited.



2.1.2.3.2. Determine characteristic in list view

The part variables can also be shown and operated in a **list view** in addition to the **table view**.

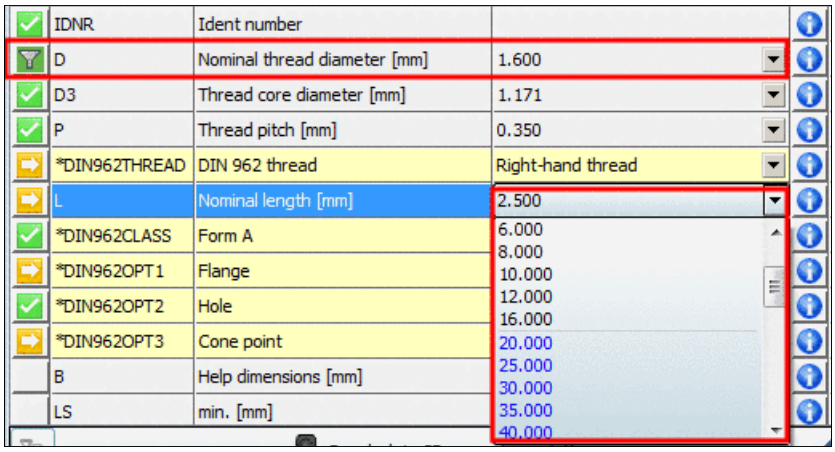
The list display contains the following columns:



Meaning of columns

1. Icon

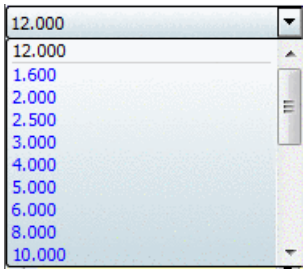
	Meaning
	Fixed value The variable contains a non-changeable value.
	Several values available in list field / Changeable value: When you select a value in the list field, then automatically depending variables are changed as well. The following two possibilities can occur: a. At a depending variable only one value is still possible. Then the variable is marked with ☑. In the opened list field you see a black value (the set and the others in blue font color. b. There are restrictions at a depending variable, but still several values are possible. Then the variable is marked with further on. In the opened list field you see black values. These are not affected by the current selection. Furthermore you see blue values. These have been filtered by the current selection.
	Value indirectly determined



Example: D has been set to the value 1.6. Thereby at L values greater than 20 are not possible anymore. These now are displayed in blue font color.

This symbol is shown if:

a. only one value was basically available
   or
b. by filtering another variable, the selection was restricted to one single value.



Note

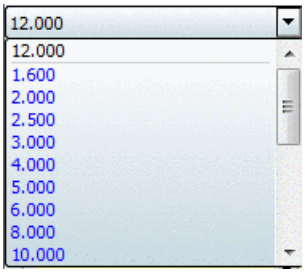
This does not mean that you cannot perform changes anymore.

However by the selection of a blue value all restrictions performed before are removed.

Value pinned

The value has been pinned by clicking on or or by direct selection.

- Actively filtered variable (by selection in the list field or by clicking on the symbol)
  In the related list field all values are blue, except the set one. This is black.



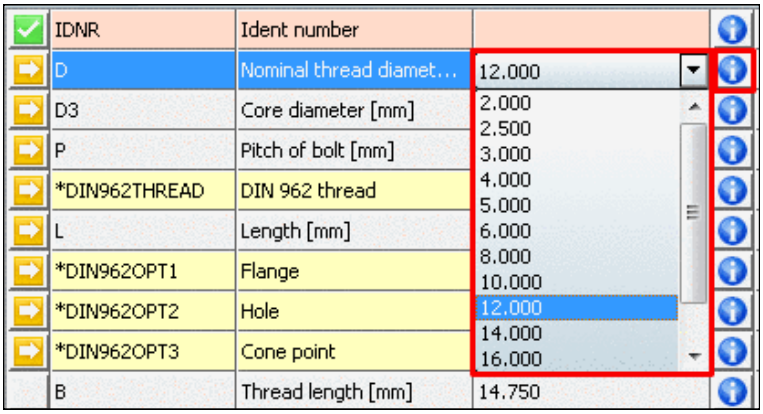
- Filtered variables restrict depending variables. There values, not available anymore, are also colored in blue.
  Variables unaffected by the filtering are still displayed in black.
  Compare Fig. „Example: D has been set to the value 1.6. Thereby at L values greater than 20 are not possible anymore. These now are displayed in blue font color.“.
- By clicking on the icon the filter can be removed again.
- Yellow and orange variables (value range fields) can not be filtered. (These are set via .)

By clic5king on this symbol the **Enter value** window opens. For value ranges (yellow and orange fields) you may make a selection here.

2. **Name of variable**
3. **Variable description**

4. **Variable value**

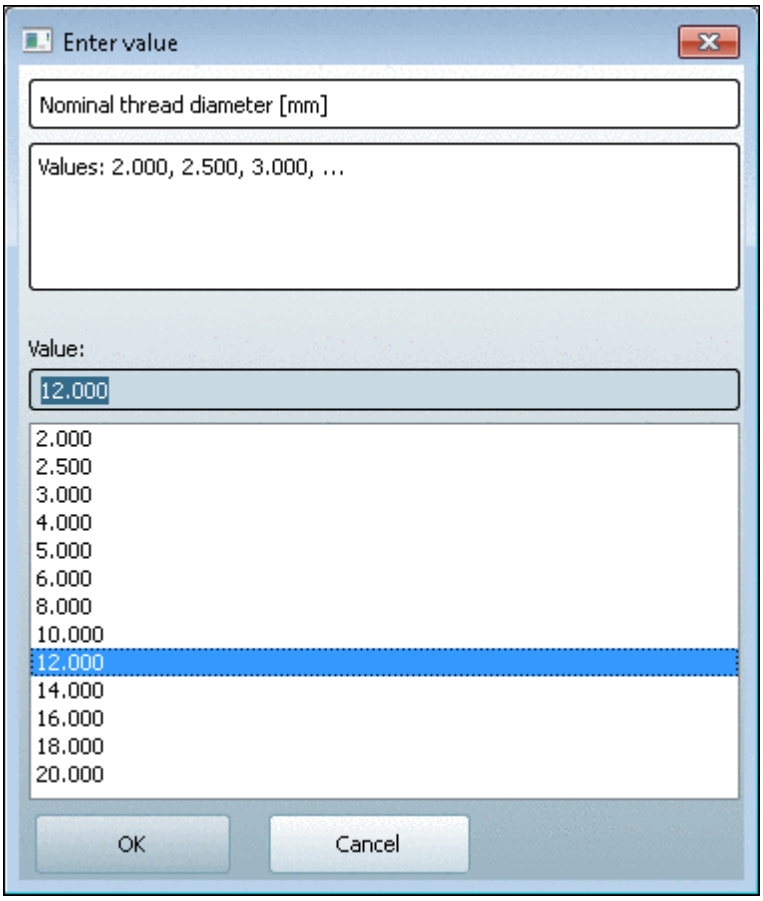
   The value can be changed via the list field (if possible at all).



Choose value

5. **-Button**

   By clicking on the **value range selection dialog** is opened. Here the variable value can be changed as well.



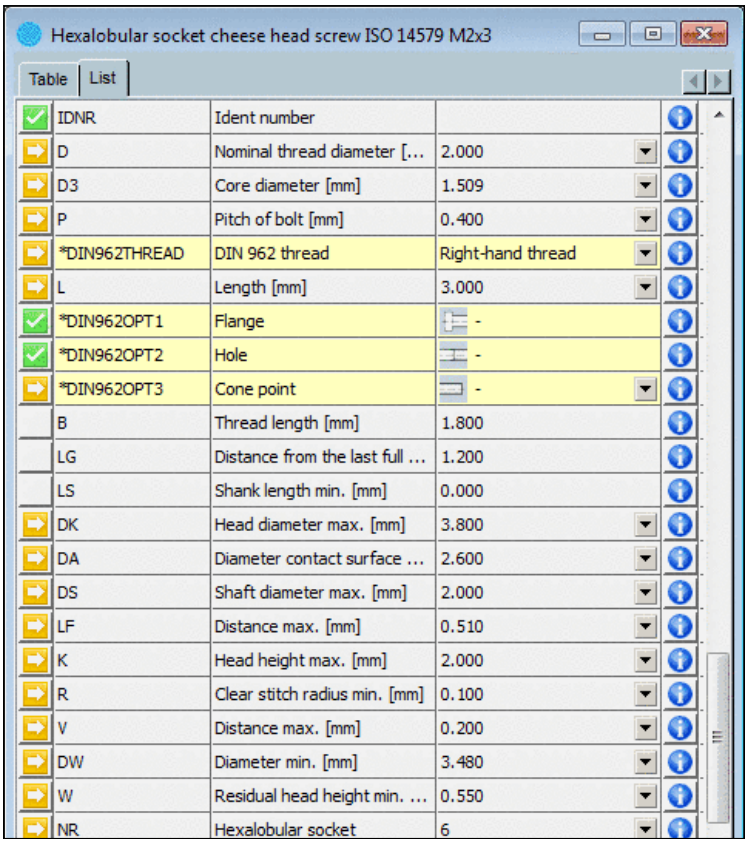
Enter value

Example - Quick restriction to desired values:

- All table values are listed underneath each other. The variable values are set to middle table values.

  Variables **B**, **LG** and **LS** have a set value ☐.

  For all other variables you can change the default value via the **list field of the variable value** or with ℹ.



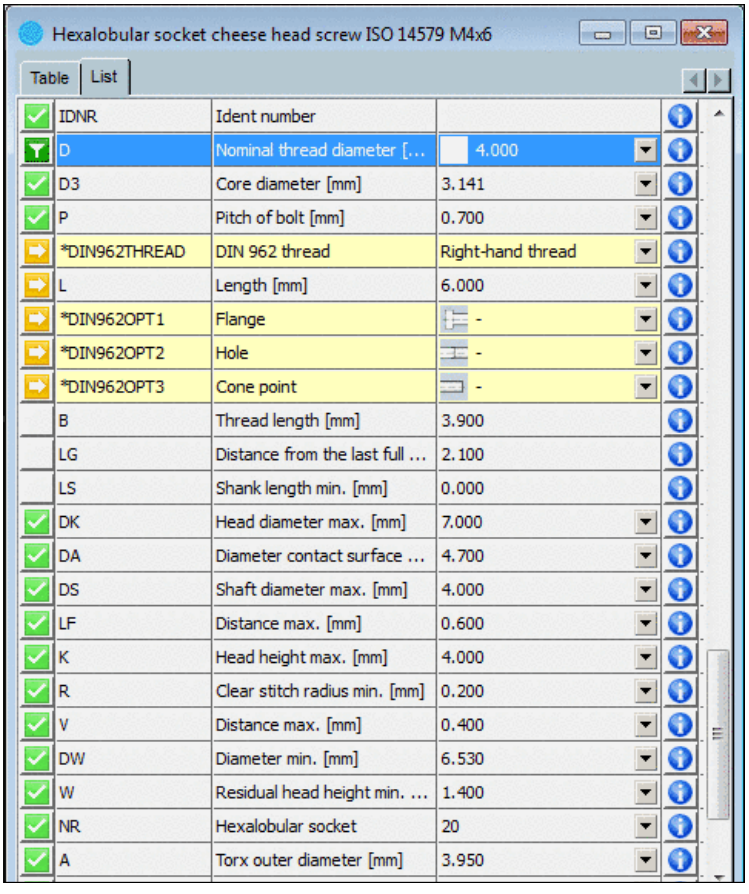
Define value range of individual variables

- The value of variable **D** was changed to **2,000**.

  -> The variable is therefore automatically pinned. A filter symbol is displayed.

  -> All other values dependant on this value are also pinned and identified by a checkmark symbol ☑.

  See Fig. „Change of value D“.



Change of value D

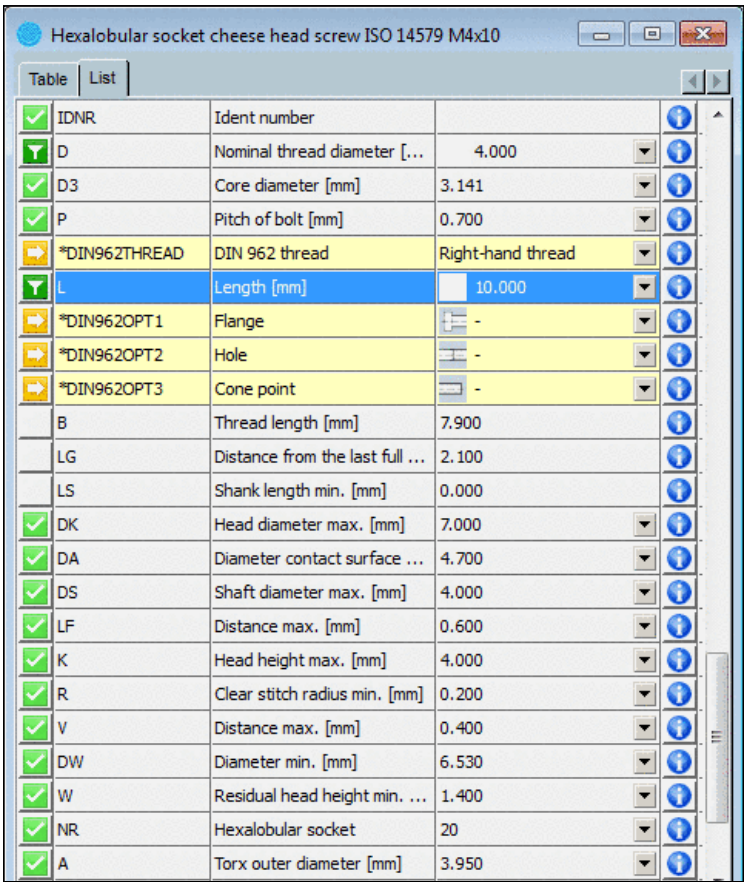
- Variable **L** can still be defined as desired.

  Set the value to **6,000**.

  -> Now the filter symbol is displayed here too.

  -> The two **DIN962** options **flange** and **hole** are now also pinned.

  See Fig. „Change of value L“.



Change of value L

- With particular parts in the last step you can change the **DIN962 option** by clicking on  at a **DIN962OPT** value.

  Note

  As of PARTsolutions version 9 for all standard parts the DIN 962 was converted. This controls how screws and nuts can be adjusted for special use cases through additional forms and designs.

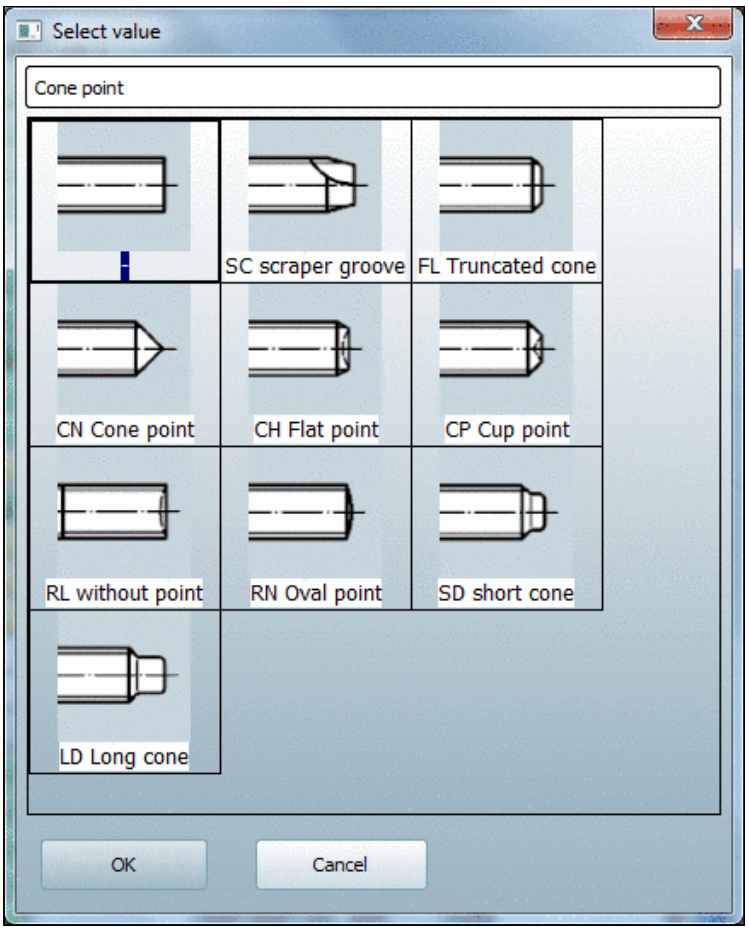
  Whether you want the DIN962 options to be displayed in the table and list views can be decided via the respective button in the button bar.

  Standard toolbar: DIN 962 button

  -> The dialog box **Select value** opens.

  Select the desired tip and confirm with **OK**.



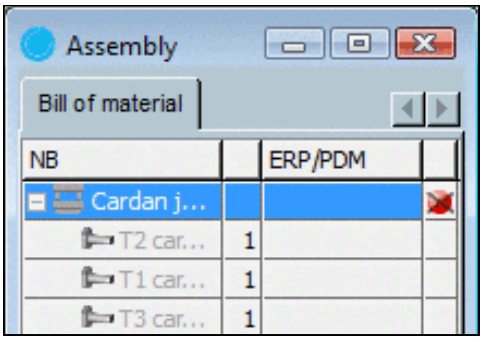
Select tip

2.1.2.4. "Assembly" window

The **Assembly** window shows the **Bill of material** for assemblies.

The single parts are listed with their **Amount**.

By selecting the assembly or a single part, the respective table is loaded.

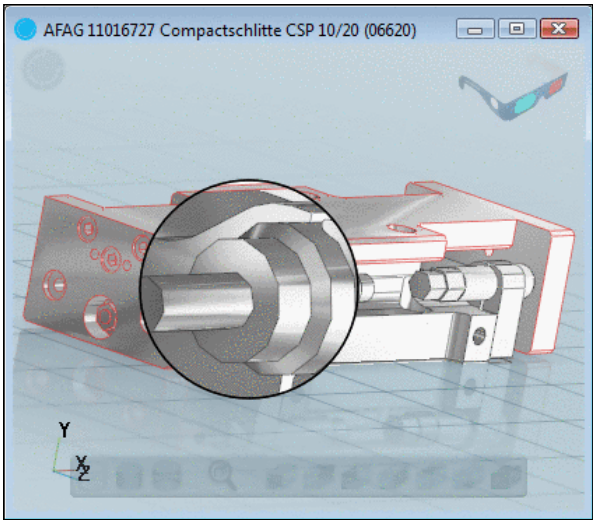


BOM list information

2.1.2.5. "3D preview" window

The characteristic chosen in the **Table** or **List** is immediately displayed in the **3D window**.

For visual component testing there are a number of functions available to you:



3D preview with magnifying function

- **3D toolbar**

  To control the **3D preview** use the buttons in the 3D view toolbar. The most important functions are summarized here.

  3D view toolbar

  If you move the cursor over the buttons, the display of a button changes from dimmed to full-color.

  The currently selected button (shadowed e.g.) is displayed a little bit darker. Magnifying glass and animation can also be activated and then are displayed darker as well.

  Button clicked

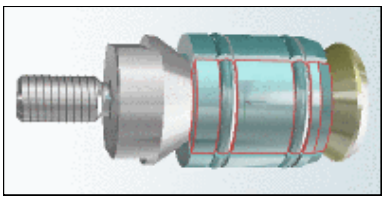
  More detailed information about the individual buttons can be found under Section 2.1.2.5.1, “3D window toolbar ”.

- **Mouse functions**

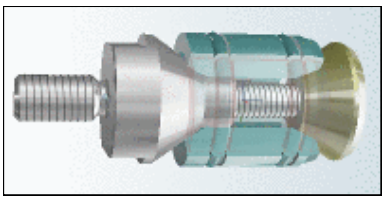
  With the mouse functions **left mouse button**, **right mouse button**, **both right and left mouse button pressed at the same time** you can carry out the following operations:

  - **Rotate**
  - **Pan**
  - **Zoom in/out**
  - **Transparency**

    With the **middle mouse button** you can set the desired part to **transparent**.



Part marked



Transparency with middle mouse button

By holding down the Shift key you click through the transparent parts and can thus also select a part behind it and make it transparent as well.

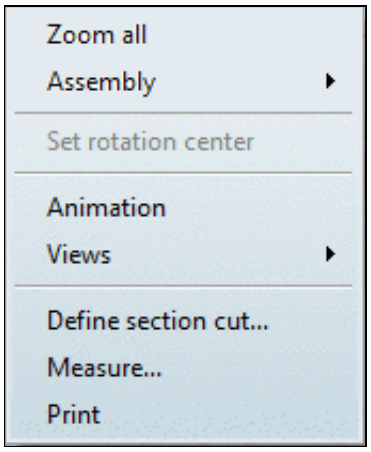
- **3D context menu**

By right-clicking into the 3D window you reach the context menu.

There you have some commands of the 3D toolbar available in parallel, in addition some more commands:

- Define sectional plane... (see Section 2.1.2.5.5, “ Define section cut... ”)
- Measure... (see Section 2.1.2.5.3, “ Measurement of 3D parts ”)
- Measuring grid (see Section 2.1.2.5.4, “ Measuring grid ”)
- Print

More detailed information about the individual buttons can be found under Section 2.1.2.5.1, “3D window toolbar ”.



3D context menu (assembly)

- **Coordinate system**

  The coordinate system is displayed on the bottom left per default. You can change this under **Extras** -> **Settings...**. (on/off, position).

- **Red-cyan display**

  With a pair red-cyan glasses you can see the assembly even more realistically in 3D.

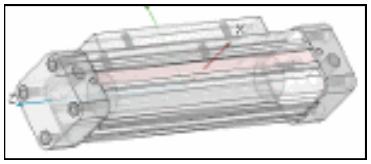
  The default display is on the top right. You can change the display under **Extras** -> **Settings...**. (on/off, position).

2.1.2.5.1. 3D window toolbar

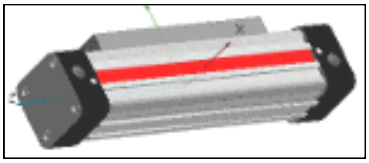
This section describes the individual buttons of the 3D toolbar in the 3D window in detail.

3D toolbar

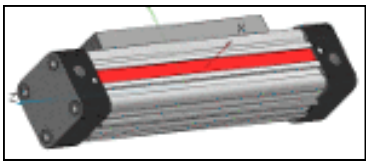
Line view



Shaded view



Shaded view with edges



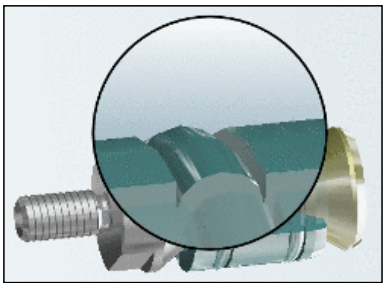
Zoom all

The display is adjusted in the center of the window.

Magnifying glass on/off

The magnifying glass can be turned on/off.

The magnifying glass enables viewing parts in detail..



Magnifying glass on

Note

The rules for the mouse function in the 3D window apply to the magnifying glass function as well.

For example when holding down the left and right mouse buttons you can move the magnifying glass over the part.

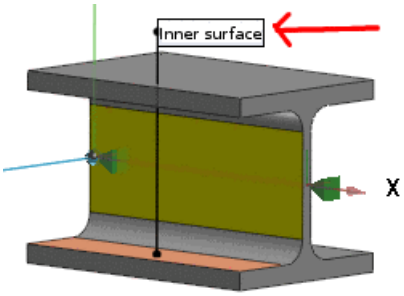
Animation on/off

The animation (rotate part) can be turned on/off.

Note

By clicking anywhere outside of the toolbar, the animation is also turned off.

Text attribute and Display published elements



7 views:

Front, **Back**, **Left**, **Right**, **Top**, **Bottom**, **Isometric**

As soon as the context menu command **Define section cut...** is called, the respective toolbar appears.

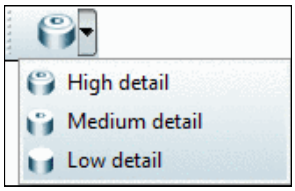
3D toolbar: Define section cut...

Detailed information on this is found under Section 2.1.2.5.5, “ Define section cut... ”.

2.1.2.5.2. Select Level of Detail of part

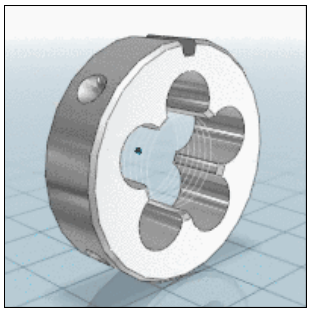
Using the **detail**  button, you can select the **Level of Detail** of a part (assembly).

As soon as you have clicked on this button, the display changes in the 3D window.

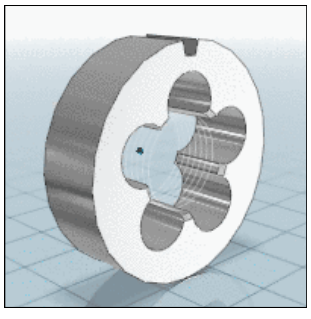


Detail function button

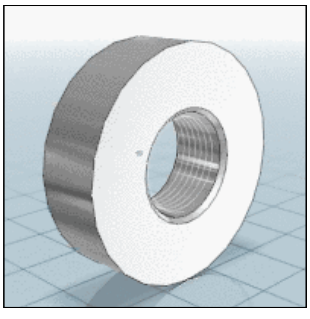
- High detail
- Medium detail
- Low detail



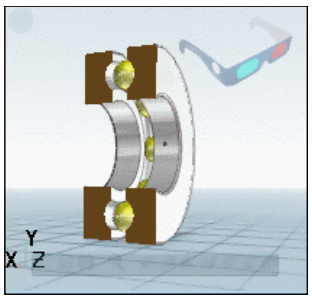
High detail [a]



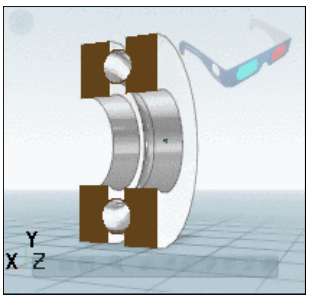
Medium detail



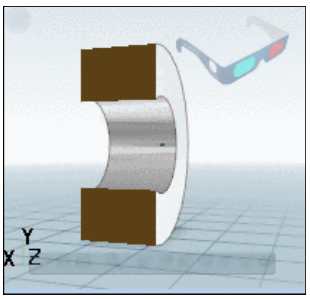
Low detail



High detail [b]



Medium detail



Low detail

[a]Example images depict ISO 4231
[b]Example images depict deep groove ball bearing DIN 711

Note

As of PARTsolutions Version 9 all standard parts are applied in 3 levels of detail.

Advantage:

With the level of detail "low" your parts (especially large assemblies) are loaded much quicker. This is convenient during part search, for example, and it saves time. If you want to analyze a part in more detail, switch to "medium" or "high". During export, detail "high" is usually set administratively, independent of the currently displayed level of detail.

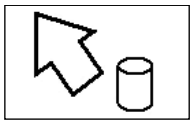
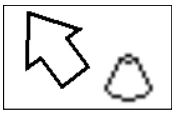
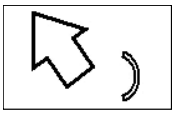
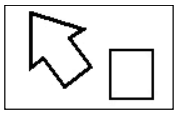
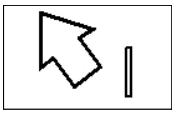
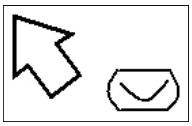
2.1.2.5.3. Measurement of 3D parts

The **Measure dialog** is subdivided into fields **Element 1**, **Element 2** and **Result** and **Constraints**.

By calling the **Measure** command the mouse pointer gets an **object related geometry symbol** in the **3D view** , which is signalizing the type of the touched element.

After you have clicked consecutively on two **drawing elements** (area, edge or bore etc.) in the **3D view** a **Symbol** is displayed in each of the fields **Element 1** and **Element 2**.

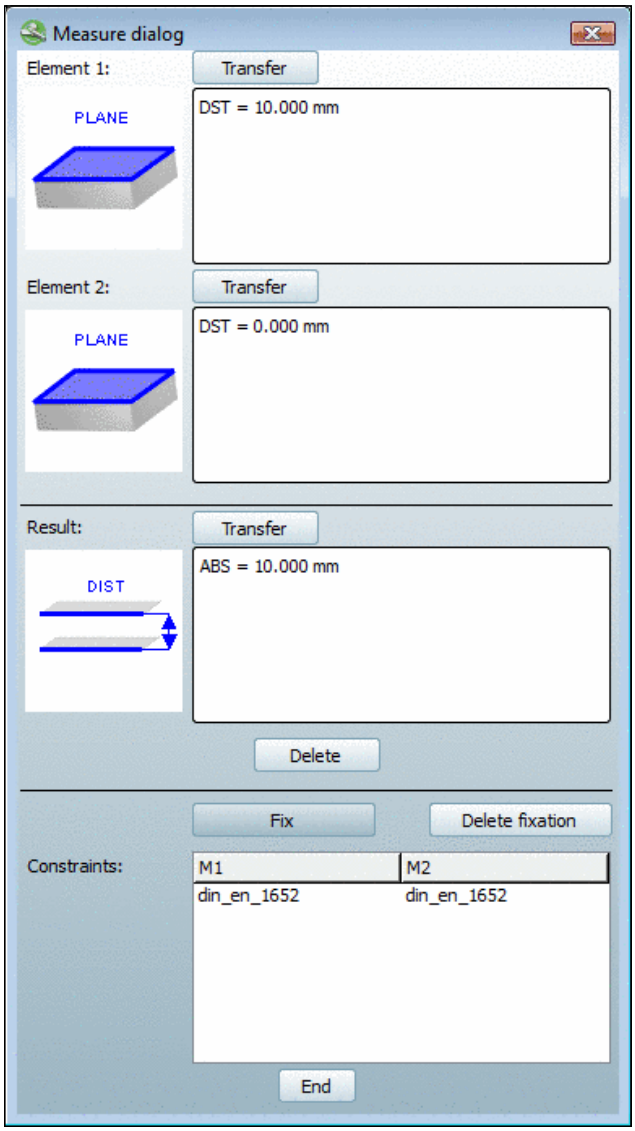
In the following the possible **geometry symbols** are shown:

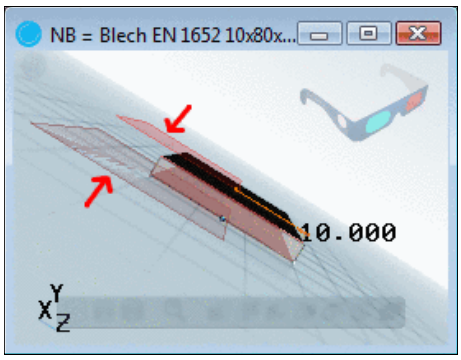
					
Bores and cylinders	**Conical faces**	**Circular edges**	**Planar planes**	**Straight edge**	**Toroidal faces**

Note

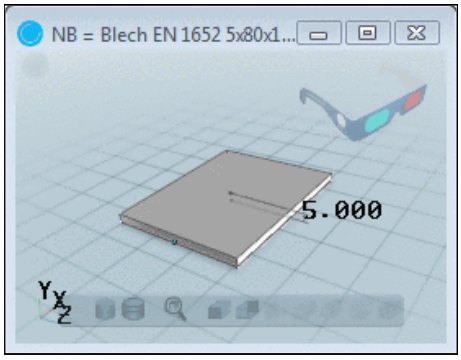
In order to determine the **dimensions** of a part, simply call up the context menu command **Measuring grid** in the 3D window. See Section 2.1.2.5.4, “ Measuring grid ”.

In the following example, **two opposing planes** have been clicked (see Fig. „2 planar planes selected“).





2 planar planes selected



Fix: The measurement stays during changing the table rows

The two faces are at a specific distance of 10 mm, as shown symbolically in the **Result** area. The **measure of distance** (ABS = 10.000°) is displayed to the right of it.

Constraints

With planar, parallel planes the **Fix** command is available.

When changing table row, the display of the measurement remains in the **3D view**.

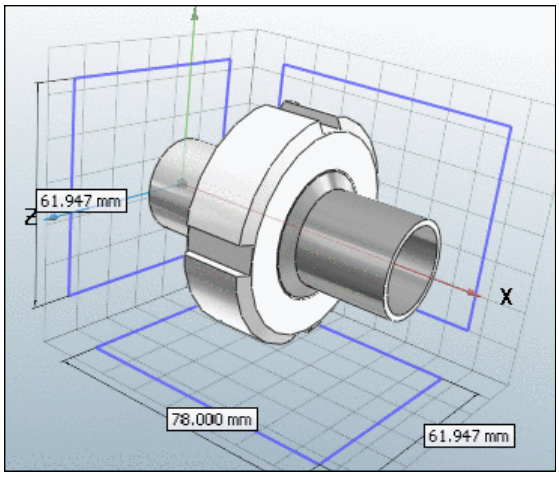
With **Delete fix.** you can delete the constraint.

Transfer

The **Transfer** command can be used during the classification procedure of native parts.

2.1.2.5.4. Measuring grid

When you activate the context menu command **Measuring grid** inside the 3D window, the **maximum dimensions** are displayed.

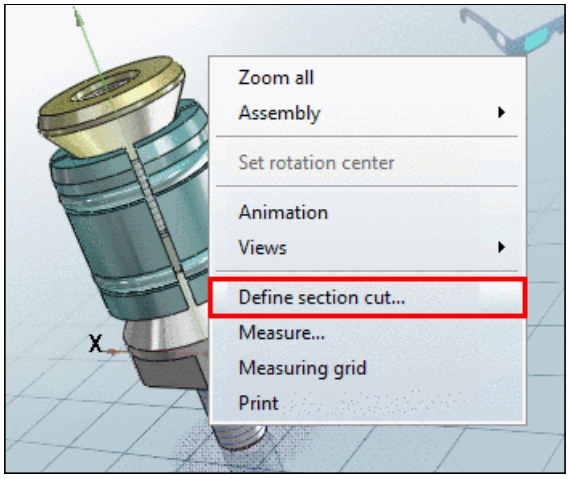


2.1.2.5.5. Define section cut...

Select a sectional plane and the desired offset in relation to zero level. Depending on the algebraic sign an offset in positive or negative direction results.

Call up

In the **3D view** call up the **Define section cut...** context menu command.



-> The respective toolbar is displayed.

Toolbar buttons

 Close: The "Define section cut" mode is finished, the toolbar hidden.

 YZ plane

 XZ plane


XY plane

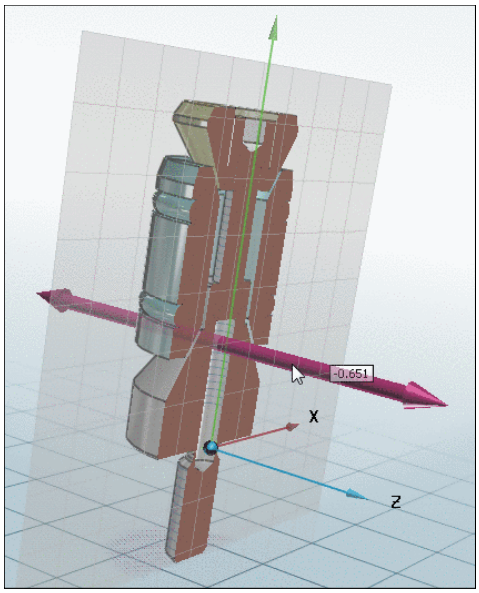

Reverse section cut


Show plane

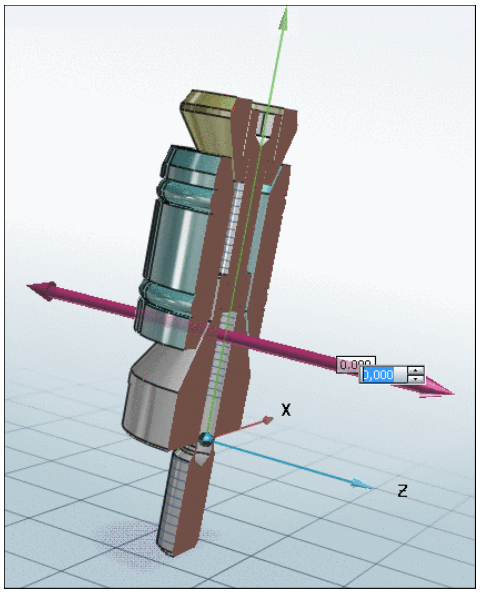
Move sectional plane

In order to move the sectional plane, to determine the offset, you have the following options:

- Click on the axis and move the cursor along the axis with pressed mouse key.
  -> The current offset value is displayed fluently.
- Click into the input field on the axis.
  -> The input field is opened. Insert the desired offset value or change the value with the little arrow keys.



Sectional plane displayed



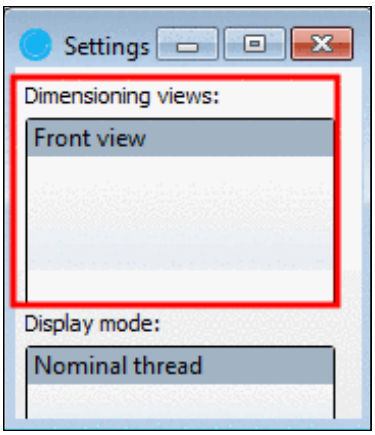
Input field for offset value opened

2.1.2.6. "Settings" window

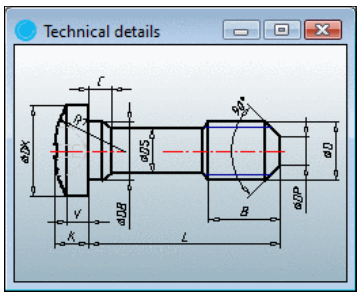
In the **Settings** dialog you can select between different **Dimensioning views** (for example **Front view**, **Side view**) and **Display mode**.

Select the following in the **Settings** window:

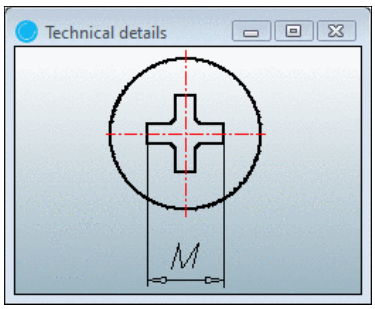
a. The desired **Dimensioning view**
   The **Technical details** page shows the respective setting.



Dimensioning views

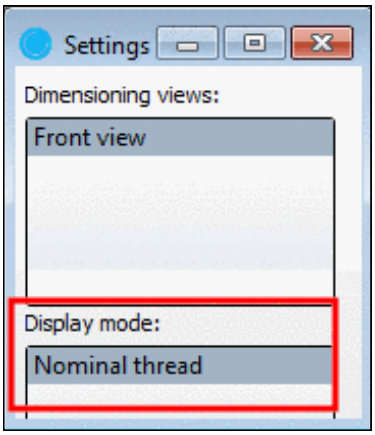


Front view

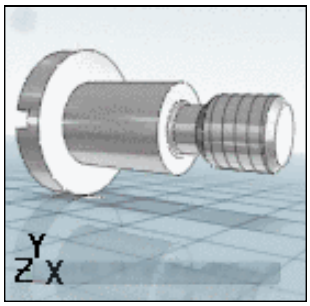


Side view

b. The desired **display mode**
The 3D view shows the corresponding setting



Display mode

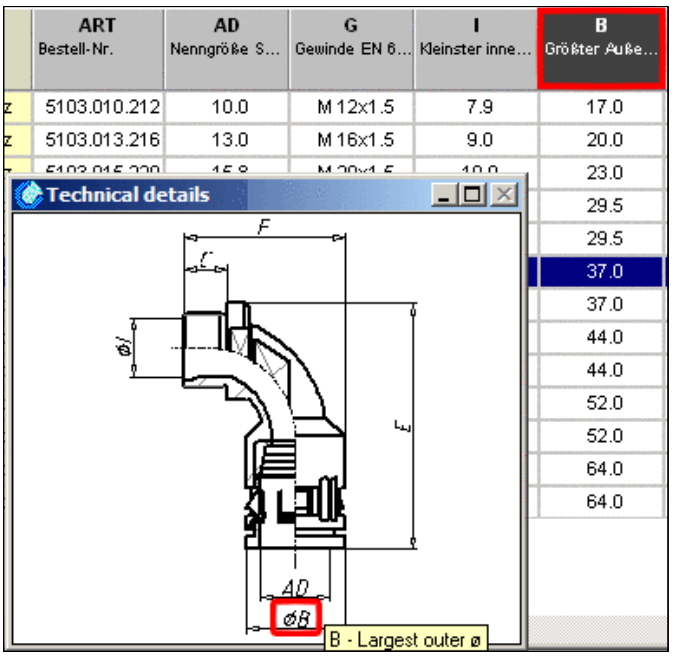


Nominal thread

2.1.2.7. "Technical details" window

The **Technical details** window contains **Dimensioning views**, that you select under **Settings**. See Section 2.1.2.6, “ "Settings" window ”.

If designated in the project layout, clicking on a variable in the dimensioning view causes the appropriate one to be marked in the table as well.



2.1.2.8. "Links" window

The **Links** window contains references to related parts.

Depending on the selection in the list field, specific categories for the comparison are used.

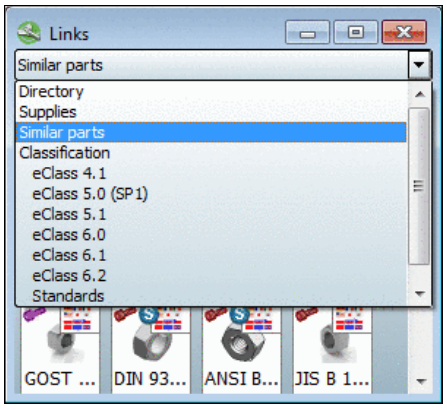
These may be:

- **Directory**

  The remaining parts from the same directory are shown.
- **Accessories**
- **Similar parts**

  With this selection, the geometric similarity search is running in the background
- **Classification**

  The same classified parts within the selected classification are displayed.



References to related parts

You can find the same settings options under **PARTdataManager** -> **Extras** -> **Settings...** -> **Part selection** -> **Content of the link window**

By double-clicking on a part, you can load it directly.

2.1.2.8.1. Geometric search in the background

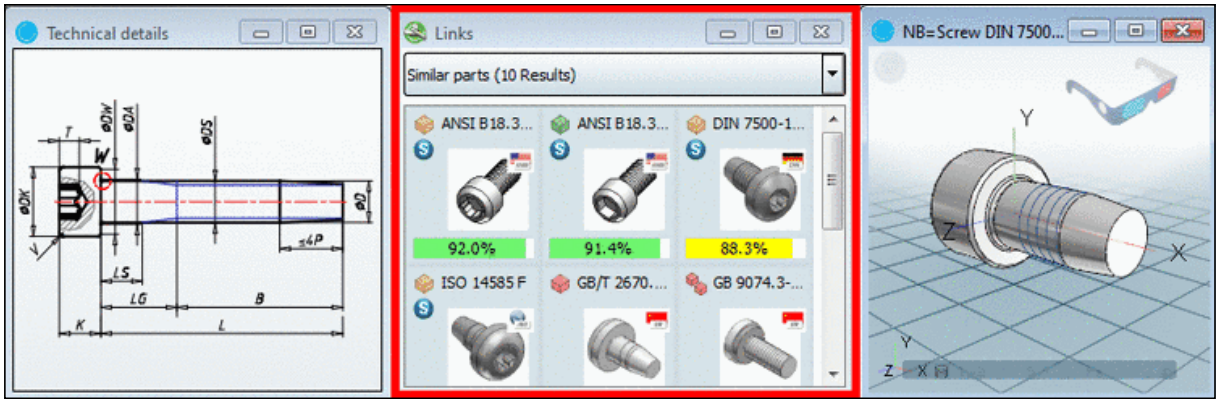
The geometric search is running in the background in PARTdataManager.

Parts found that are similar to the currently opened part will be immediately offered.

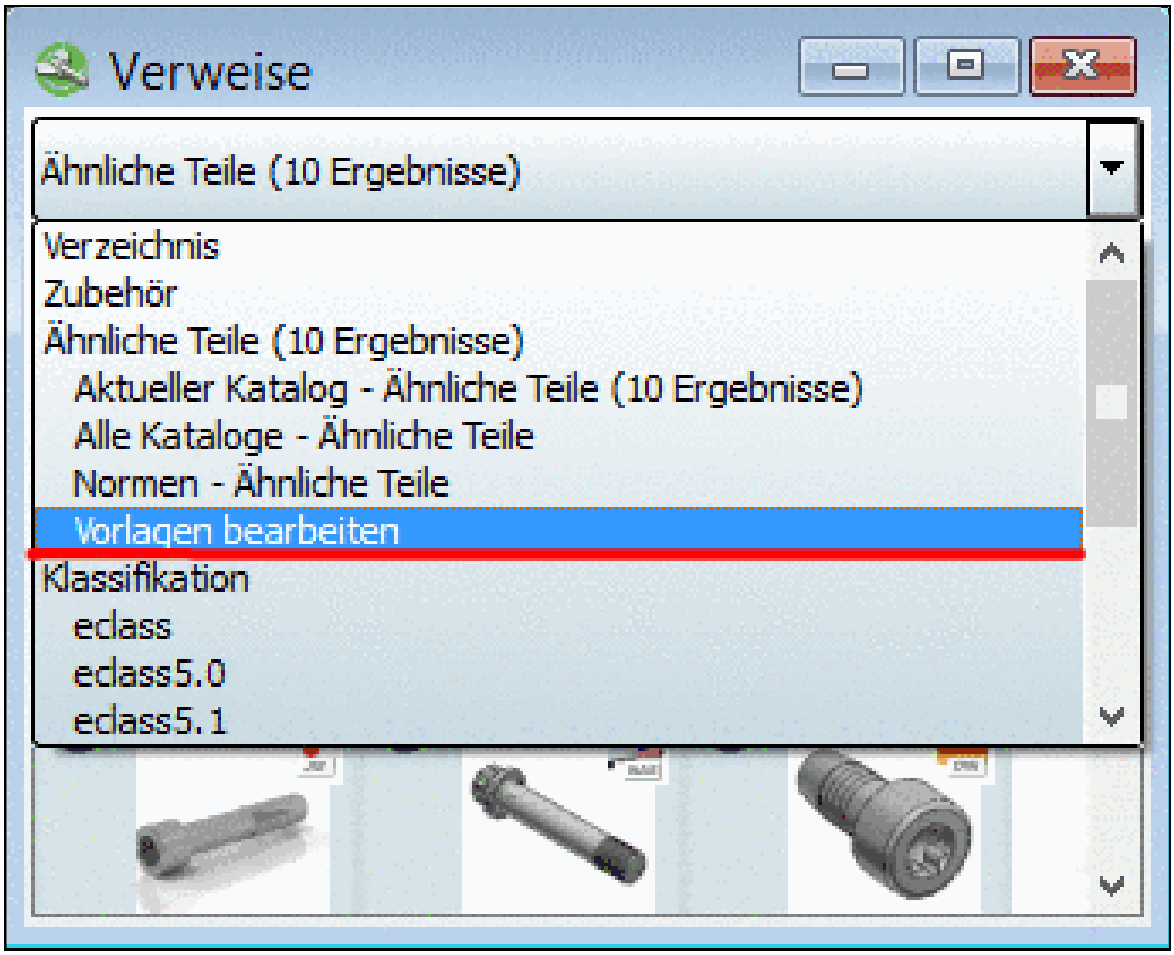
You may continue working, configuring parts, create a 2D derivation, etc., all without being disturbed.

The display of geometric similar parts occurs under **Links** -> **Similar parts**.

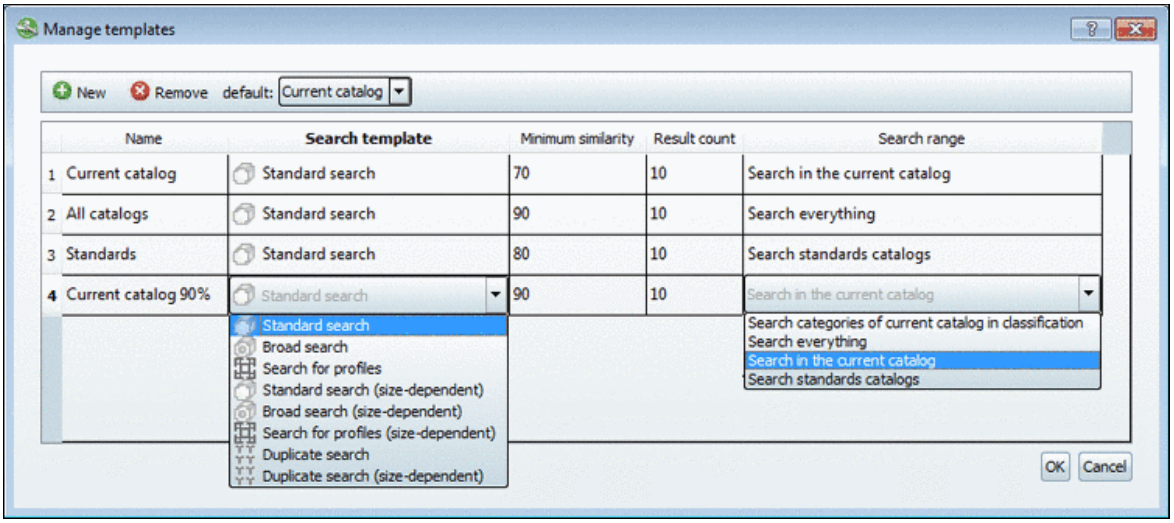
Via double-click you can directly load them.



- Works with parts from the **Own parts library** as well
- May be turned off
- In the search results, the catalog is displayed as a preview image
- Via subitem **Edit template** you can configure, exactly where and with which minimum similarity shall be searched (details follow).



-> The respective dialog box **Manage templates** opens.



Dialog box "Manage templates"

Already existing templates are listed. Now you can perform the following settings:

- **Name**:

  In the **Name** column, double-click the desired field. Afterwards you can change the displayed name of the template.
- **Search template**:

  In the **Search template** column, double-click into the desired field. Afterwards you can select the desired template in the list field.
- **Minimum similarity**:

  In the **Minimum similarity** column, double-click into the desired field and set the desired value via little arrow keys.
- **Result count**:

  In the **Result count** column, double-click into the desired field and set the minimal number of results via little arrow keys.
- **Search range**:

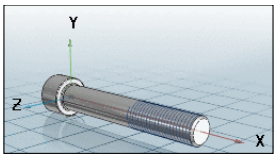
  In the **Search range** column, double-click into the desired field. Afterwards you can determine the search range in the list field.

Furthermore you can add or remove templates and determine the default template.

The default template is used, if you do not use the templates displayed indented (meaning no special template), but the item **Similar parts** one level higher.

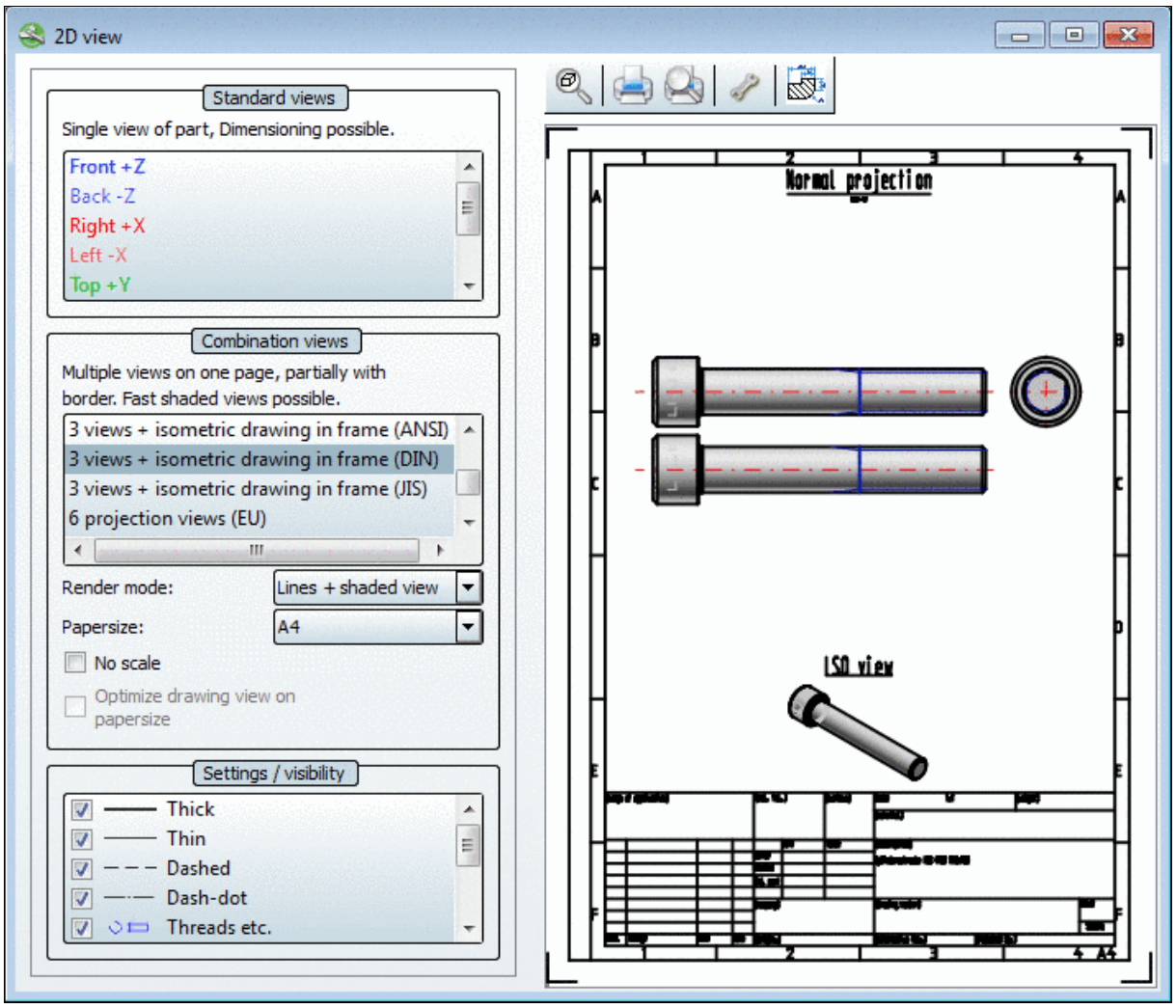
2.1.3. Create 2D derivation

2.1.3.1. Calling 2-D drafting

	3-D Object	Generate 2-D derivation	2-D Object
In order to be able to insert a 3-D part/assembly from PARTsolutions into a **2-D CAD system**, you must create a **2D derivation** of the 3-D object. You can find the command in the menu as well as in the toolbar. • **View** menu, **2D view** • **Default** toolbar, **2D view** First, the command opens the "empty" dialog window **2D view**.			

2.1.3.2. "2D view" dialog box

Selection and settings within the **2D view** window, create the basis for the display of the object in your CAD system.



Dialog window 2D view

As soon as you click on a view, the **2D derivation** of the part is created.

Note

An exception for **Combination views** is the option **Shaded view**. Here the 2D derivation is only created in case of an export to the CAD system. See more under Section 2.1.3.2.2, “ Combination views ”.

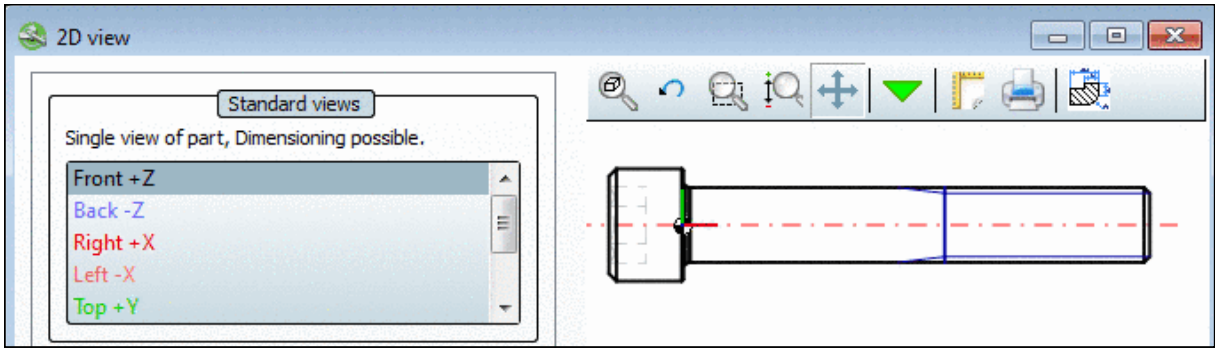
-> Once all settings have been made, click on **Transfer to CAD**.

The settings area of the dialog page is subdivided as follows:

- **Standard views**
- **Combination views**
- **Settings / visibility**

The individual areas are explained in the following sections.

2.1.3.2.1. Standard views



Standard views

The following individual views are available:

- **Front**
- **Back**
- **Right**
- **Left**
- **Top**
- **Bottom**
- **Isometric**
- **Current view**
- **Sectional view**

The **Derivation view** "**Line view**" is used automatically for the individual views.

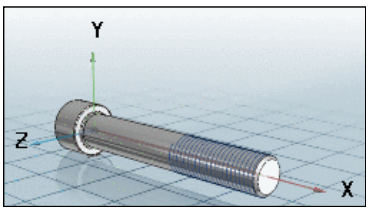
Advantage in this mode:

Manual **dimensioning** is possible. See Section 2.1.3.2.5, “Add dimensioning in PARTdataManager before the export ”.

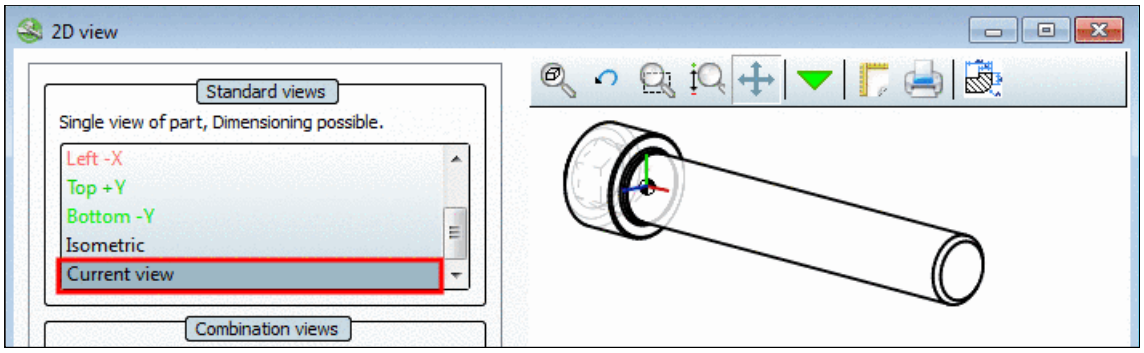
Optionally you can derive the **current 3D view**. See Section 2.1.3.2.1.1, “ Current view ”.

2.1.3.2.1.1. Current view

If you want to import the currently set direction of the coordinate system from the 3D view into the 2D derivation, in the list field select the option **Current view**.



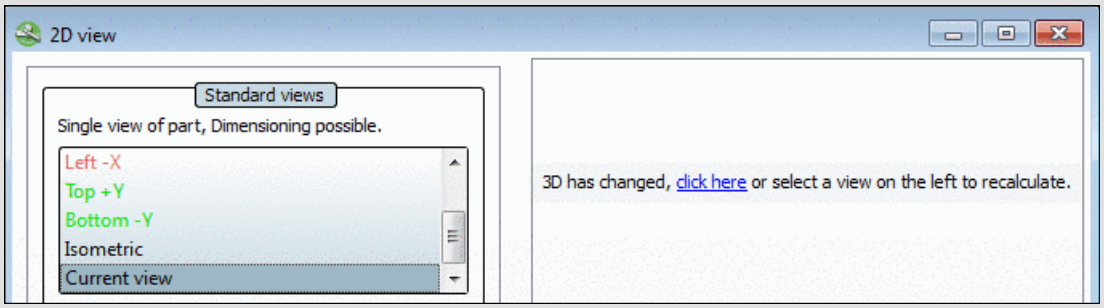
3D view



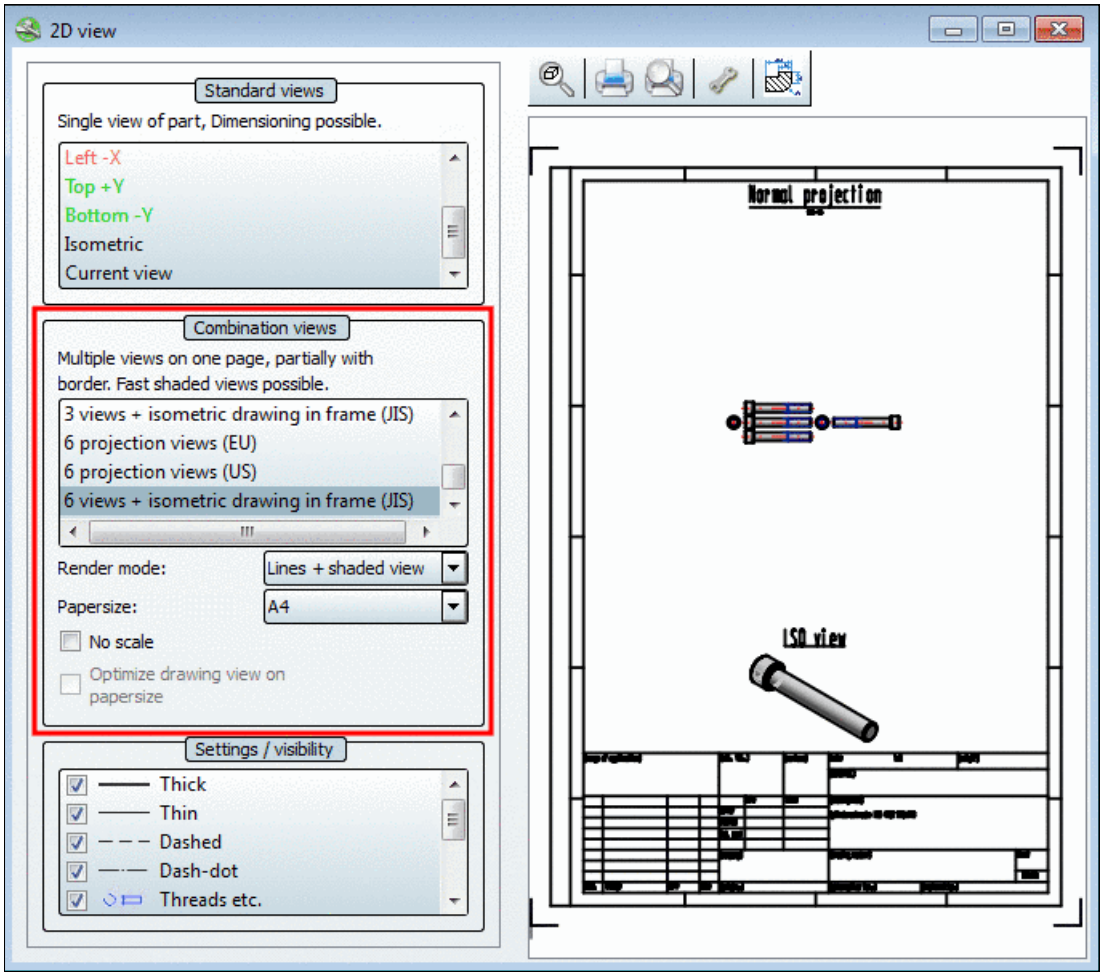
2D derivation - Current view

Note

Should you switch from the **2D view** into the **Part view** and select a new variant of the opened part or choose another object via the **Part selection**, you must simply click on the link on the right side.



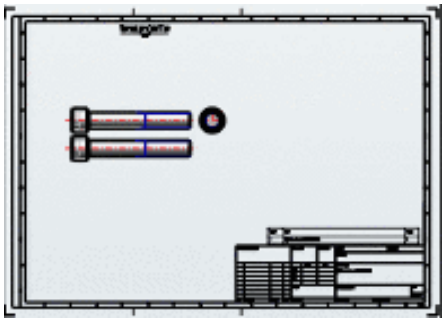
2.1.3.2.2. Combination views



Selection options for views:

With frame:

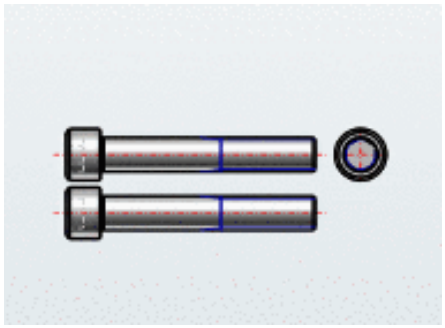
- Isometric drawing in frame
  - **3 views + isometric drawing in frame (ANSI)**
  - **3 views + isometric drawing in frame (DIN)**
  - **3 views + isometric drawing in frame (JIS)**
  - **6 views + isometric drawing in frame (JIS)**
- With integrated BOM-list in frame
  - **3 views + bill of material in frame (ANSI)**
  - **3 views + bill of material in frame (DIN)**



Combination view with frame

Without frame:

- **3 projection views (EU)**
- **3 projection views (US)**
- **6 projection views (EU)**
- **6 projection views (US)**



Combination view without frame

Settings:

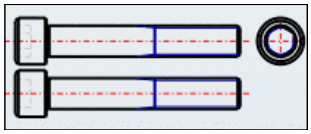
- **Render mode**: See Section 2.1.3.2.2.1, “ Render mode ”.
- **Paper size**: See Section 2.1.3.2.2.2, “ Scale and Paper formats ”.
- **No scale**: See Section 2.1.3.2.2.2, “ Scale and Paper formats ”.
- **Optimize drawing view on paper size**: This option is only then active, when a shortened view has been created for the part in addition. On this see under Section 2.1.3.2.4, “ Alternative 2D size Optimize drawing view on paper size / ”.

2.1.3.2.2.1. Render mode

In the list field under **Render mode** the display under the derivation may be changed:

Choose one of the following options in the list field:

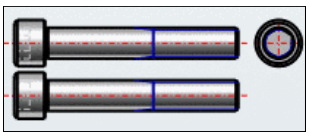
- **Line view**:



Line view

- **Lines + shaded view**: [15]

[15] New for V9.02

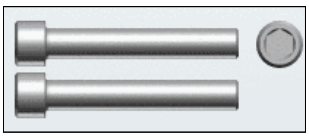


Lines + shaded view

Combination of line display and shaded display

Advantage: Optically more attractive than line display

- **Shaded View**: [16]



Shaded view

Here a gridded image is displayed, into a 2-D derivation. The derivation is only created if an export to the CAD system follows.

Advantages:

- Optically more attractive than line display
- Very rapid display, also with complex parts

2.1.3.2.2.2. Scale and Paper formats

For the following views, the display can be exported with a sketch frame or with a sketch frame and integrated BOM-list.

- **3 views + isometric drawing in frame (ANSI)**
- **3 views + isometric drawing in frame (DIN)**
- **3 views + isometric drawing in frame (JIS)**
- **6 views + isometric drawing in frame (JIS)**
- **3 views + bill of material in frame (ANSI)**
- **3 views + bill of material in frame (DIN)**

> **Note**
>
> Depending on type the respective paper formats are displayed. On this see under Section 2.1.3.2.2.2.2, “Adjust paper format in 2D view”.

The following adjustments may be made:

- Scale, position sketch elements
- Adjust paper format

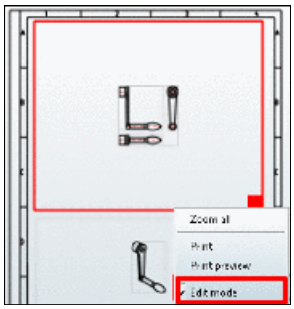
See the following sections for more information.

[16] New for V9.02

2.1.3.2.2.2.1. Scale, position sketch elements in 2D view

Scale sketch elements:

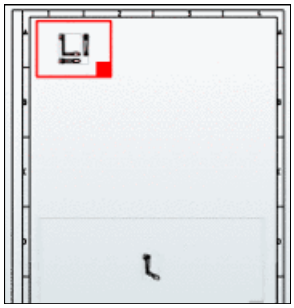
1. Activate the **Edit mode**:
   - Click into the view area with the right mouse button.
     In the context menu activate the **Edit mode**.
   - Or click on the respective button in the toolbar alternatively.



Edit mode activate

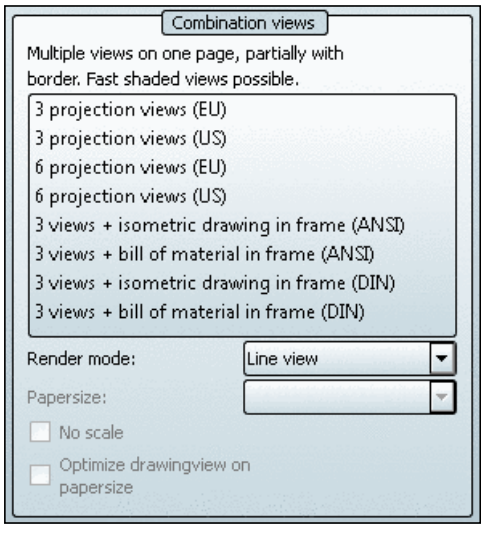
2. Click into the sketch element.
   -> The red frame with the finger shows up in the right bottom corner.

3. Deactivated:
   -> The display either changes continuously or progressively in set scales. See "**No scale**" in the next point.



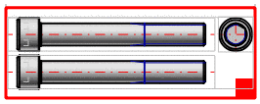
Scale - 1: 10

No scale

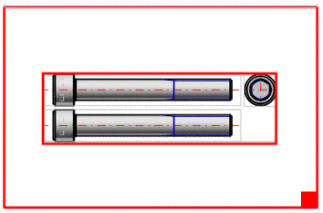


No scale

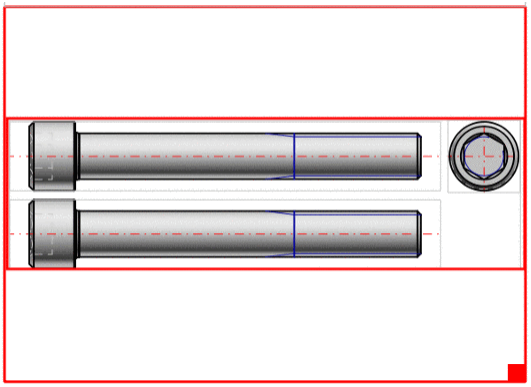
- Option **No scale** **deactivated** (scale used):
  Within the given frame the most fitting scale is used. The scale is displayed in the title (possibly only visible after enlargement).



Scale 1:10

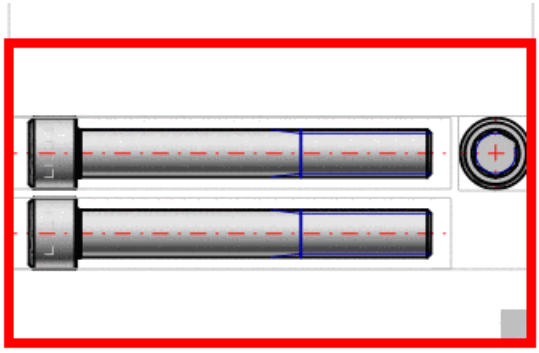


Scale 1:10



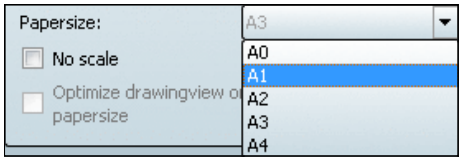
Scale 1:5

- Option **No scale** **activated**:
  Within the given frame the entire available space is used. (Usually the derivations then increase in size.)

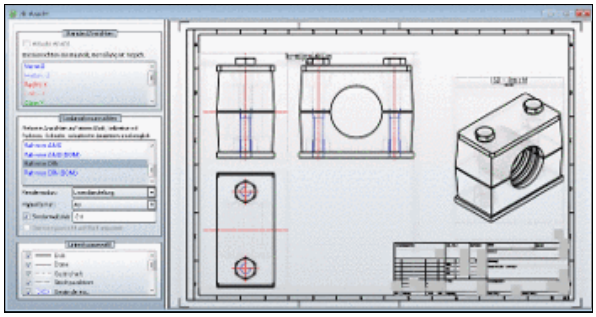


2.1.3.2.2.2. Adjust paper format in 2D view

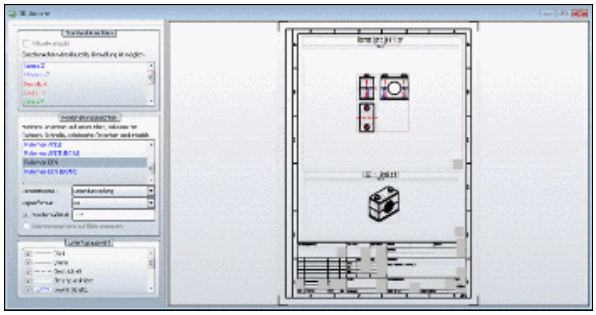
In the list field under **Paper formats** select the desired format. (Either A0 to A4 for DIN or A to E for ANSI)



Select paper format



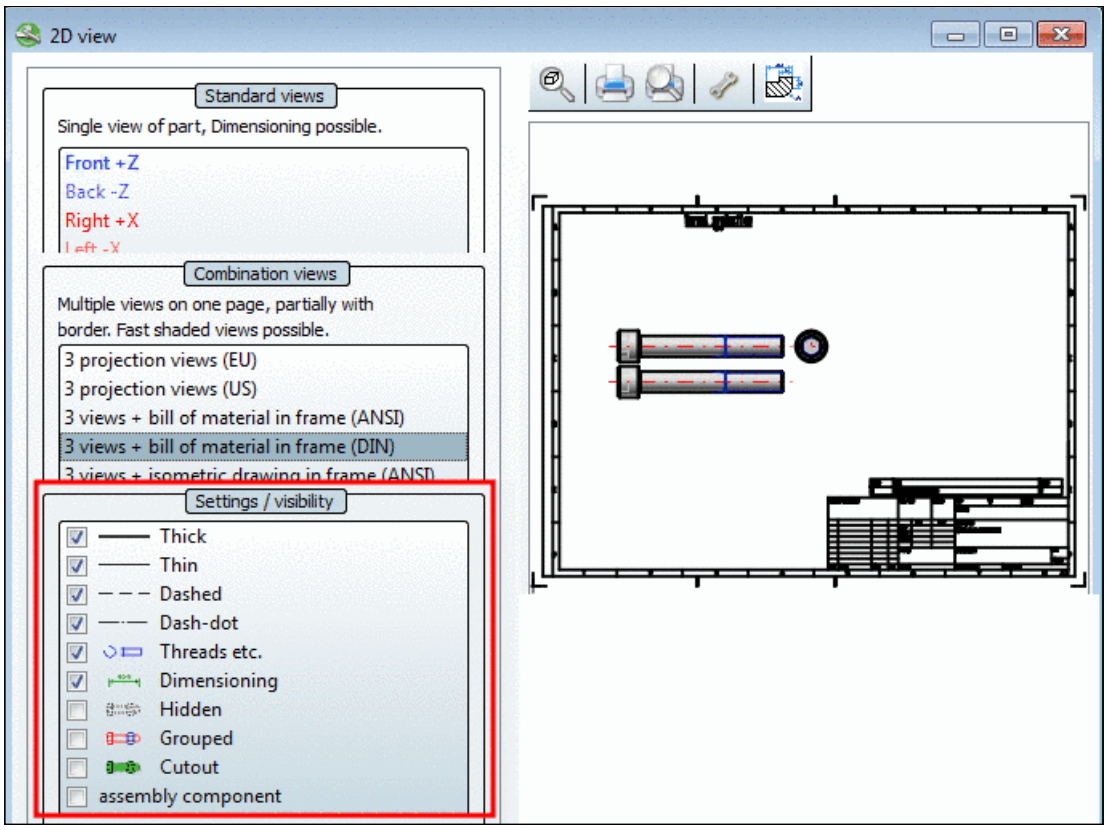
Paper format A3 -> Default scaling 2:1



Paper format A4 -> Default scaling 1:2

-> Scaling is adjusted automatically. As described under Section 2.1.3.2.2.2.1, “ Scale, position sketch elements in 2D view”, you may change it.

2.1.3.2.3. Settings / visibility



Settings / visibility

- **Settings / visibility** selection dialog

  Activate the desired option using the checkbox.

  - **Thick**
  - **Thin**
  - **Dashed**
  - **Dash-dot**
  - **Threads etc.**
  - **Dimensioning**
  - **Hidden**
  - **Grouped**
  - **Cutout**
  - **assembly component**

- **Threads etc.** and the **Dimensioning** are highlighted in color.
- In the **Grouped** mode, the respective part can at first only be opened collectively after export to your CAD system. In order to be able to address individual lines in parts or individual components in assemblies, you must dissolve the group again.

> **Note**
>
> How the grouping is affected depends on the respective CAD system and/or export mode (with or without interface).

- **assembly component** :

assembly component refers to the preferred hatching direction in assemblies. If activated, then the assembly is treated as component and all parts of the assembly are hatched in the same direction in a cut.

The difference is especially eye-catching with bearings.

Normally outer and inner rings are hatched reverse. If the **assembly component** option is activated, then they are hatched in the same direction.[17]

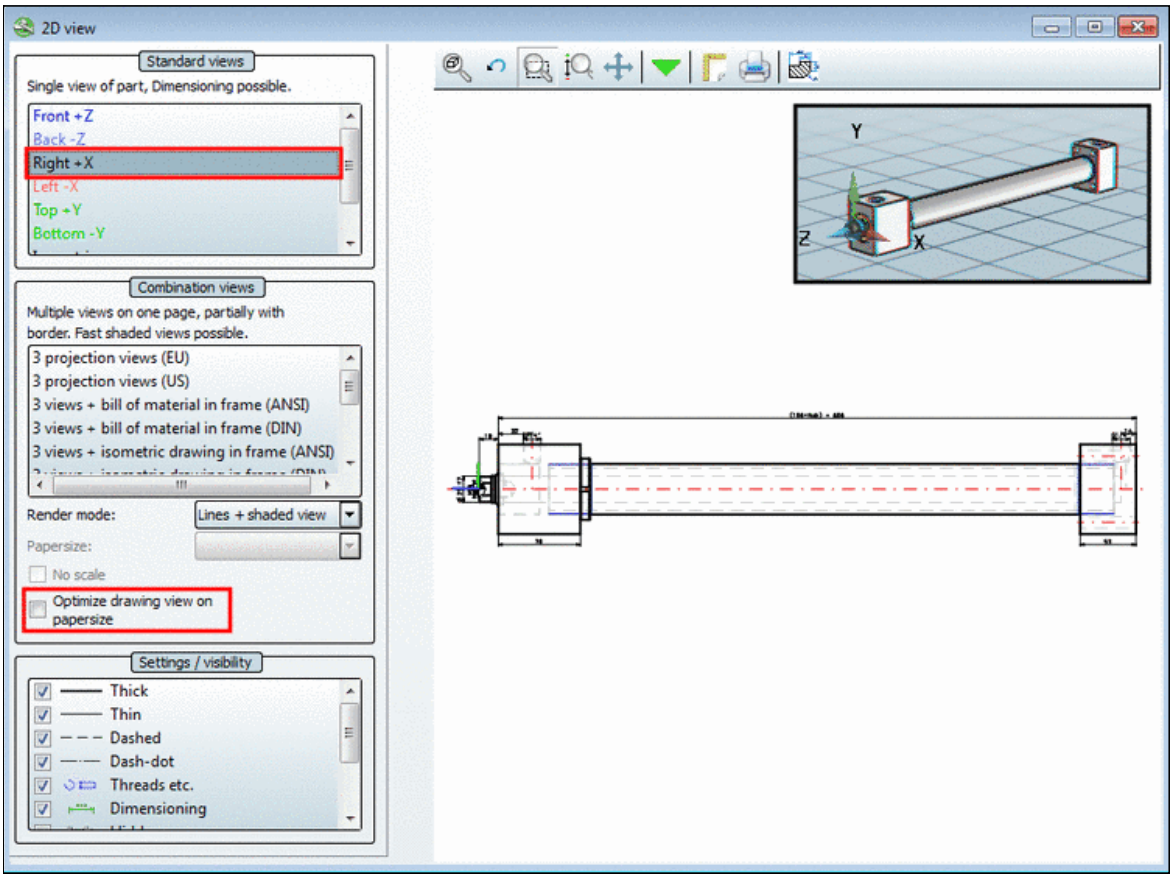
2.1.3.2.4. Alternative 2D size Optimize drawing view on paper size /

- **Optimize drawing view on paper size** is a special feature for catalogs with parts which look bad in the 2D derivation due to their proportions.

  This may happen with long cylinders, for example. The **2D derivation** would then appear to be more of a line than a cylinder.
- If the part contains an additional shortened view, the user can select between the standard display and the shortened view by checking the box **Optimize drawing view on paper size** in the **2D view** dialog. Otherwise the checkbox remains inactive.

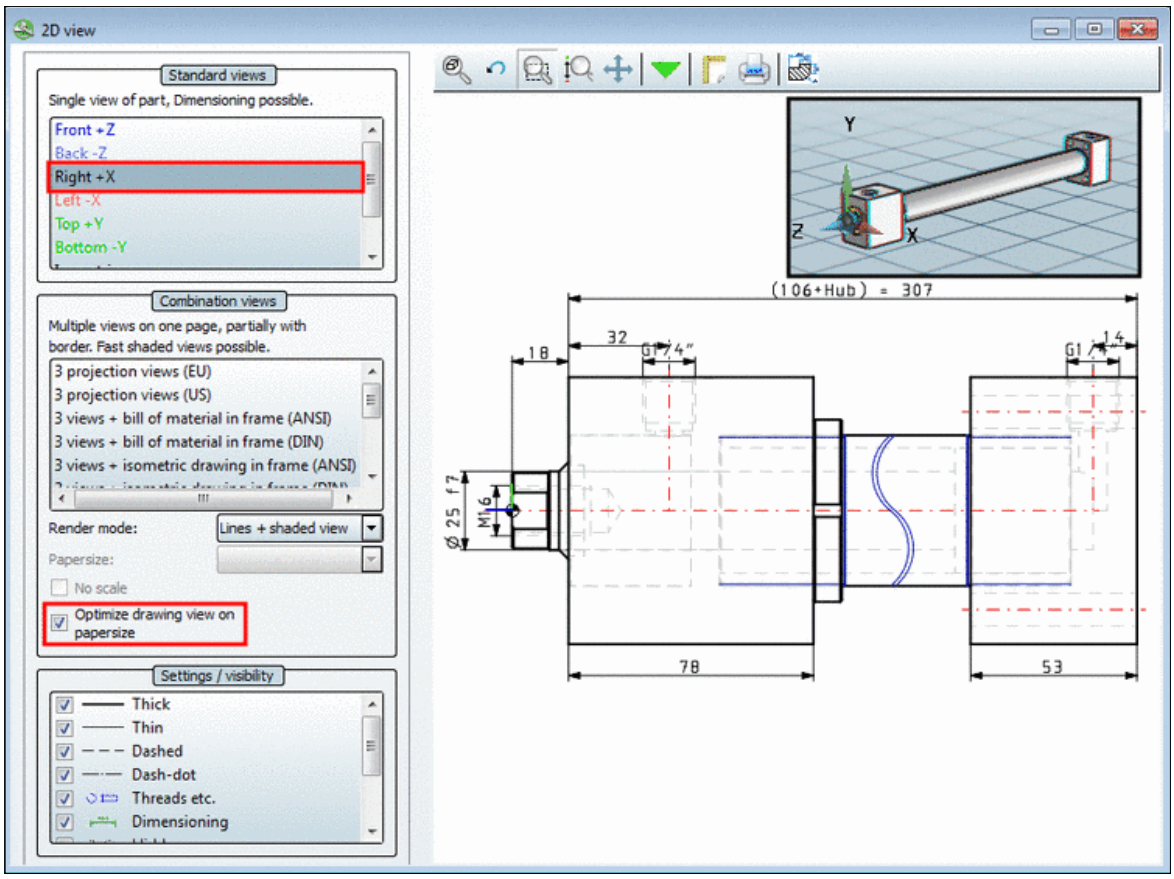
Note

The attributes remain unchanged.



"Optimize drawing view on paper size" not activated

[17] ISO 8826-1 says, that the general, simplified depiction of bearings has to be performed with hatches in the same direction for all components with the same position number (rolling elements excluded).



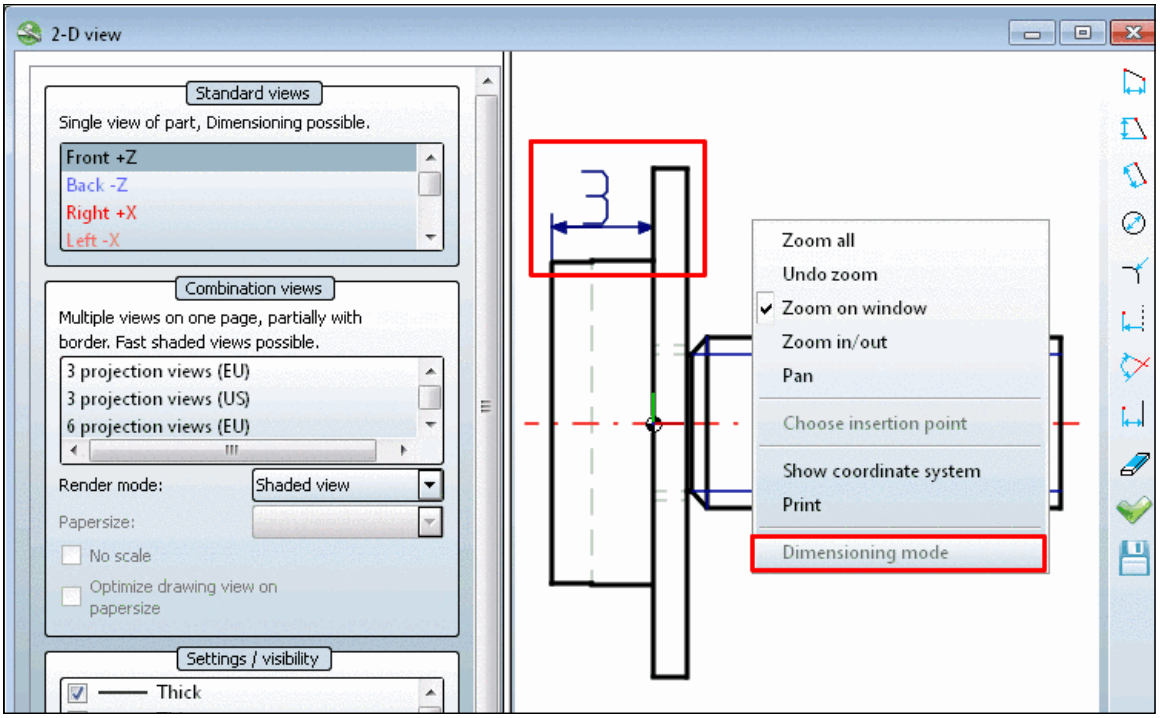
"Optimize drawing view on paper size" activated

2.1.3.2.5. Add dimensioning in PARTdataManager before the export

Before you export a 2D derivation into the CAD system, you can add a dimensioning.

Hereto proceed as follows:

1. Select a standard view such as **Front +Z** for example.
2. Click the **Dimensioning mode** command in the context menu of the view.

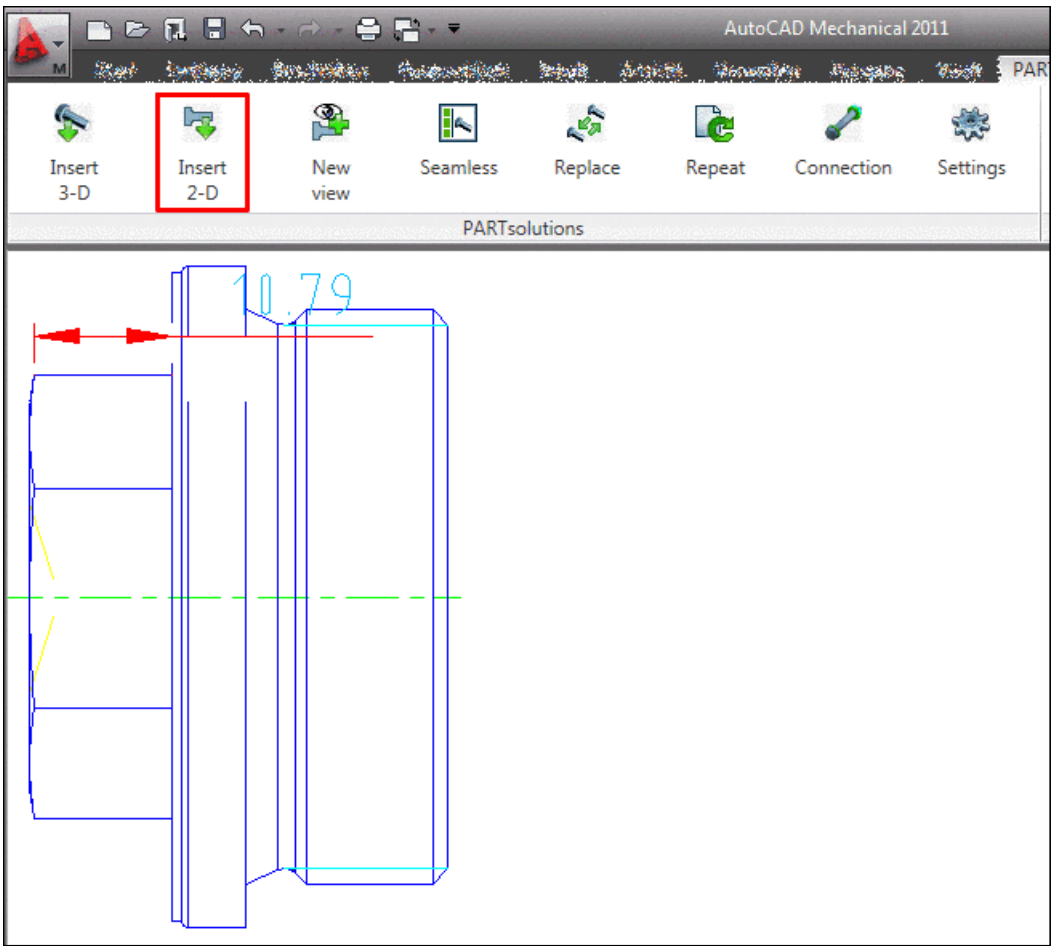


Note

A detailed description of the functions in dimensioning mode you can find under Section 2.1.3.2.5, “Add dimensioning in PARTdataManager before the export ”.

3. Set the desired dimensioning:
4. Click on **Export to CAD** 

.
5. The part is transferred to CAD with dimensioning.



2.1.3.2.6. Transfer special derivations or technical views to CAD system

If customer sided provided you can transfer **additional derivations** to the CAD system in the **Choose view to pass...** dialog box (exemplified below "Special5").

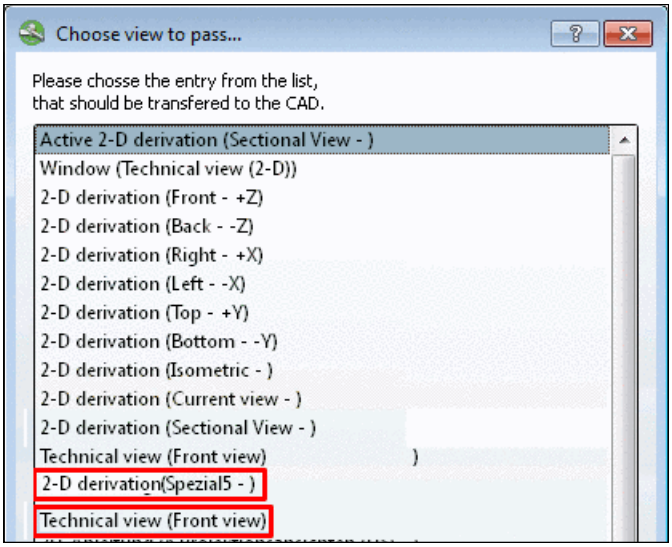
Furthermore the **technical views** are displayed in the dialog box and can also be transferred to the CAD system.

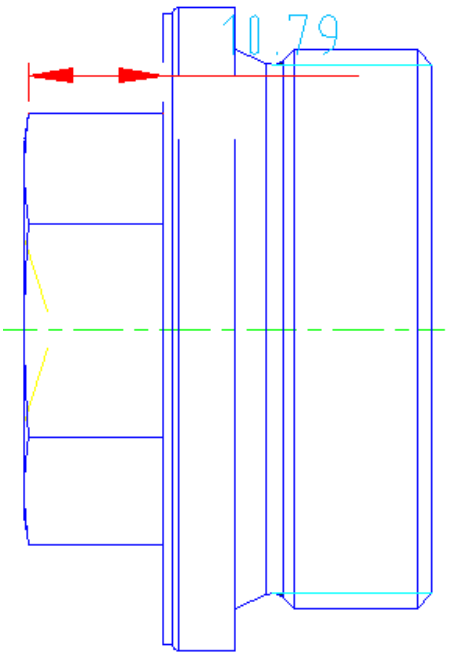
In order to export special derivations to the CAD system, proceed as follows:

1. Call up **PARTdataManager** in the CAD system via the **PARTsolutions** menu -> **Insert 2D**.
2. After selection of the desired part click on **Export to CAD**.

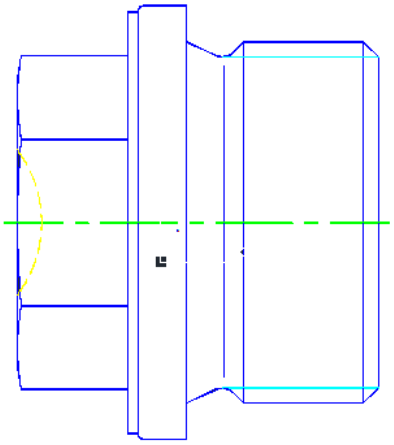
> **Note**
>
> On this please regard the setting options under Section 3.3.9, “"Export to CAD" tabbed page ” in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

3. -> The **Choose view to pass...** dialog box opens.
4. Select the special desired view here.





Derivation (Spezial5 -)

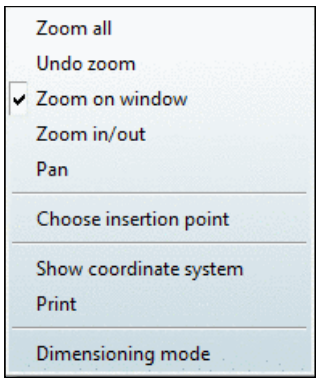


Technical view (Front view)

5. Confirm via **Commit** in the dialog box.
6. -> The special derivation or view is transferred to the CAD system.

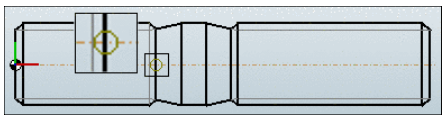
2.1.3.3. Context menu and buttons "2D view" window

All commands in the window can both be executed via context menu or via buttons. A click with the secondary mouse button into the window, opens the corresponding **context menu**.



- **Choose insertion point**

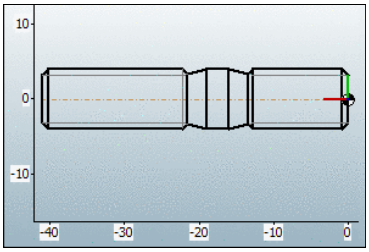
  If you want to reappoint the insertion point for a part, select **Choose insertion point**.

  Everywhere placement of such a point is possible, a **circle symbol** shows up during mouseover. By clicking on the circle, the insertion point is fixated. A green triangle marks the insertion point.

- **Show coordinate system**

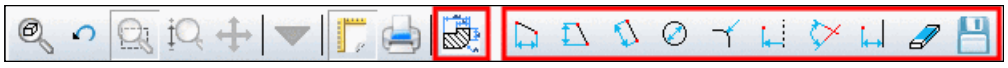
  Via **Show coordinate system** a ruler is inserted horizontally and vertically in the 2D view.

- **Print**

  Print starts the window for the print job.

- **Dimensioning mode**

  After clicking on the respective button or context menu command the dimensioning toolbar is displayed in addition.

  Note

  The dimensioning mode is only available for the individual views **Front**, **Back**, **Right**, **Left**, **Top**, **Bottom**, **Isometric** and **Current**.

  Detailed information on the dimensioning mode can be found under Section 3.1.3.3.2.3.10.1, “ Dimensioning mode ” in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

2.1.4. Preferences

2.1.4.1. Launch

The **Settings** dialog can be reached as follows:

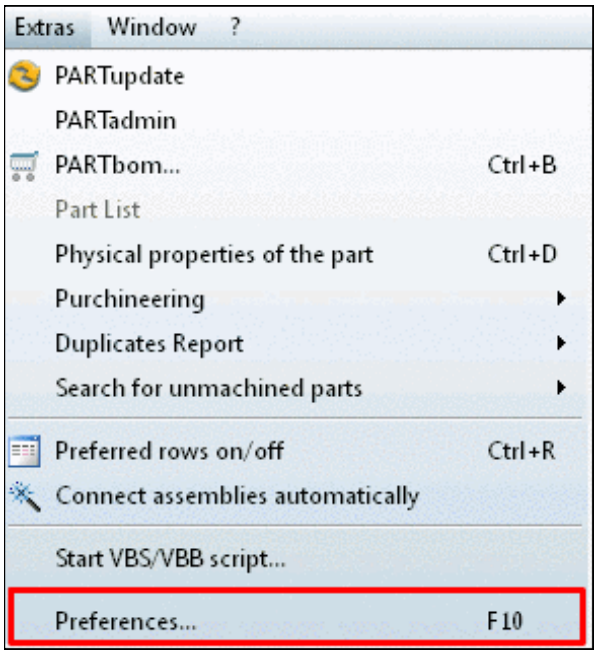
- **From the PARTdataManager via the toolbar**

"Mini viewer" toolbar

- **From PARTadmin via the toolbar**

"Tools" toolbar

- **From PARTdataManager via the menu**

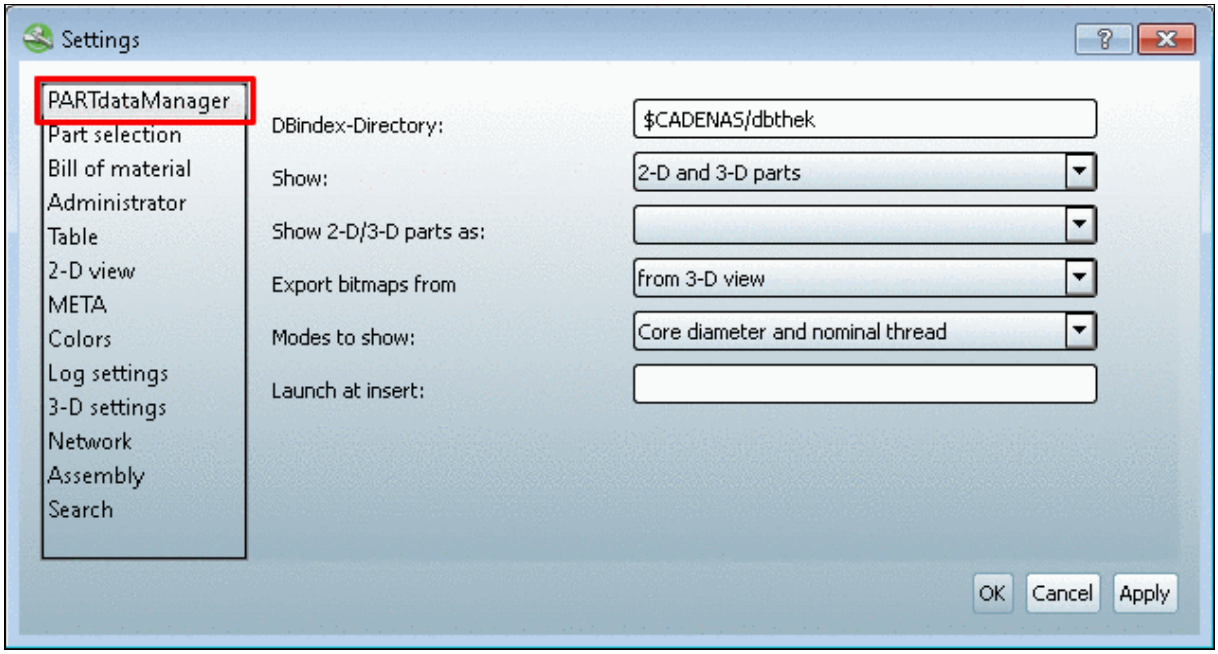


"Extras" menu

Note

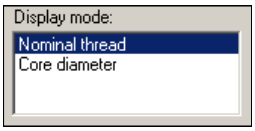
Should changes to the **Options** page not be immediately carried out, close the respective program and restart.

2.1.4.2. "PARTdataManager" tabbed page



- **DBindex-Directory** refers to **dbthek**, in which "simple" 2D parts are applied. From this directory, for example, 2D thread displays are taken, which can be used collectively for different parts.
- **Show** : This field defines the display range of the displayed catalogs in the PARTdataManager. You can basically only select from the following settings: **2D and 3D parts**, **only 2D parts** and **only 3D parts**. In other words, for example, the setting **only 2D parts** will no longer have 3D part available for selection.

  However, if you launch PARTdataManager from a CAD system in which either only 2D mode or 3D mode is set, this field is inactive. In this case, the mode set on the CAD system defines the display format.
- **Show 2D/3D parts as**: in this field, you can define whether 2D/3D parts are displayed in 2D mode or 3D mode. If this field is blank, you will see a prompt asking you to define in what mode the part is to be displayed when you open 2D/3D parts. This field, in the same way as the **Show** field, is inactive if a specific format has already been preset on the CAD system.
- **Export bitmaps from** : In the PARTdataManager the bitmaps of parts can be exported, for example the BOM-list module PARTbom. Aside from the presetting of exporting bitmaps from **the 3D view**, you can also export from **of the 2D derivation**.
- **Modes to show**: For each part, a selection regarding the **View modes** can be defined here. Within the PARTdataManager **Part view** this selection is then present (see example on the right).

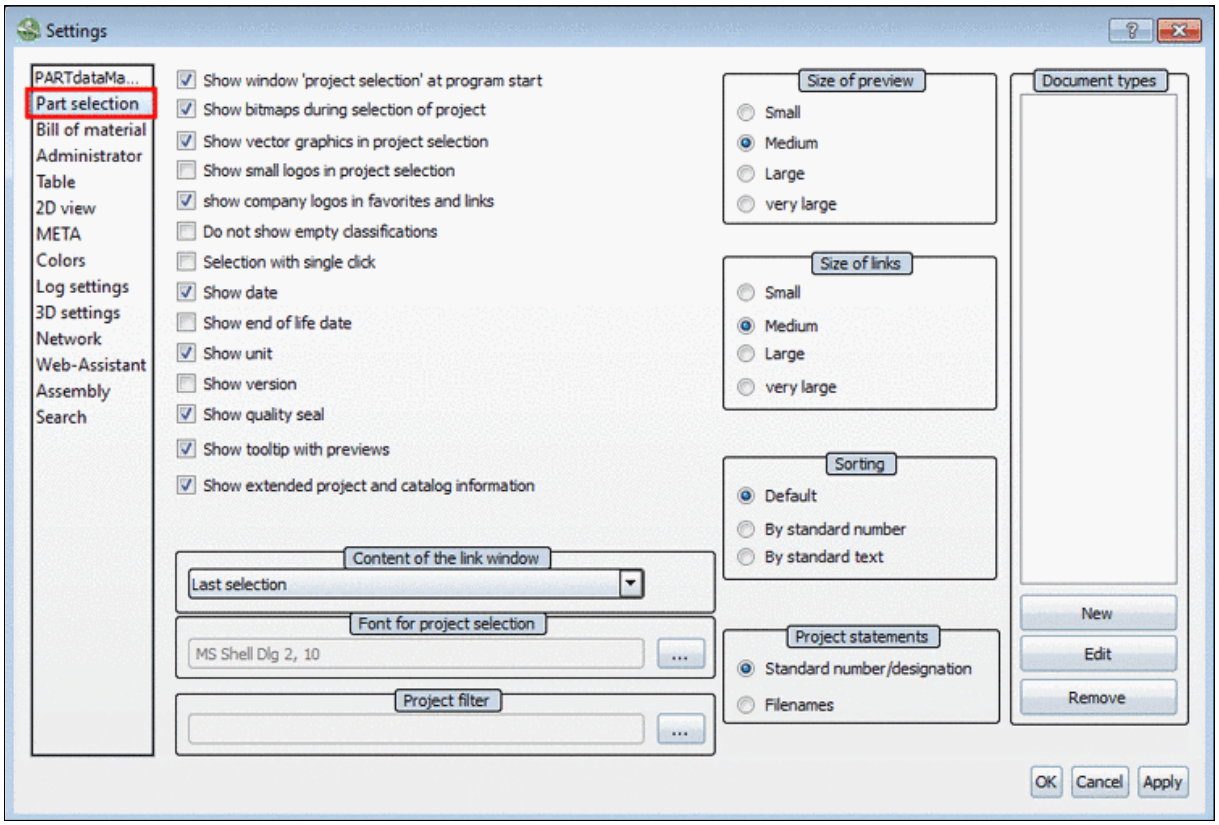
  

  Options are:

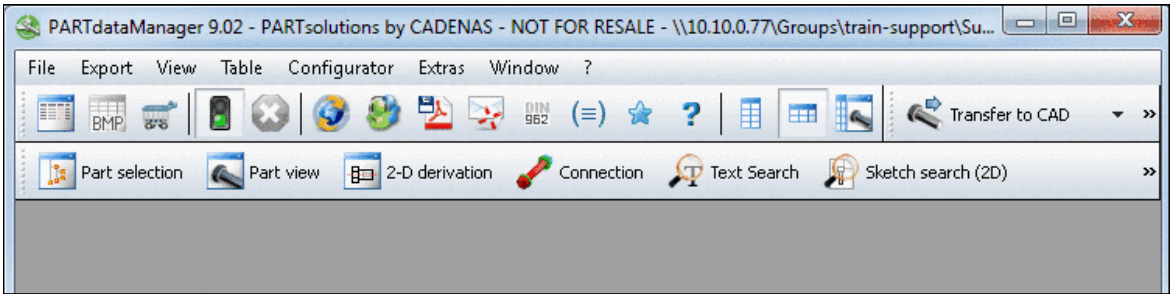
  - **Core diameter and nominal thread**
  - **Only nominal thread** (default value)[a]
  - **Only core diameter**

  [a] as of 9.05
- **Launch at insert**: you can define a **Program**, e.g. **notepad.exe**, which is launched together with your CAD system if you export parts from PARTdataManager.

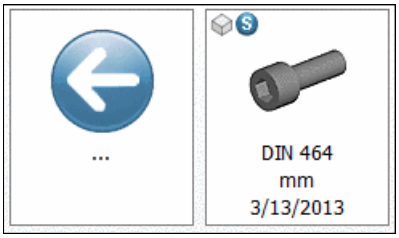
2.1.4.3. "Part selection" tabbed page



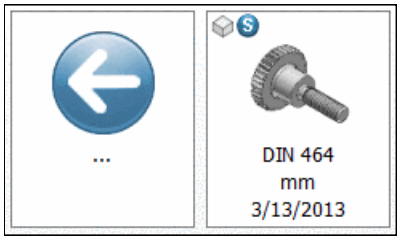
- **Show window 'project selection' at program start** : Option field to show/hide part selection dialog areas of the PARTdataManager. By clicking on **Part selection** you show the respective dialog area in case the option is not activated.



- **Show bitmaps during selection of project**: ...shows part bitmaps. Otherwise only neutral folders or symbols are used.



Off



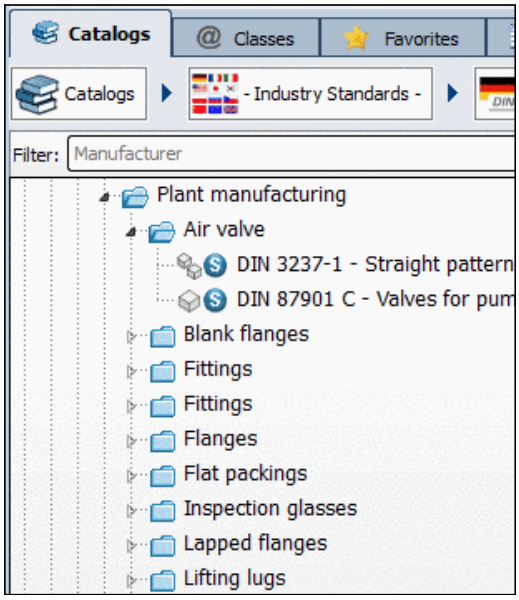
On

- **Show vector graphics in project selection** : ...shows vector graphics of parts. Otherwise only folder or bolt symbols are used.

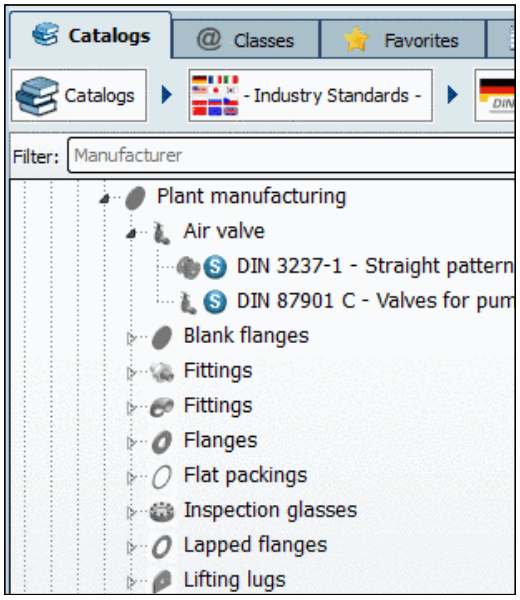
Note

The speed of assembling bitmap and/or vector graphics requires high capacity processors.

- **Show small logos in project selection**



With standard symbols



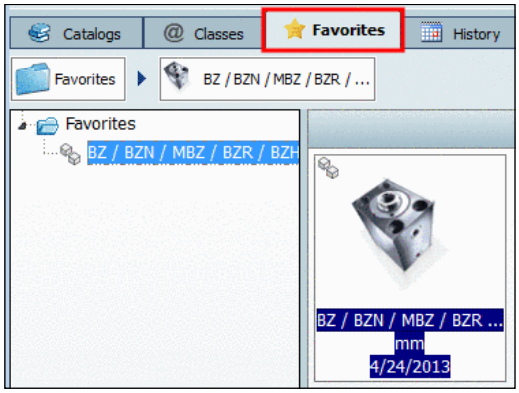
With logos

Note

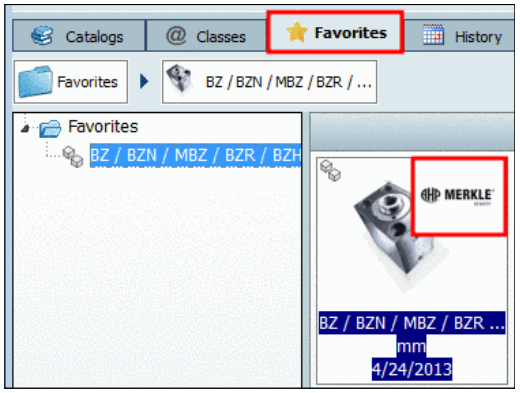
The activation is the prerequisite for the selections **Show bitmaps during selection of project** or **Show vector graphics in project selection**.

If no activation has taken place, the standard symbols will be used.

- **show company logos in favorites and links**: ...shows the company logo (if available) of the respective catalog.

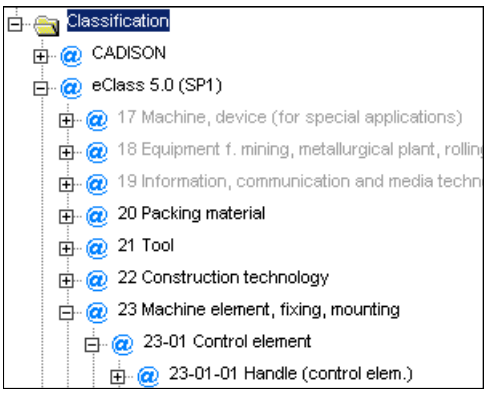


Off



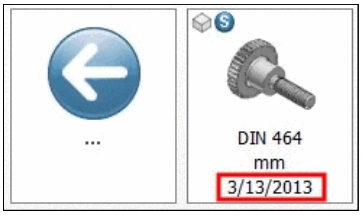
On

- **Do not show empty classifications**: Classifications, whose projects were allocated, are not displayed in the directory tree



Empty classifications displayed

- **Selection with single click**: Without this option the directories must be double-clicked to be opened.
- **Show date**: ...shows date directory/project was created.

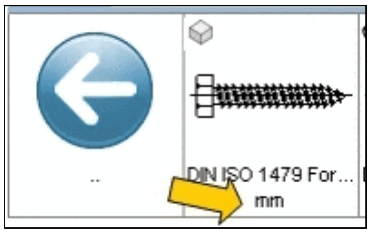


- **Show end of life date**:

  Option activated: If standards ran out, were replaced or changed, the validity date is displayed.

Validity date

- **Show unit**: Option activated: The corresponding unit for projects is shown.



- **Show version**:

  Option activated: The version itemized according to date and time is shown.

Note

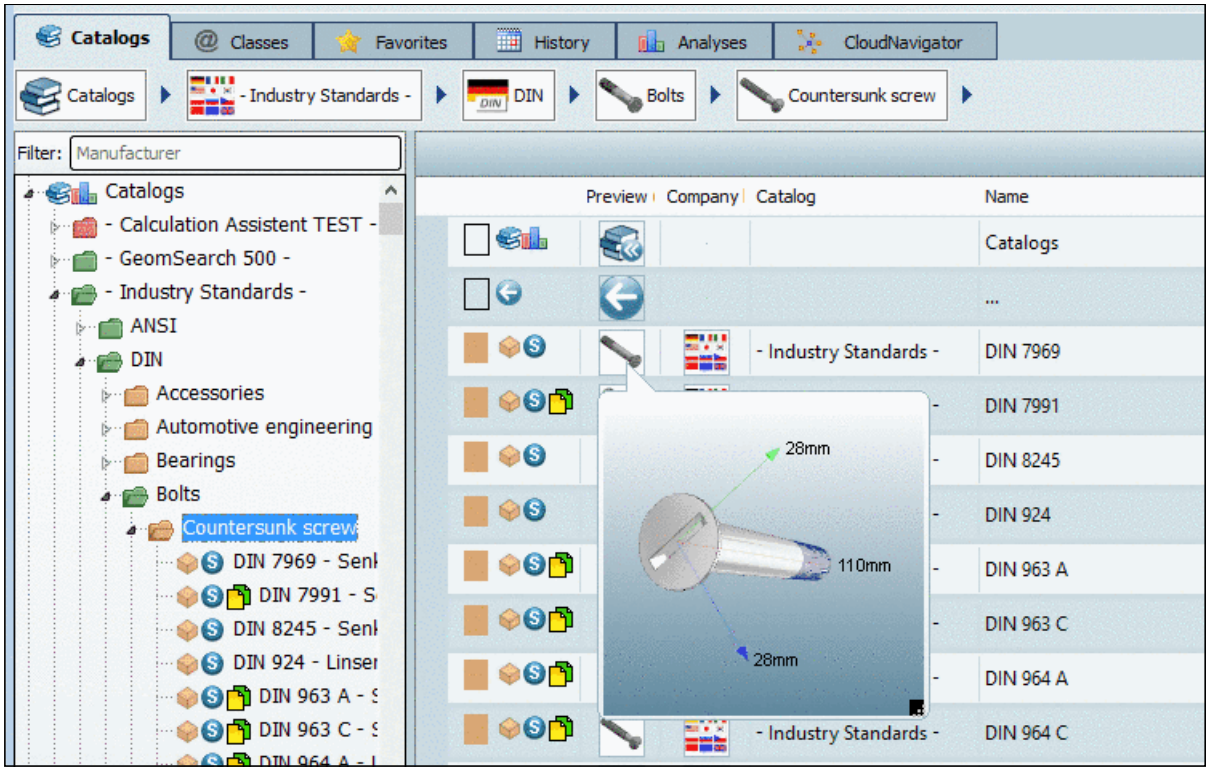
May only then be displayed if the **Size of preview** has been set to **Medium**..

- **Show quality seal**:

- **Show tooltip with previews**

  Especially when **Preview** and **Company logo** are set on "small" it is helpful to move the mouse over the preview images in order to get a bigger preview.

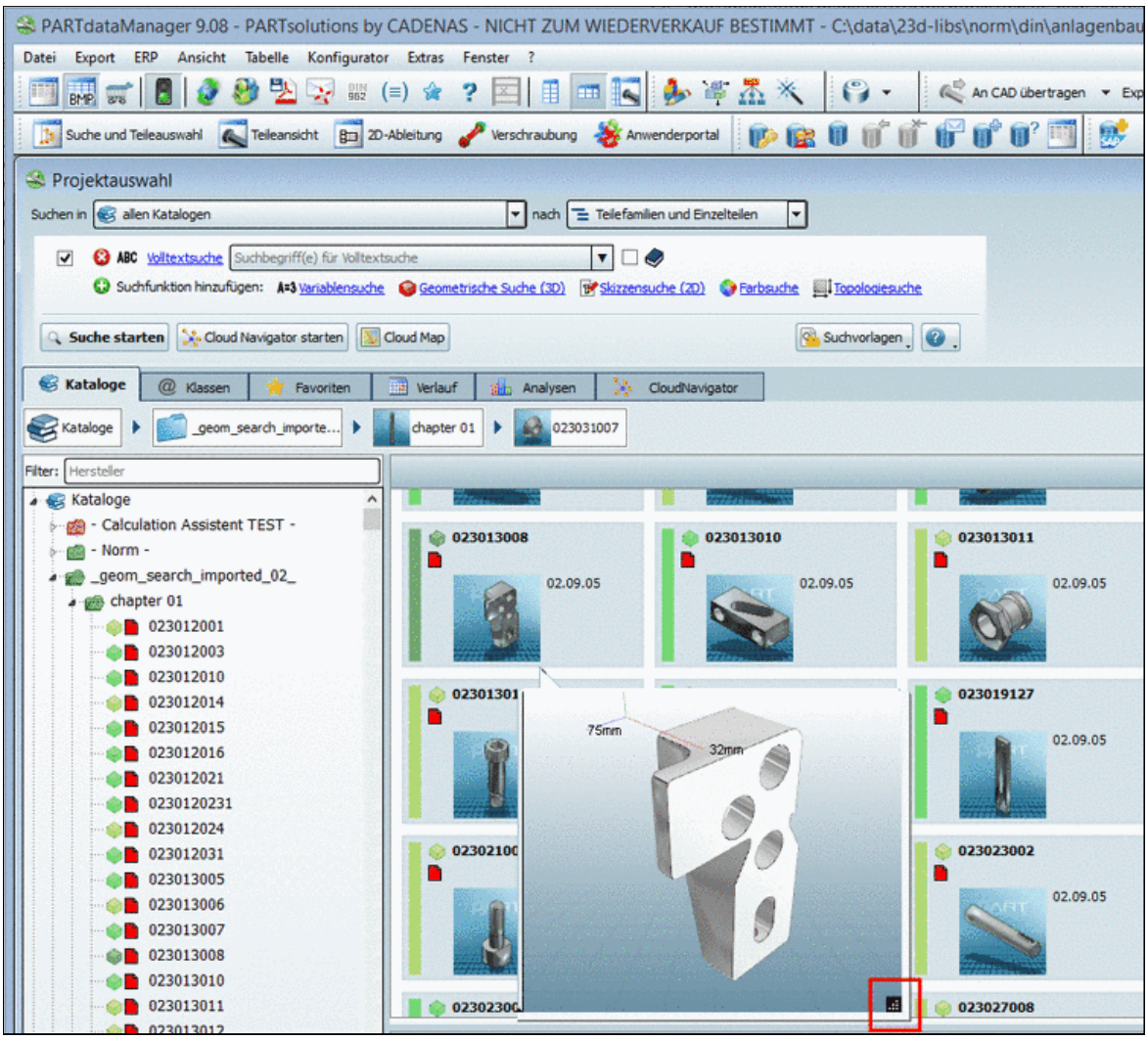
  The feature is available both in the **Details** view in **Part selection** and in the **Search** dialog of the complex search.



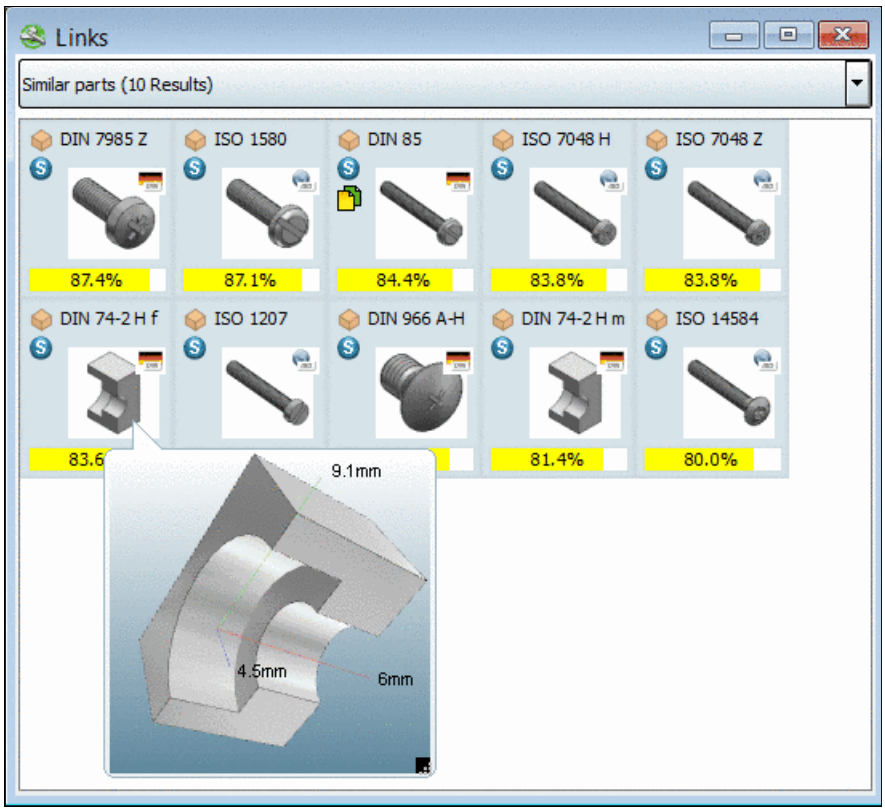
Big preview image in Details view

- **3D Tooltip**
  - **No 3D Tooltip**
  - **Small**
  - **Medium**
  - **Big**

  In the project selection (or also in the dialog box **Links**) **3D Tooltip**s are available. Drawing the mouse over a 3D preview image, the tooltip is displayed. In the down right corner, this has an icon, where you can draw up the size.



3D Tooltip in Project selection



3D Tooltip in "Links" dialog box

- **Show extended project and catalog information**

  You can display catalog and project data directly in the part selection on directory and project level at the bottom right.

Details window

- **Content of the link window** :

  In the **Links** dialog similar parts are shown. Determine which classification should underlie during the comparison.

  - **Last selection**
  - **Directory**
  - **Accessories**
  - **Similar parts**

    A geometric search is carried out in the background.

- **Special classification**

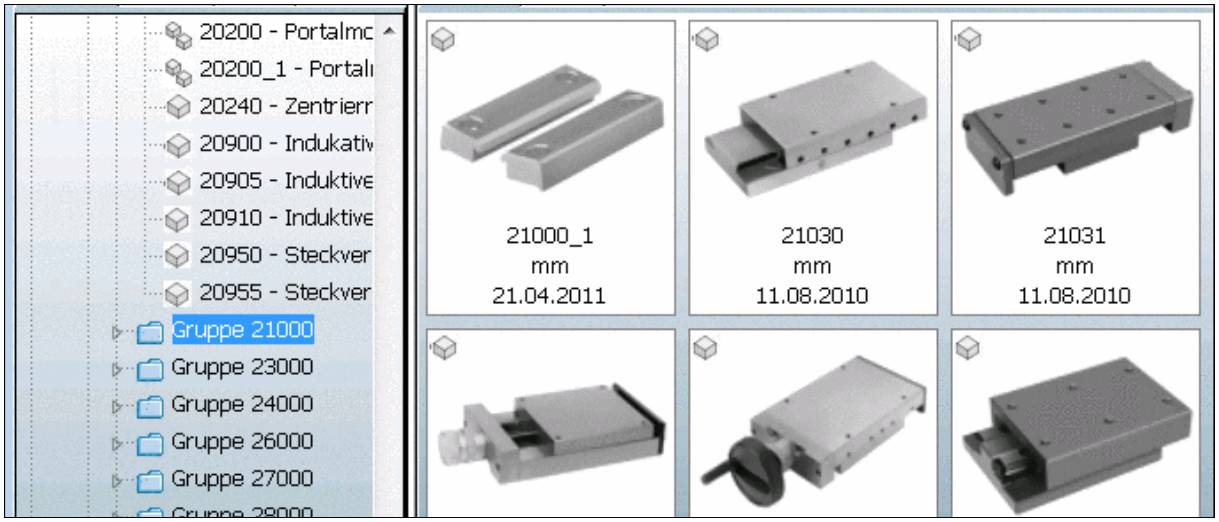
- **Max. search results**: ...restricts the number of search results to the value set here.

> **Note**
>
> The value "0" does not correspond to a restriction!

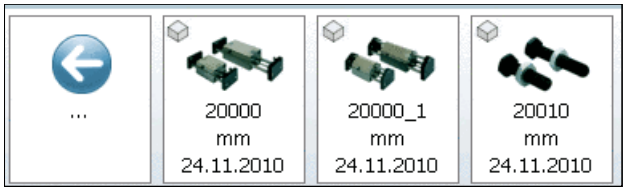
- **Font for project selection**: Via **Browse** ... the menu to select the font for the **Part selection** opens.
- **Project filter**: Set up a filter [18],with which you can reduce the selection of projects.

2.1.4.3.1. Size of preview

Selection between four different size steps (**Small**, **Medium**, **Large**, **very large**) for display of the component previews (bitmap, vector graphic or symbol).



Size of preview "very large"



Size of preview "Small"

2.1.4.3.2. Sorting

Selection between three different display variants of the component designation in the directory tree.

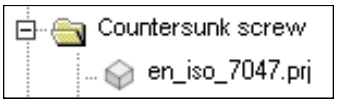
You can perform sorting of parts in the index tree using one of the following criteria:

- **Default**: If not differently specified, the default is according to the setting of **By standard number**. This setting is specified by the catalog supplier in PARTproject.
- **By standard number**:
- **By standard text**:

[18]This filter is defined in PARTproject. See Section 4.7.2.1.14.6, “ Check out catalog ” in *eCATALOGsolutions Manual*.

2.1.4.3.3. Project statements

Alternatively to the part description with standard number and/or text, you can also have the file name be displayed.



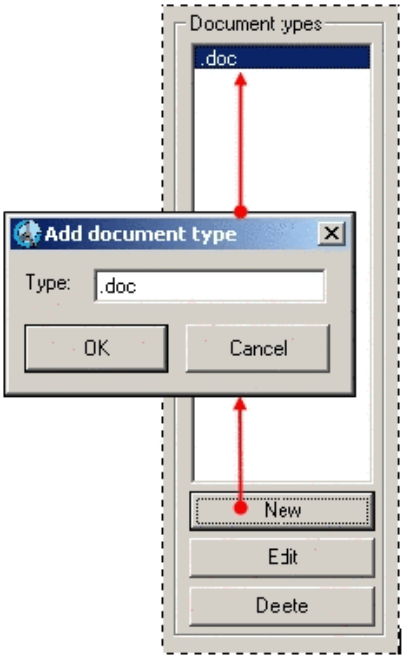
2.1.4.3.4. Document types

This field offers the option of allowing additional documents to be opened in the relevant PARTsolutions module. You can set file formats such as ***.pdf**, *. **doc** or ***.html** or this purpose.

We shall use the WORD format ***.doc** in the example.

a. Using the **New** button open the **Add document type** input window.
b. Enter the required file format and confirm with **OK**.

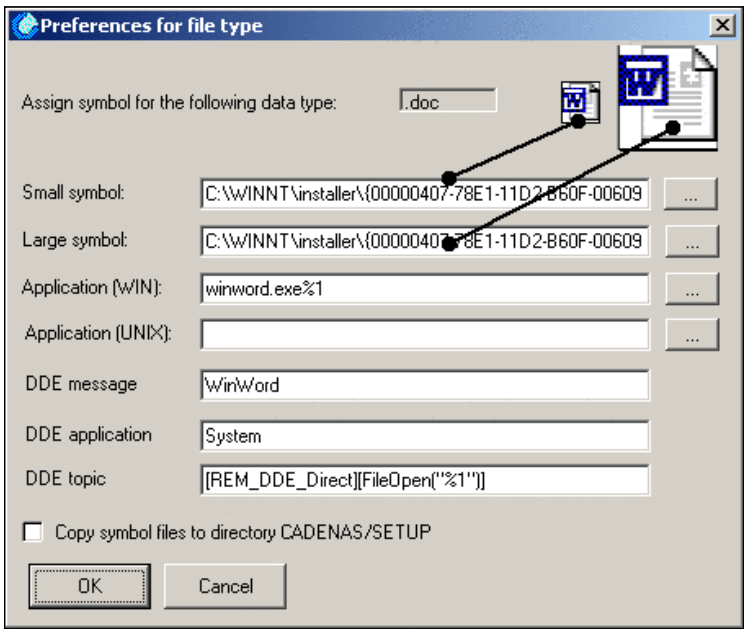
→ The format is added to the **Document types**.



c. Then open the **Preferences for file type** menu with the **Edit** button.
d. Make the basic settings for this file type (see example in the illustration).

Large symbol or **Small symbol**: Directory path in which the respective symbol for this file type is stored.

You can search the system using the browse-button **...**.



Application (WIN) or **Application (UNIX)** : Define the application with which this file type should be opened. Use the Browse button for this.

> **Note**
>
> Do not forget **%1** at the end of path declaration! (This is the placeholder for the file)
>
> With English operation systems use double quotes in addition. ("**%1**")

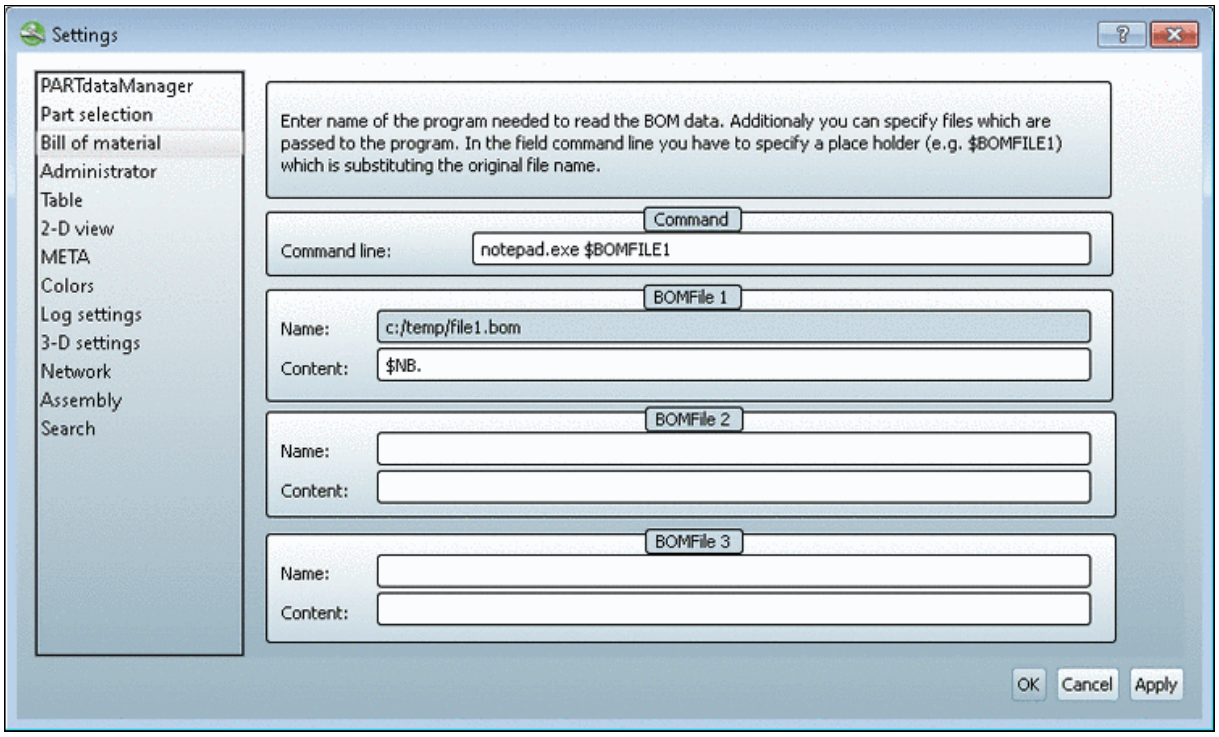
DDE message, **DDE application**and **DDE topic**: DDE functions simplify working with files. For example, you can create a query with the settings in the image above, whether WORD is already open. Upon repeated opening of WORD files, just the one WORD application is recognized and used instead of opening a new one each time.

Copy symbol files to directory CADENAS/SETUP : If you activate this option, the symbols applied under PARTsolutions users will be generally available under **Small symbol** and/or **Large symbol** (e.g., administrator).

> **Note**
>
> Settings made inside of the **Preferences for file type** window generally apply for the respective data type.

> **Note**
>
> You can set up the **Document types** in **PARTadmin** as well. On this please see under Section 1.1.4.8, “ Document types ” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.

2.1.4.4. "Bill of material" tabbed page



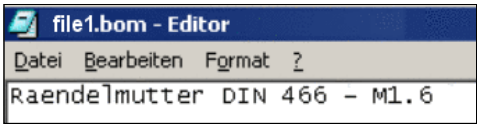
By these fields you are able to create an external Bill of Material.

Command

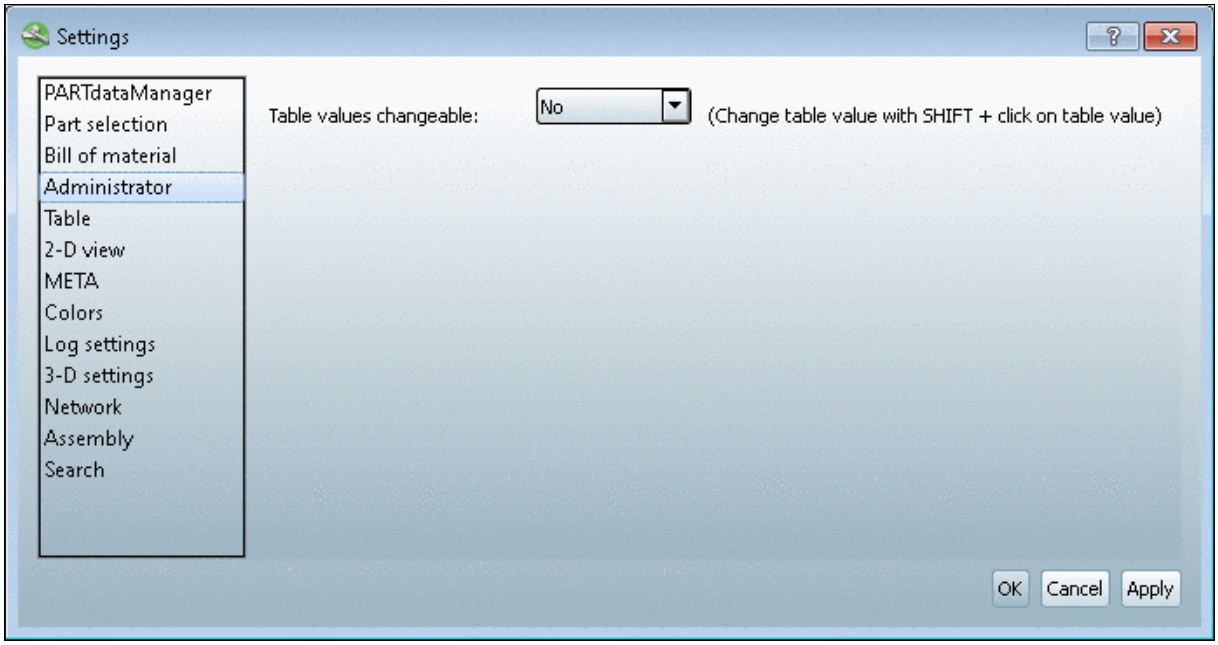
Command line: this is where you define the program ("notepad.exe" in the example) to be launched as the "platform" for your Bill of Material. The placeholder "$BOMFILE **1** addresses **BOMFile 1** and "$BOMFILE **2** addresses **BOMFile 2** etc.

BOMFile 1, **BOMFile 2** or **BOMFile 3**: Enter the **name** of the file in which the lower set **content** (from the applied program) should be read out. In the example, it is the content of variable column standard name "NB".

Choose **Extras**, **Bill of material** in order to display the contents. → The program is launched and the content is entered.



2.1.4.5. "Administrator" tabbed page



In the **Table values changeable** you can set whether values in tables should be edited or not via **Yes** and/or **No**. If you selected **Yes**, you can change the table value by pressing **SHIFT + clicking on the table value**.

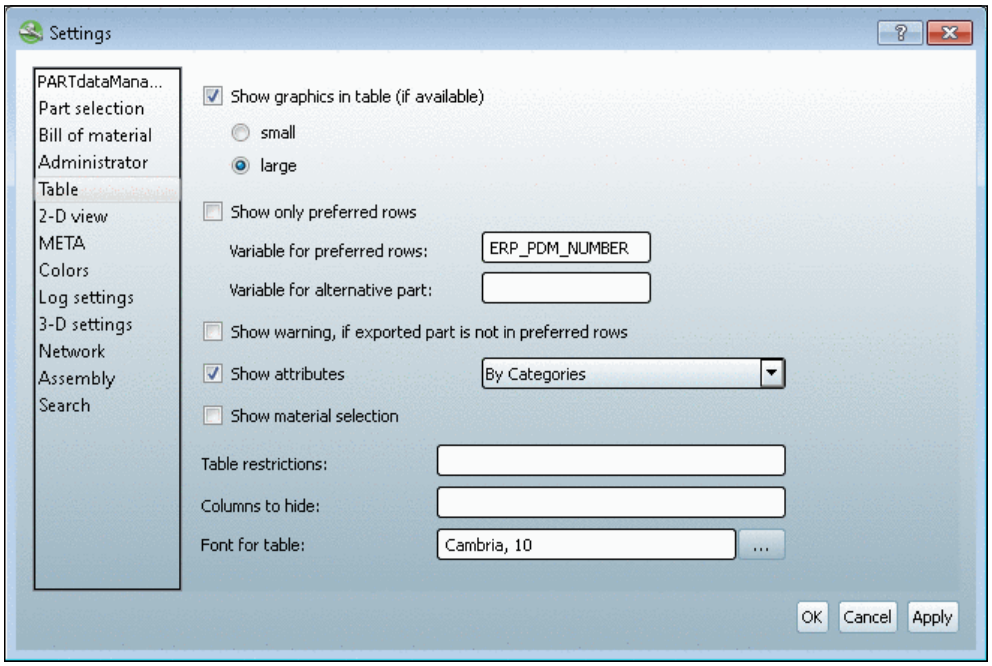
Note

The **Administrator** tabbed page is only available in the installation mode **Admin**.

Caution

Take care in the case of parts which you have already exported earlier to your CAD system. When opened again, such parts are taken from the pool directory - with the "old" values. You will then be editing parts with original settings but will be assuming that the changed table values have been adopted by the CAD system.

2.1.4.6. "Table" tabbed page

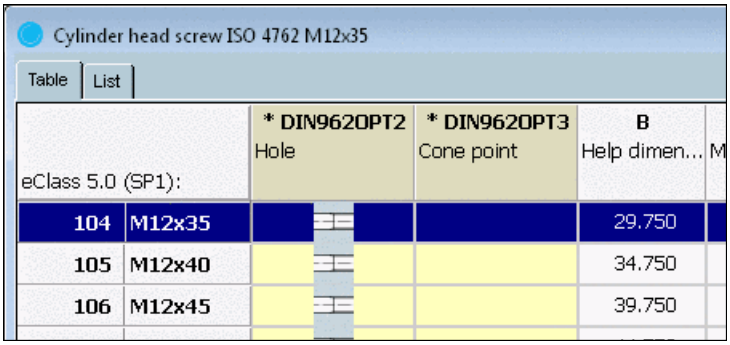


- **Show graphics in table (if available)** : A table may also contain columns with graphics. If you wish to also display these files per default, please check this option button. Hereby only the preselection is controlled. Via **Default** toolbar -> **Show graphics in table** you can switch on and off the graphics anytime.

"Default" Toolbar with "Show graphics in table" selection

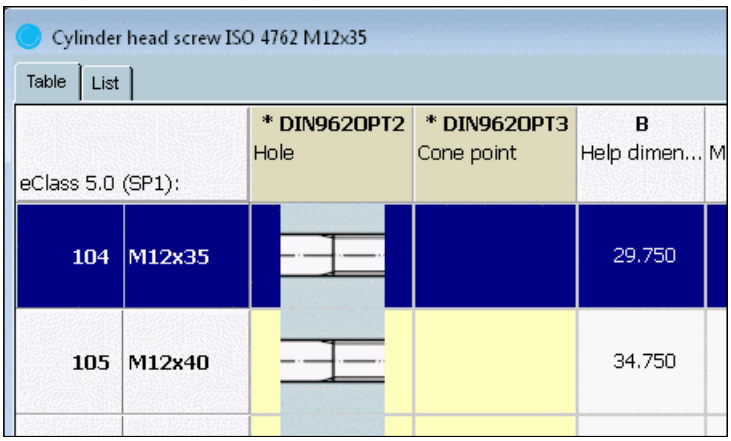
There are two display options for the graphic size:

- **Small**



Graphic in table - Small

- **Large**



Graphic in table - Large

Selecting "**Large**" please note that this may cause the column size to increase greatly (vertically).

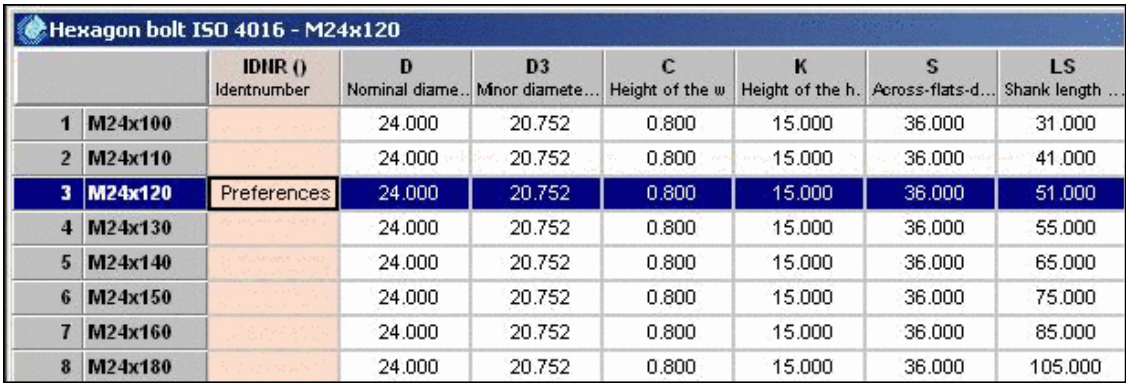
- **Show only preferred rows** : Restriction of the table on preferred rows (see fig. below).

  If you like to switch on the preferred rows as default, then check the option. Hereby only the preselection is controlled. Via **Default** toolbar -> **Preferred rows on/off** you can switch on and off the restriction of the table on preferred rows anytime.

"Default" toolbar with "Show graphics in table" selection

  - **Variable for preferred rows** :In this field you can set the variable and/or column, that should be pulled up as the preferred row. The column appointed here has precedence compared to the setting in the project.

    When the function is switched on, then in the table only these rows are displayed which have an entry in the set column.

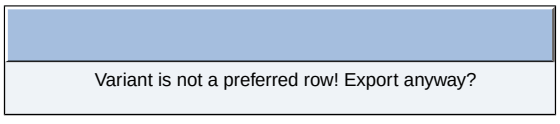


Entry in the preferred row column at M24x120

  - **Variable for alternative part** : If you set a checkmark here the part, which is closest to the preferred part in the table, will be transferred to the CAD system as a meta file. This function is only supported by certain CAD systems.

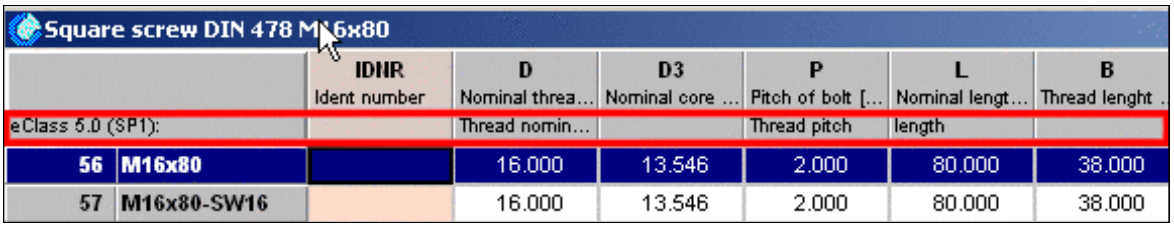
- **Show warning, if exported part is not in preferred rows**: This alternative is available to you optionally. If you wish, please activate the checkbox.

The following notification shows up if the part does not belong to the preferred row.



- **Show attributes** :

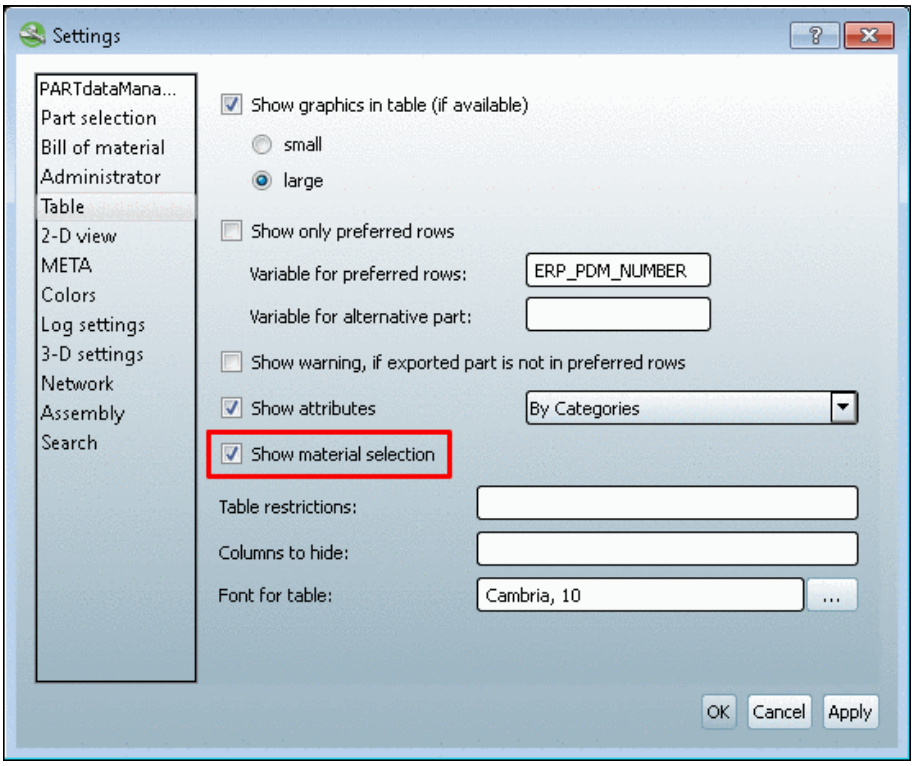
  With activated option the class variables are displayed in addition according to the selected classification (here exemplified eClass 5.0). This functionality is also available for your own classification. Section 5.7, “Apply own Class system ” in *eCATALOGsolutions Manual*.



Show attributes

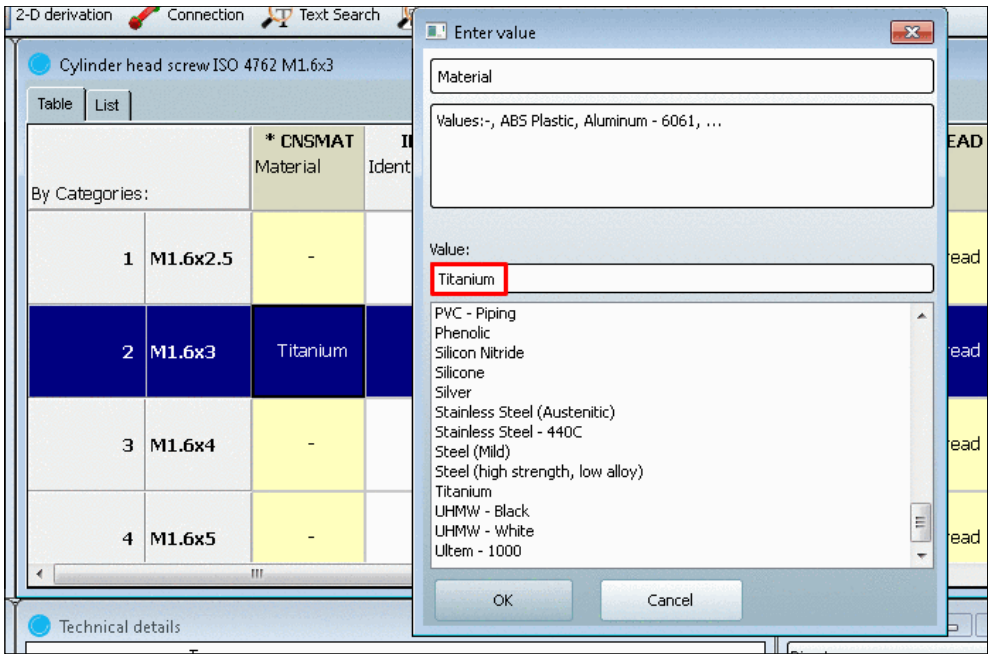
- **Show material selection**

  When you wish to differentiate identical parts via the material then activate the **Show material selection** option.



Show material selection

Thereby in the table a "virtual" column "**CNSMAT**" is displayed for the material selection. Before the export you open the **Enter value** dialog with a click into the respective field.



"Enter value" dialog

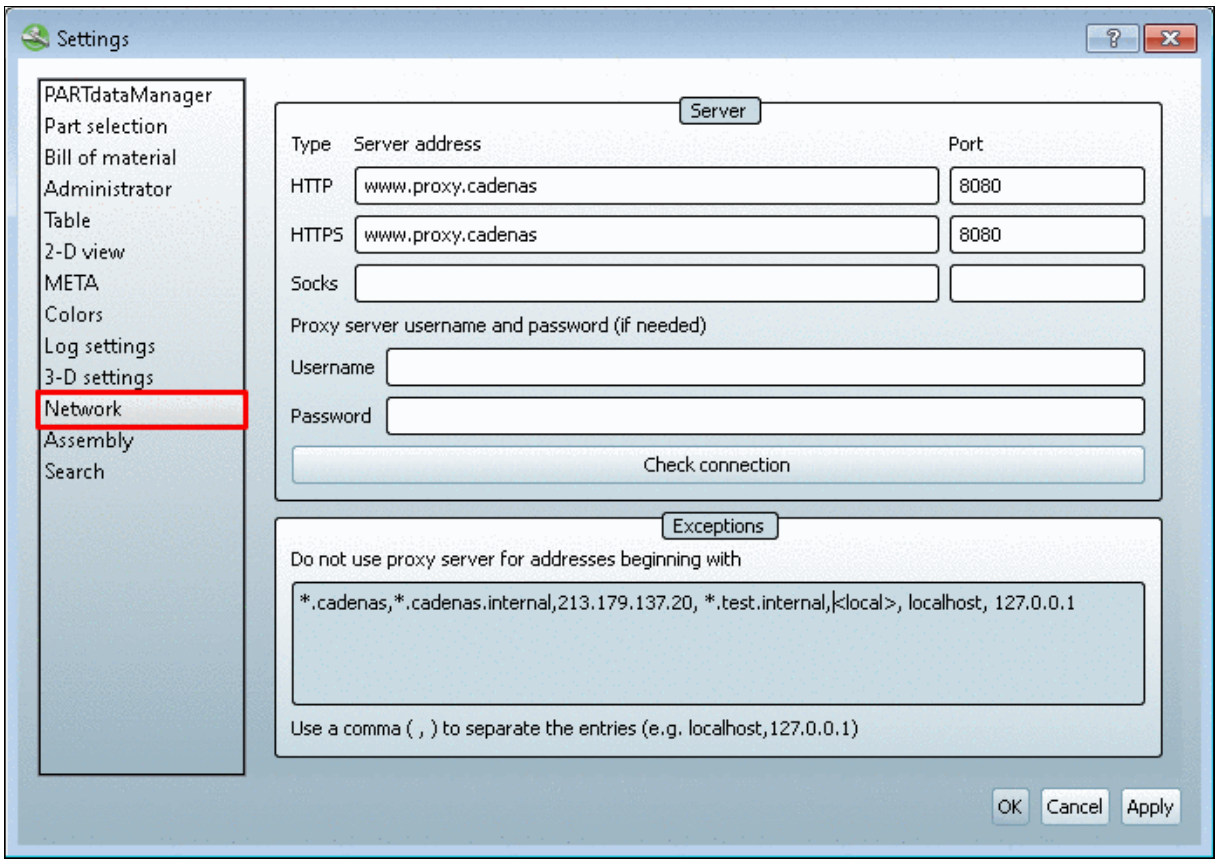
In the **Enter value** dialog all materials are listed which are set up in the `material.cfg`.[19]

- **Table restrictions** : Via conditions you can restrict the table. For example **D > 20**. The combination of conditions is possible as well: **D>20.AND.K>15**.
- **Columns to hide** : Columns not to be displayed can be specified here. For several columns use comma separation.
- **Font for table** : Choose from the available types via **Browse** ... .
  The font size is adjusted consistently for the table view and list view.[20]

2.1.4.7. "Network" tabbed page

The Internet Explorer settings are shown on this tabbed page.

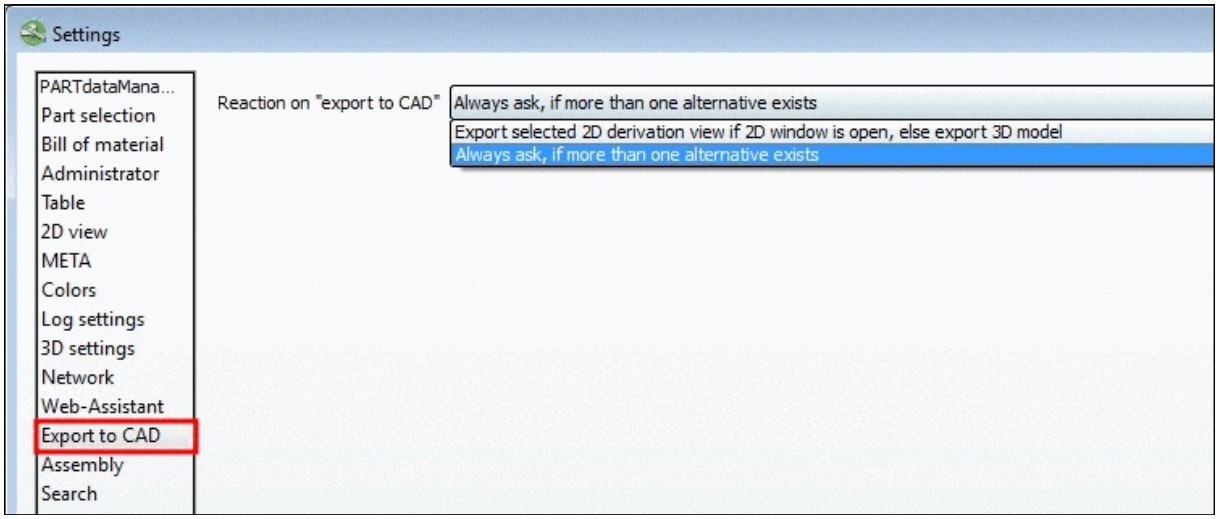
[19] Administrative notes on this you can find under Section 1.1.7.6.12, “material.cfg (without ERP integration) ” in *PARTsolutions / PARTcommunity4Enterprise - Administration Manual*.
[20] As of V9.05 the font size is adjustable for the list view.



Preferences, Network

2.1.4.8. "Export to CAD" tabbed page

In the list field under **Reaction on "export to CAD"** you can find the following two options:



"Export to CAD" tabbed page

- **Export selected 2D derivation view if 2D window is open, else export 3D model** (Default)

  When using a 2D CAD system you click on the button **2D derivation** in order to create the **2D derivation**.

  -> The **2D view** dialog box opens. There you can select the desired view.

Furthermore different functions such as **Dimensioning mode** [21] for example are available. More information on this is found under Section 3.1.1.11.3.4, “Context menu and buttons "2D view" window ” in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

The option **Technical views** is not available in this mode.

Note

When using a 2D CAD and clicking on the button **Transfer to CAD**, without having created a 2D derivation, a default derivation is transferred to the CAD system.

- **Always ask, if more than one alternative exists**

  When using a 2D CAD system or CAD system with 2D option the **Choose view to pass...** dialog box is opened by clicking on the **Transfer to CAD** button regardless of whether the **2D view** dialog box (called by clicking on the button **2D derivation**) is opened or not.

  When the **Choose view to pass...** dialog box is opened, then the selection made there is transferred in any case (even if another selection has been made in the **2D view** dialog box.

  When a pure 3D CAD system is used, the **Choose view to pass...** dialog box is not opened.

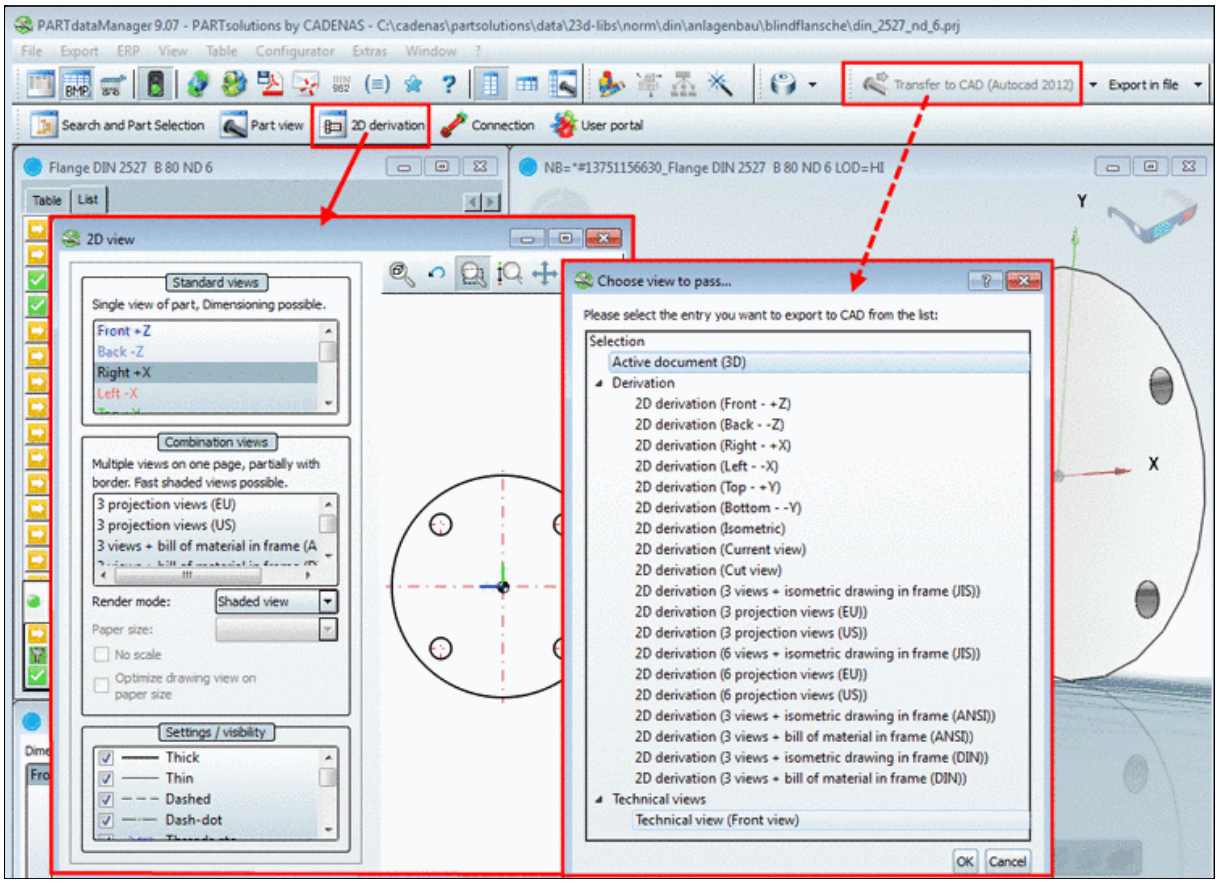
  In the **Choose view to pass...** dialog box also **Technical views** (if available) can be chosen.

Note

The effect of the setting **Reaction on "export to CAD"** has differs depending on the used CAD system:

1. CAD system has only ONE environment -> So only 2D or 3D is active.
   (valid for SW,SE,NX,OSDM,INV)
   The setting has NO effect.
2. CAD system can handle multiple environments. -> Then the selection dialog will appear.
   (valid for Pro-E and AutoCAD)
   The setting takes effect.

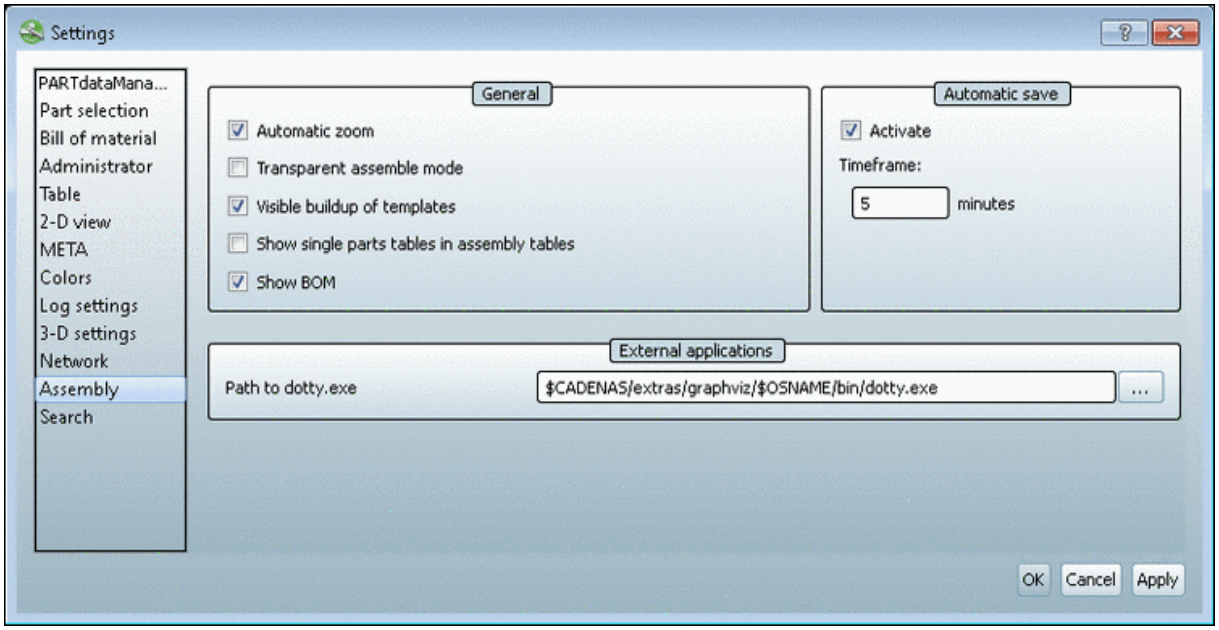
[21] Create the desired dimensioning yourself before the part is transferred to the CAD



Dialog boxes "2D view" and "Choose view to pass..."

Detailed information on 2D derivation is found under Section 3.1.1.11.3, “ Create 2D derivation ” in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

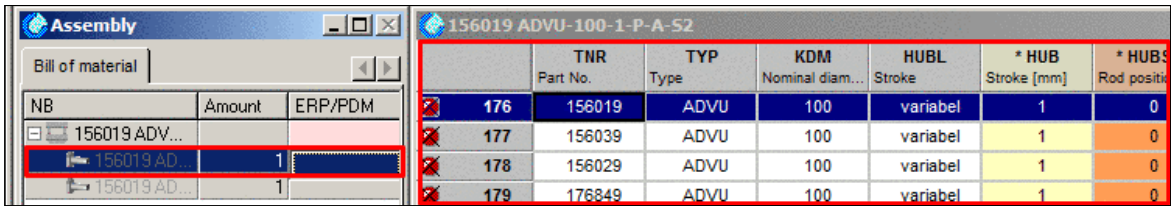
2.1.4.9. "Assembly" tabbed page



General

- **Automatic zoom** : The greatest possible entire display of an assembly (as far as possible) within the boundaries of the **3D preview**.
- **Transparent assemble mode**: The step-by-step assembly of the assembly takes place in the background. Only the completed assembly is shown later.

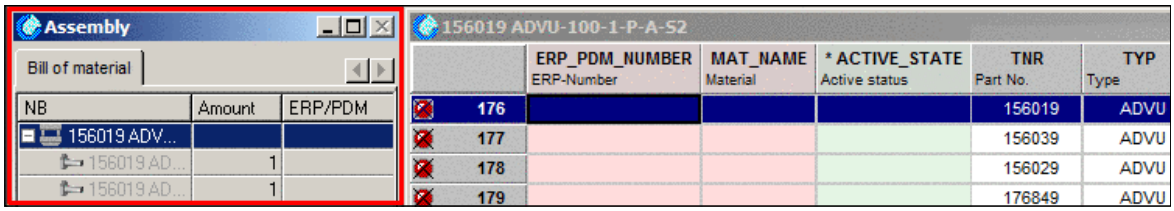
- **Visible buildup of templates**: Every step is shown. This setting turns off the **Transparent assemble mode**.
- **Show single parts tables in assembly tables** (the setting is only relevant if **Show BOM** is activated)



Single part selected in Assembly window

- **Show BOM**

  If the option has been activated then the **assembly** will be shown.



Dialog window Assembly is shown

Automatic save

- **Activate**: ...starts the automatic saving of an assembly construction.
- **Timeframe**: minutes between saving intervals

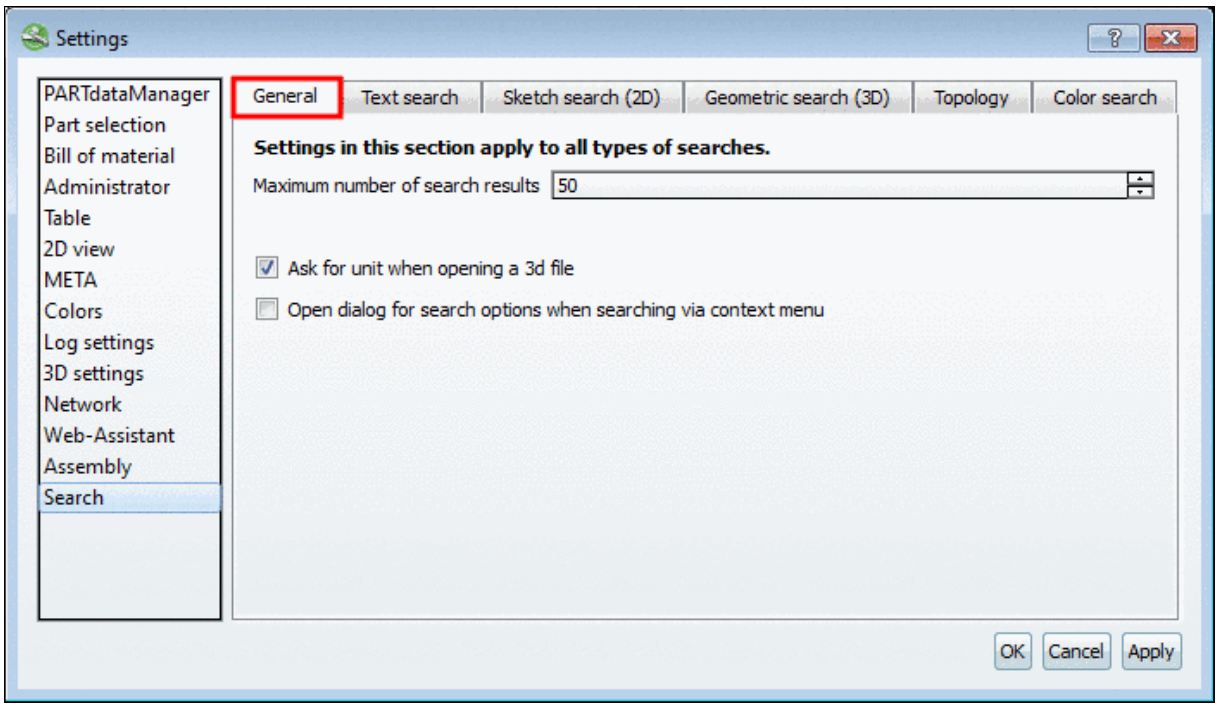
External applications

- **Path to dotty.exe** (Set as default. Graphic display of assembly relationships)

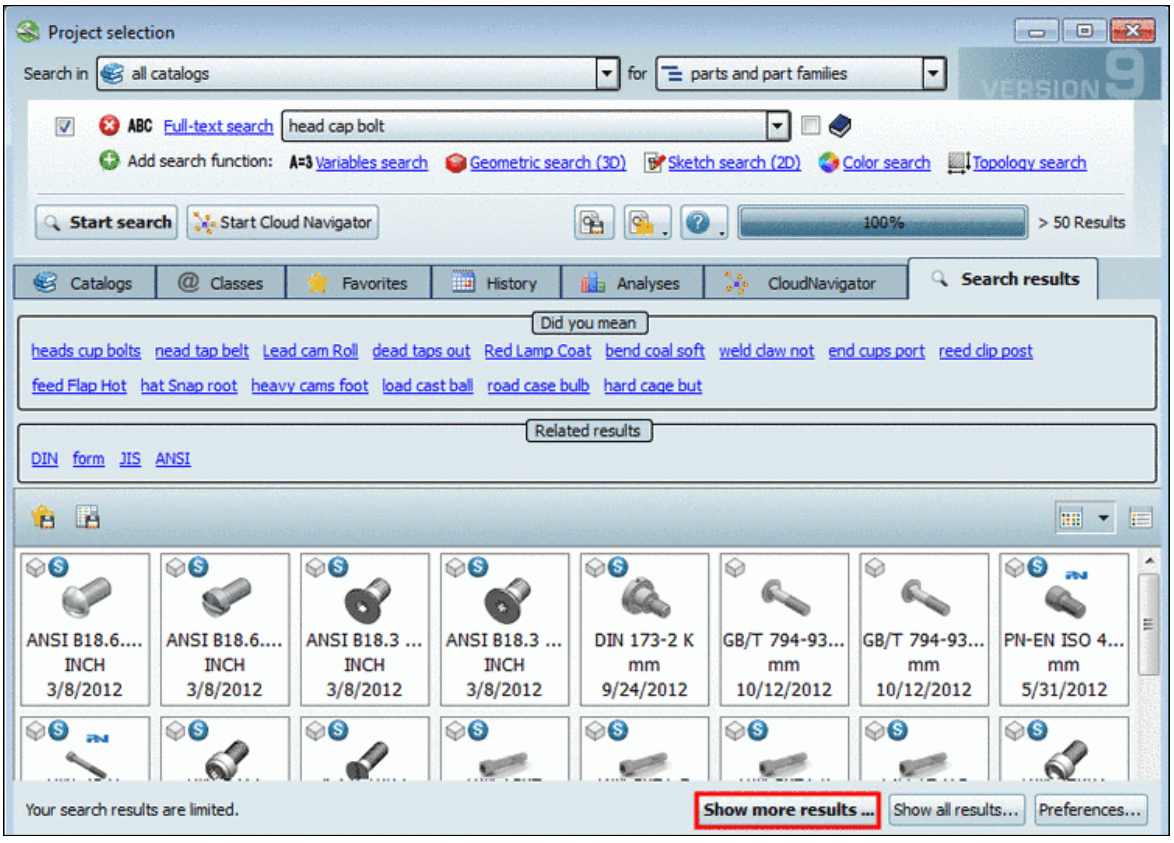
2.1.4.10. "Search" tabbed page

2.1.4.10.1. General

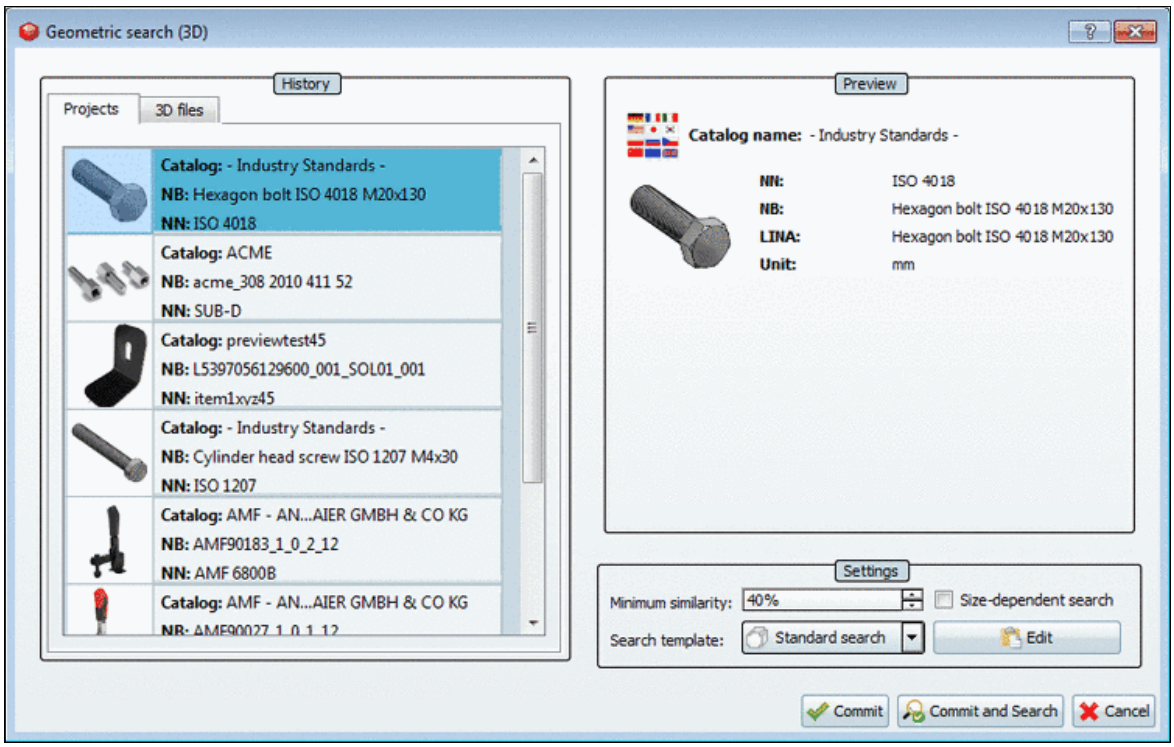
On the **General** tabbed page you have the following setting options available:



- **Maximum number of search results**: Set the desired value.
  With each click on **Show more results ...** the next block of results is displayed successively.



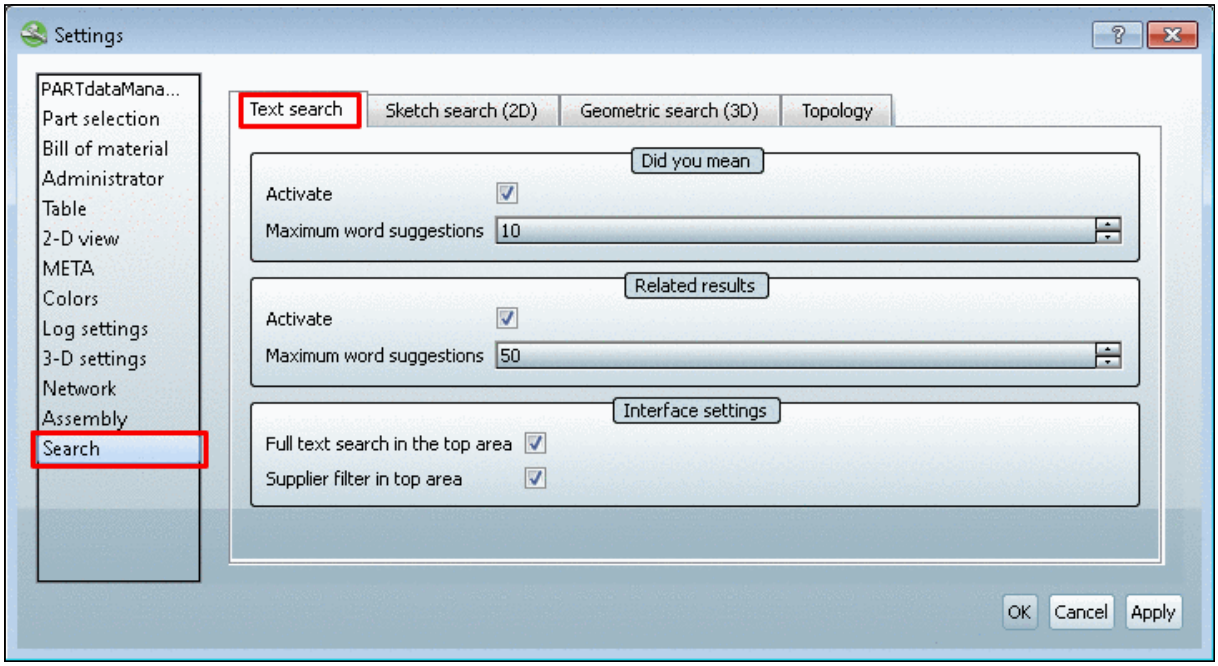
- **Ask for unit when opening a 3d file**
- **Open dialog for search options when searching via context menu**:
  This option affects the **Geometric search (3D)** dialog box.



If this option is activated the dialog box appears, otherwise the search is directly performed with the options set in the window.

2.1.4.10.2. Text search

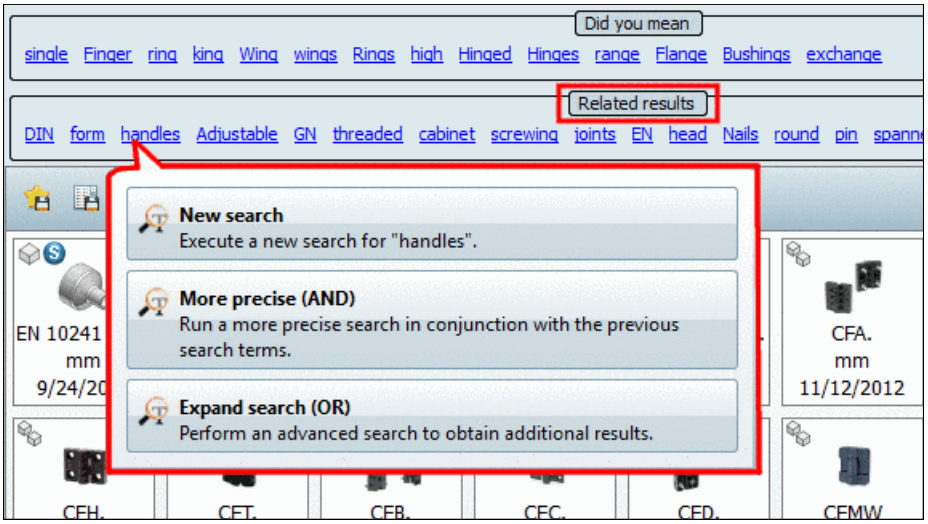
On the **Text search** tabbed page you control, which search options have to be visible under **PARTdataManager** -> **Project selection** (see Fig. „PARTdataManager -> Project selection “).



"Text search" tabbed page

- **Did you mean**
- **Related results**

Via every related term the search can be modified. On this also compare under Section 3.1.1.6.7.4, “ "Related results" - Specify / broaden search ” in *PARTsolutions / PARTcommunity4Enterprise - User manual*.

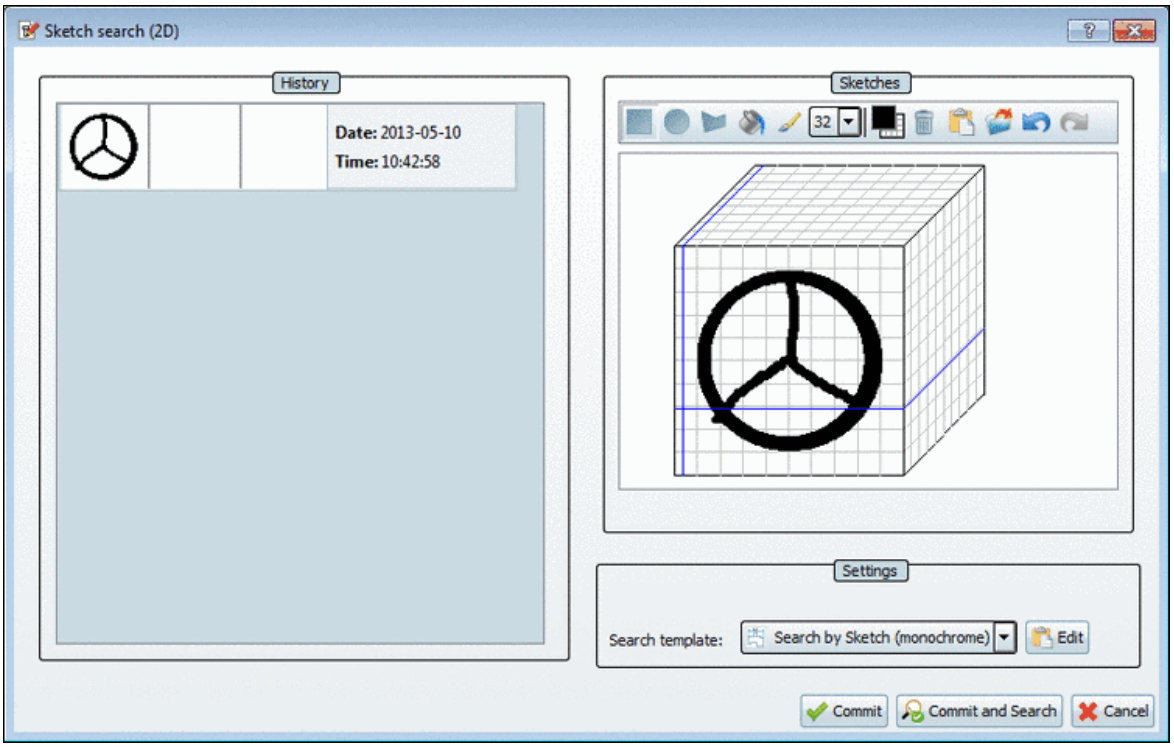


PARTdataManager -> Project selection

- **Supplier filter in top area** : on/off

2.1.4.10.3. Sketch search (2D)

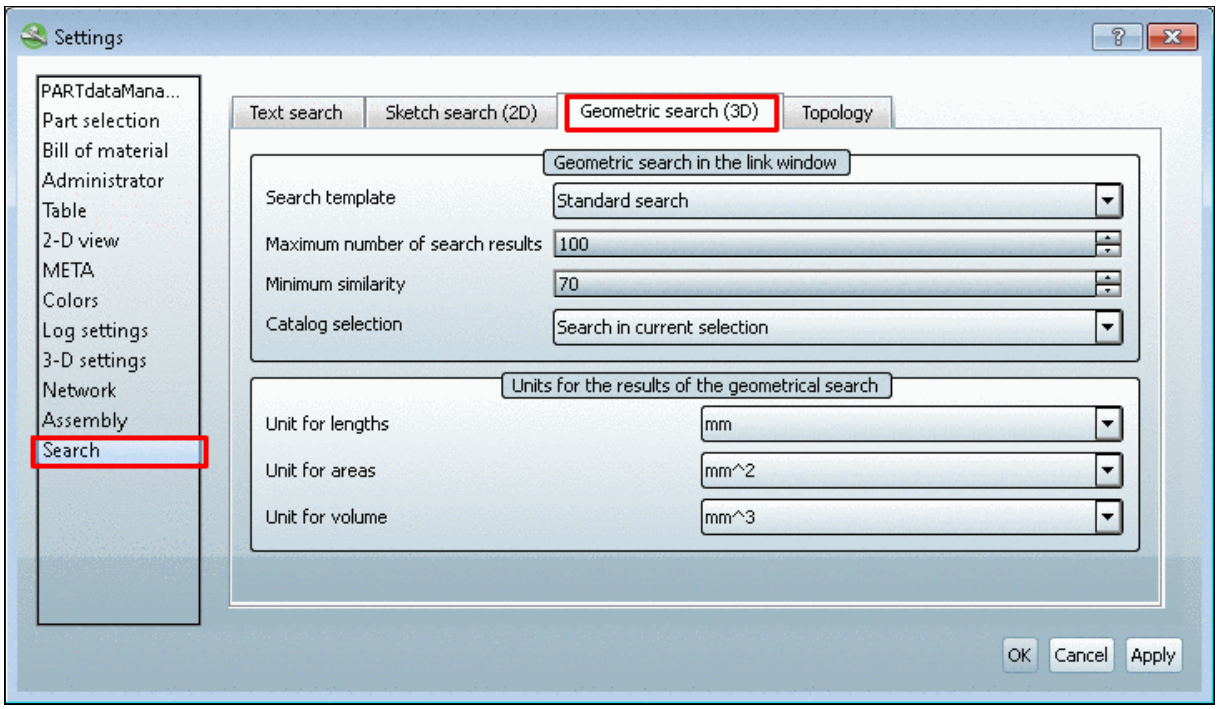
- **Number of entries in search history**:



Via this option you can adjust the maximum length of search history in the History section.

2.1.4.10.4. Geometric search (3D)

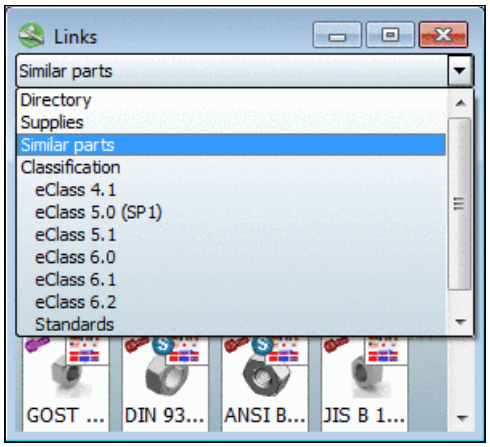
Setting options on the **Geometric search (3D)** tabbed page:



"Geometric search (3D)" tabbed page

- **Geometric search in the link window**

  The **Geometric search in the link window** setting works, if in the list the **Similar parts** option is selected. On this also see under Section 3.1.1.7.8, “ "Links" window ” in *PARTsolutions / PARTcommunity4Enterprise - User manual*.



Links to similar parts

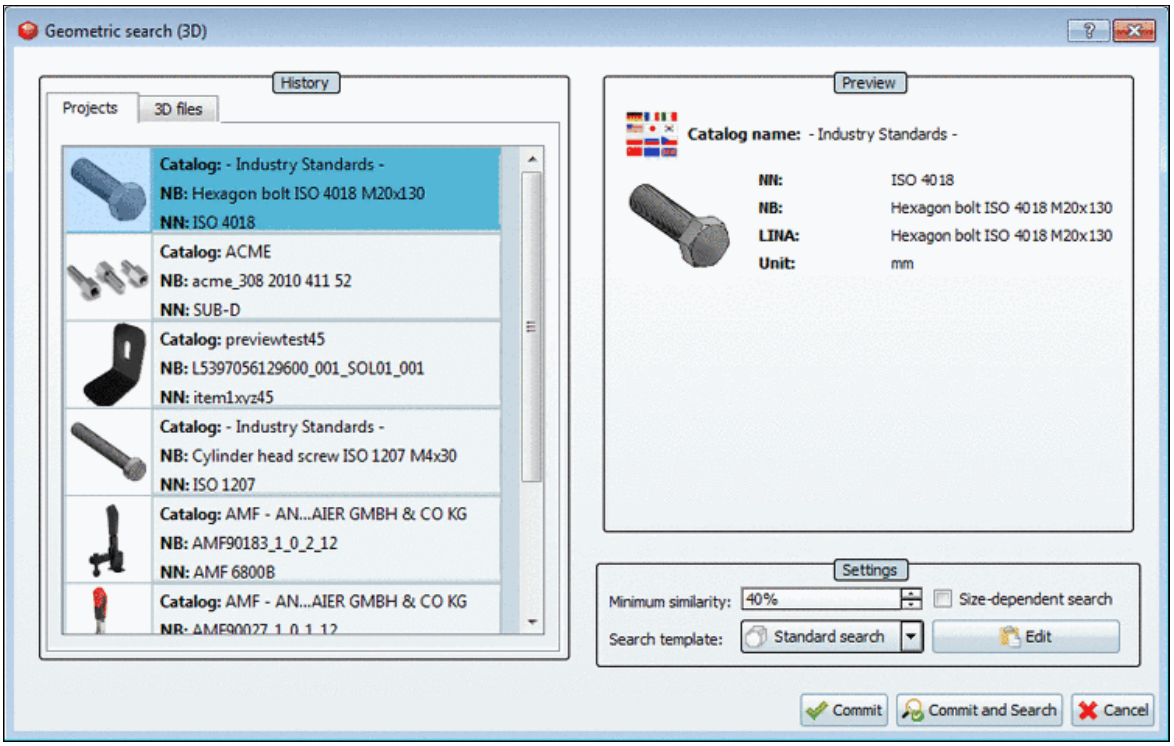
Specify the modalities for this search:

- **Search template**:
  - **Fast search**
  - **Standard search**
  - **Broad search**
- **Minimum similarity**
- **Catalog selection**
  - **Search in current selection**
  - **Search categories of current catalog in classification**
  - **Search everything**

Note

Depending on the amount of installed catalogs, this option can slow the search significantly.

- **Units for the results of the geometrical search**
  Select the desired unit for lengths, planes and volumes.
- **Always use a part as search criterion when opened**
  Number of entries in search history:

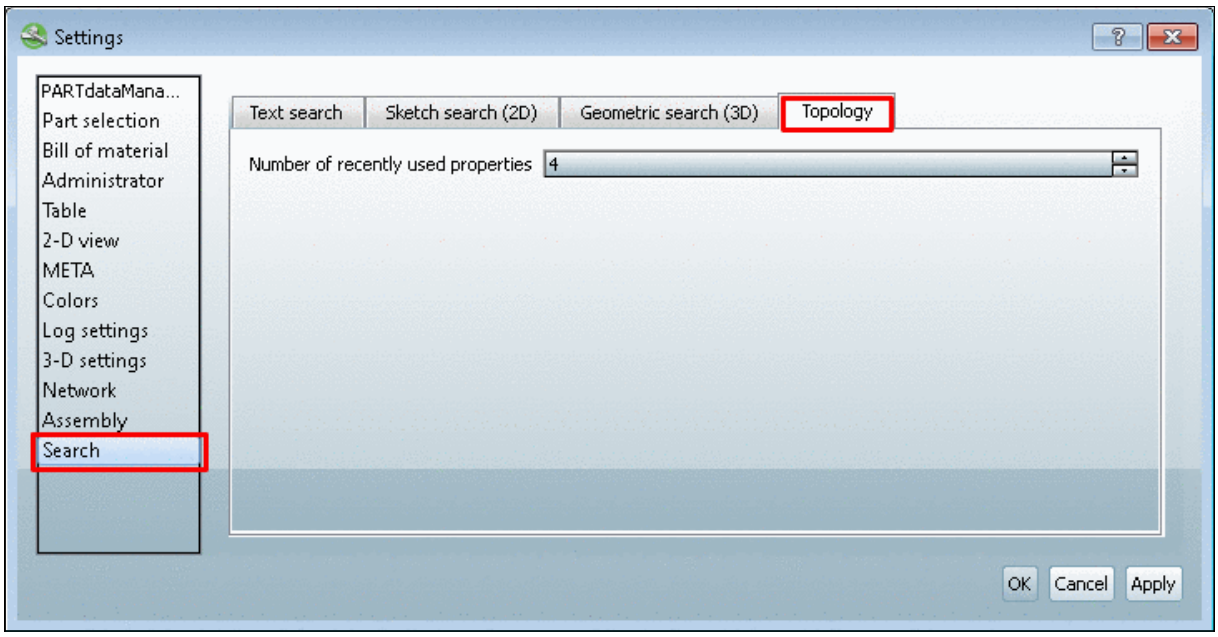


Via this option you can adjust the maximum length of the search history in the History section.

After changes the application has to be started again.

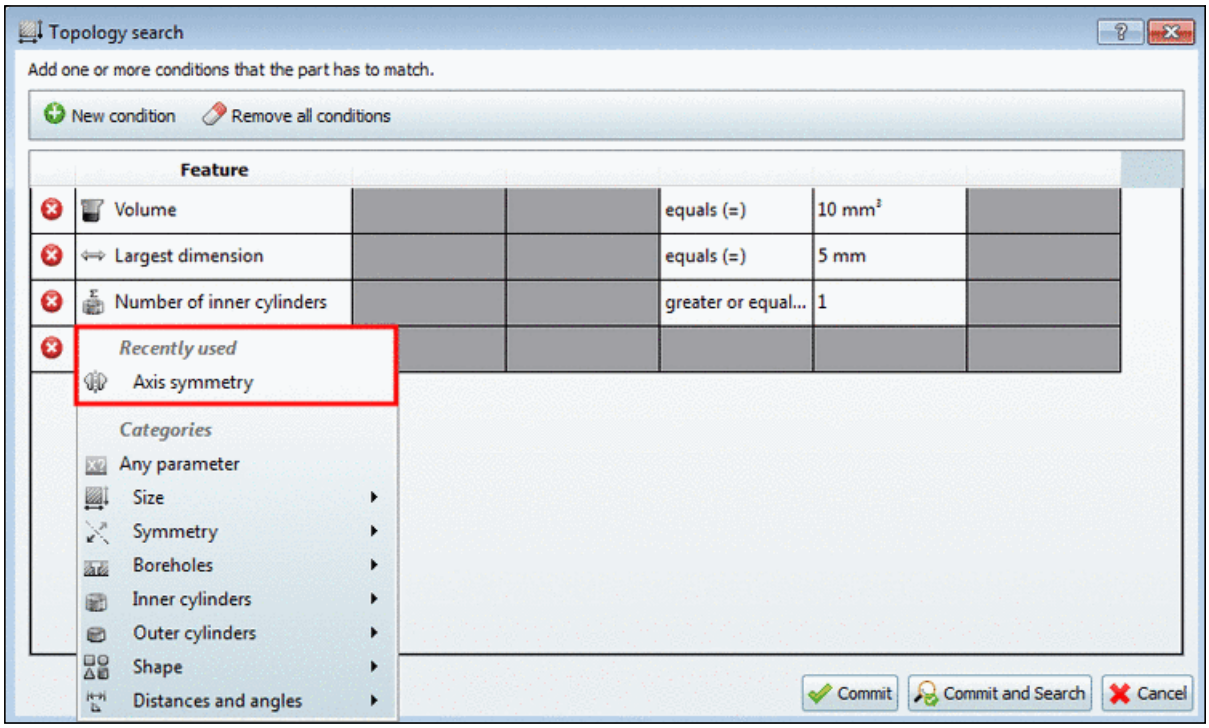
2.1.4.10.5. Topology

Number of recently used properties:



Settings dialog box -> "Topology" tabbed page

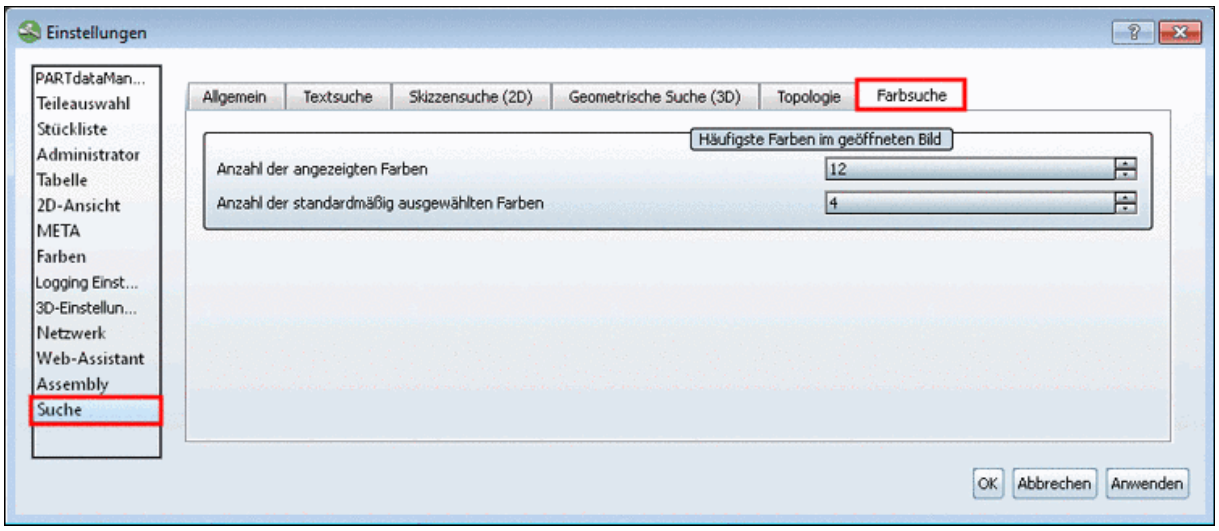
In the **Search** dialog box, on the **Topology** tabbed page, under **Property**, in the **Recently used** context menu the recently used attributes are displayed.



Recently used

2.1.4.10.6. Color search

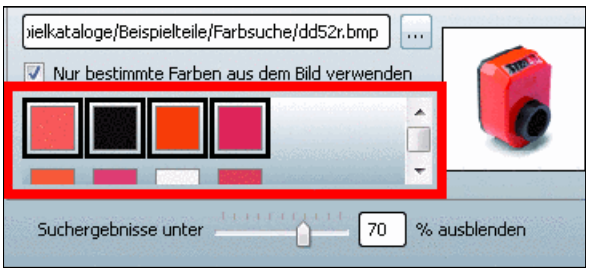
On the tabbed page **Color search** you can find the following setting options:



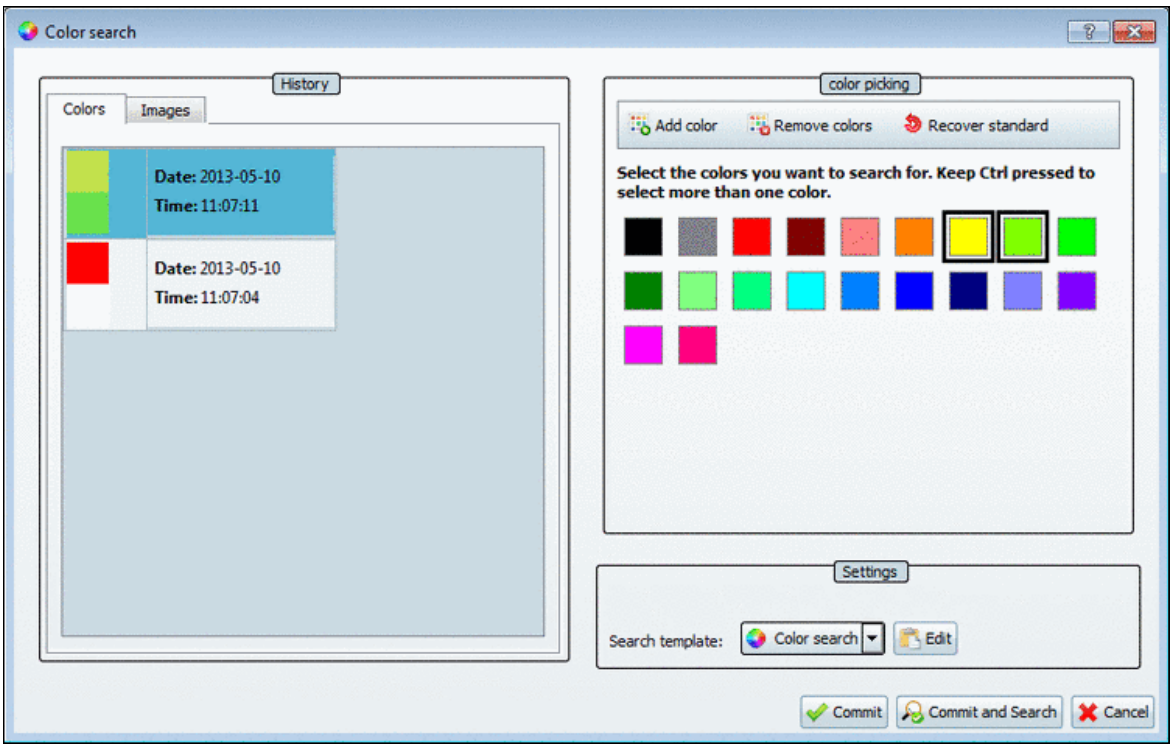
"Settings" dialog box -> "Color search" tabbed page

- **Number of displayed colors**
- **Number of colors which are selected by default**

  You can see the result under **Search** dialog box -> **Search** tabbed page - > **Color** tabbed page.



- **Number of entries in search history**:



Via this option you can change the maximal length of the search history in the section History.

2.1.4.11. "3D settings" tabbed page

On the **3D settings** tabbed page, the display (part, background) is regulated within the **3D preview**. In addition there are settings options for the internal systems graphic operating processes.

The dialogs are subdivided into the tabbed pages **Elements**, **Environment** and **Miscellaneous**.

Elements

- Display
- Line colors / thickness
- Threads
- Center point

Environment

- Background colors
- Background texture
- Logo
- Environment sphere
- Floor

Miscellaneous

- View accuracy
- Handling
- Correct aspect ratio
- Other
- Controls
- Standard material

Using the links you can directly reach the respective sections.

2.1.4.11.1. Templates

The following describes the **Templates** dialog area.

- Different templates have already been configured and are available for selection: 8.1, 9.0, CAD: CATIA V5, etc.
- Below the selection, the preview image of the marked template is displayed.
- Select your desired template and click on **Load**.
  Make changes and click **Save**.
- In order to create a template, do the following:
  - Select an existing template that is most similar to your idea.
  - Configure the template on all tabbed pages.
  - Under **Name** enter the desired one.
  - Via **Browse** ... load the desired preview image.
  - Click on **Save**.
- Via **Delete** you remove the template.

Note

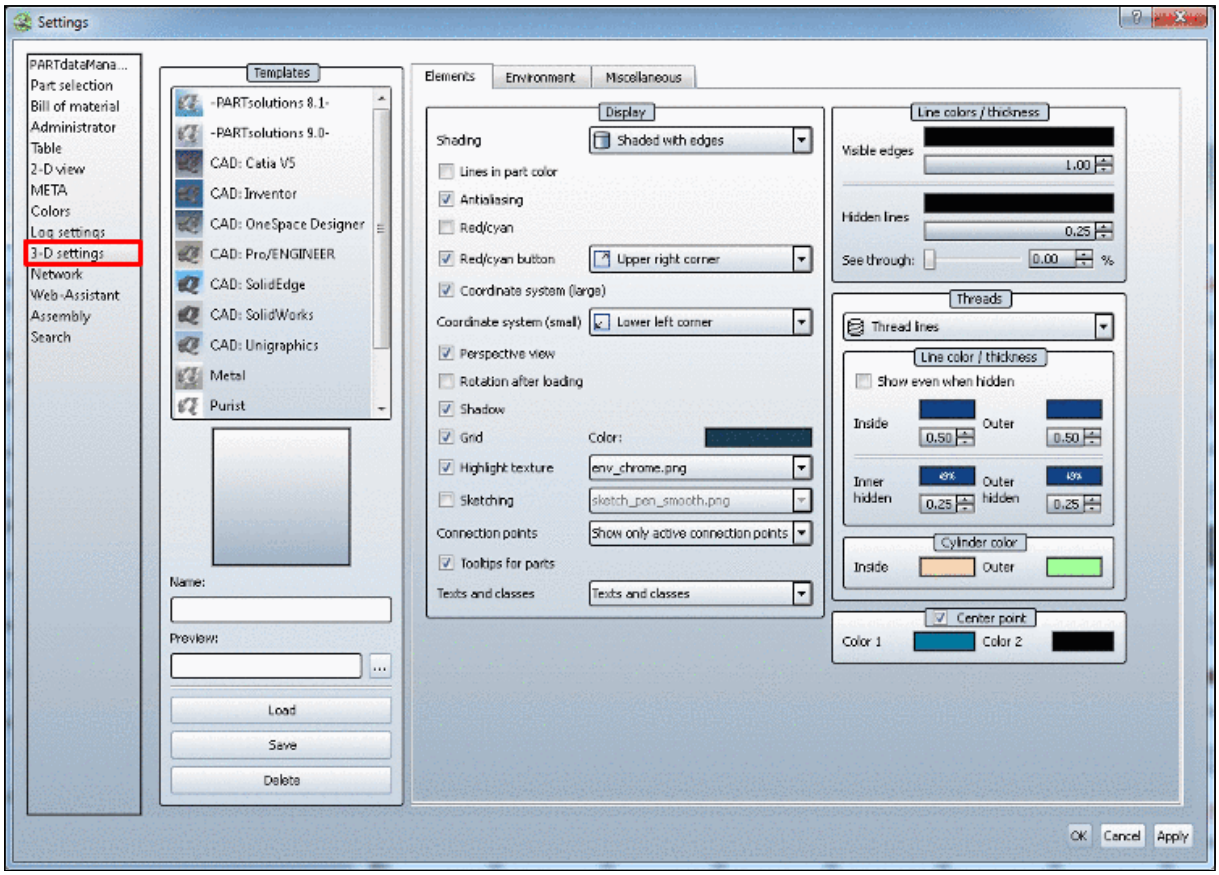
If you delete the template you may never retrieve it!

Elements tabbed page

2.1.4.11.2. "Elements" tabbed page

The **Elements** tabbed page is divided into the following sections:

- Display
- Line colors / thickness
- Threads
- Center point



Elements tabbed page

These are described below.

2.1.4.11.2.1. Display

In the **Display** area you can make the following settings:

- **Shading**:

  You can find the following selection options in the list field:

  - **Edges**
  - **Hidden lines (gray)**
  - **Hidden lines**
  - **Shaded**
  - **Shaded with edges**
  - **Schematic**

> **Note**
>
> The setting only describes the template during loading the part. You can change the display mode using the corresponding toolbars in the user interface.

- **Lines in part color**

  Part color is based on the color of a single part in an assembly. This option only refers to assemblies with colorful parts.
- **Antialiasing** smooths the part's contours.
- **Red/cyan**

  Display of the part in **plastic 3D preview**. The three dimensional effect only takes place when using red/cyan glasses!

To increase the effect of the plastic effect, the selected part is displayed **flushed**. The background is automatically darkened. The option **red/cyan effect** can be used independent of the display mode (**Lines**, **Hidden lines**, **Shaded** , etc.).

You can turn the option on/off per default via the checkbox.

- **Red/cyan button**

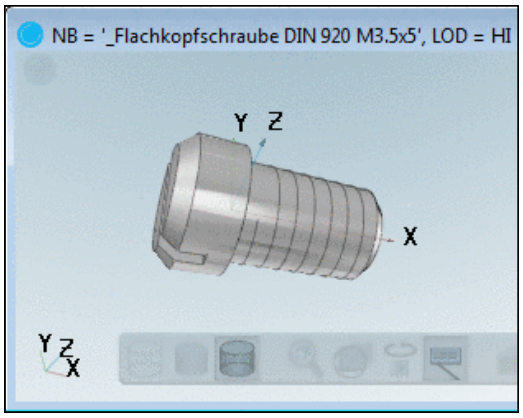
  Determine the position (corner) in the list field.

- **Coordinate system (large)**

  You can turn the coordinate system in the center of the part on/off by marking the checkbox.

  Coordinate system (small)

  The small coordinate system (in the corner) can be turned on/off and the position (corner) determined using the list field.



- **Perspective view**

  On, off

- **Rotation after loading**

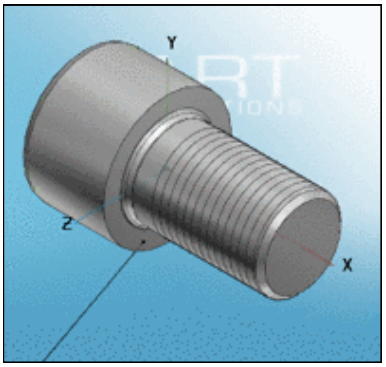
  On, off

- **Shadow**

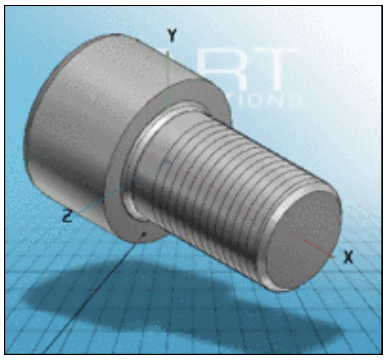
  On, off

- **Grid**

  On, off and setting of color



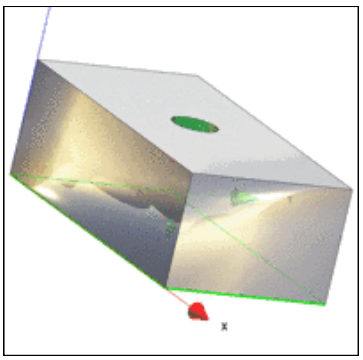
Without shadow and grid



With shadow and grid

- **Highlight texture**

- **Highlight texture** : In connection with the display type "**Shaded**" and/or "**Shaded with edges**", so-called highlighting texture can be selected for the surface of a part. The respective selection can be found in the list field.

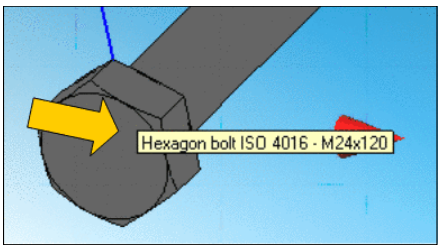


- **Sketching**

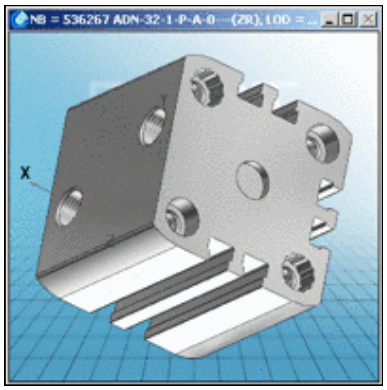
  Various adjustments can be made in the list field.

  You can also find a button on the user interface.
- **Connection points**
  - **Show connection points**
  - **Hide connection points**
  - **Show active connection points**
- **Tooltips for parts**

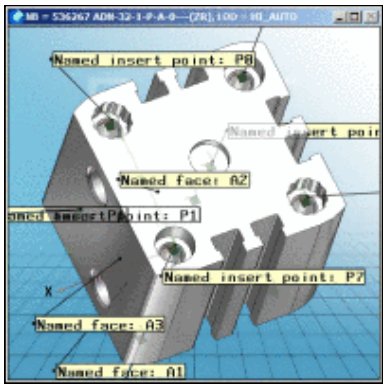
  Hied/show the part tooltip (pops up upon mouseover)



- **Texts and classes** [22]



"Texts and classes" deactivated

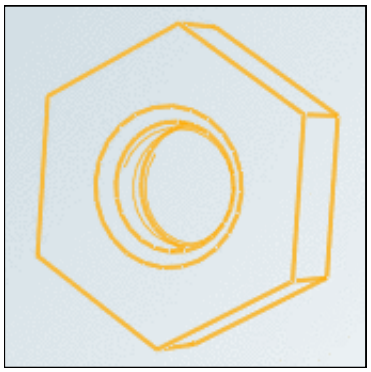


"Texts and classes" activated

[22] as of v8.1 "**Named elements**"

2.1.4.11.2.2. Line colors / thickness

Via **Line colors / thickness** set the **contour lines** (separately for **Visible edges** and **Hidden lines**) of the 3D body.



Note

The settings of the line thickness only take effect when under **Display** -> **Shading** the options **Edges**, **Hidden lines (gray)** or **Hidden lines** have been selected.

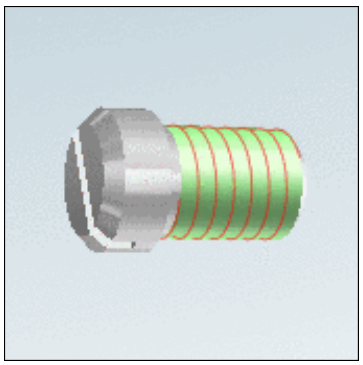
2.1.4.11.2.3. Threads

In the **Threads** window you can turn the thread display off or set different modes.

- **Colorful cylinder**

  - **Off**
  - **Colored cylinder**
  - **Thread lines**
  - **Colored cylinder and thread lines**
  - **Texture**

  The image shows the **Colored cylinder and thread lines** mode.



- **Line color / thickness**

  The thread color can be changed by clicking the cursor into the respective color field. Inner and outer threads can be set in different ways.

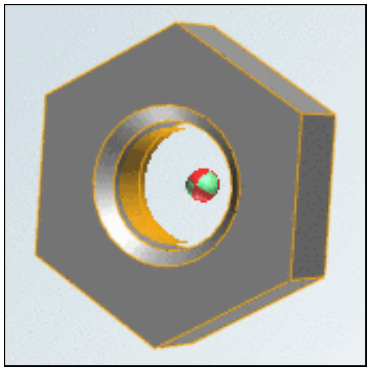
  The thickness of the thread line can be adjusted via the arrow buttons  .
- **Cylinder color**

  The cylinder, with which a thread can be symbolized, can be adjusted in color as with line color.

2.1.4.11.2.4. Center point

Via the checkboxes you can turn the central point on/off.

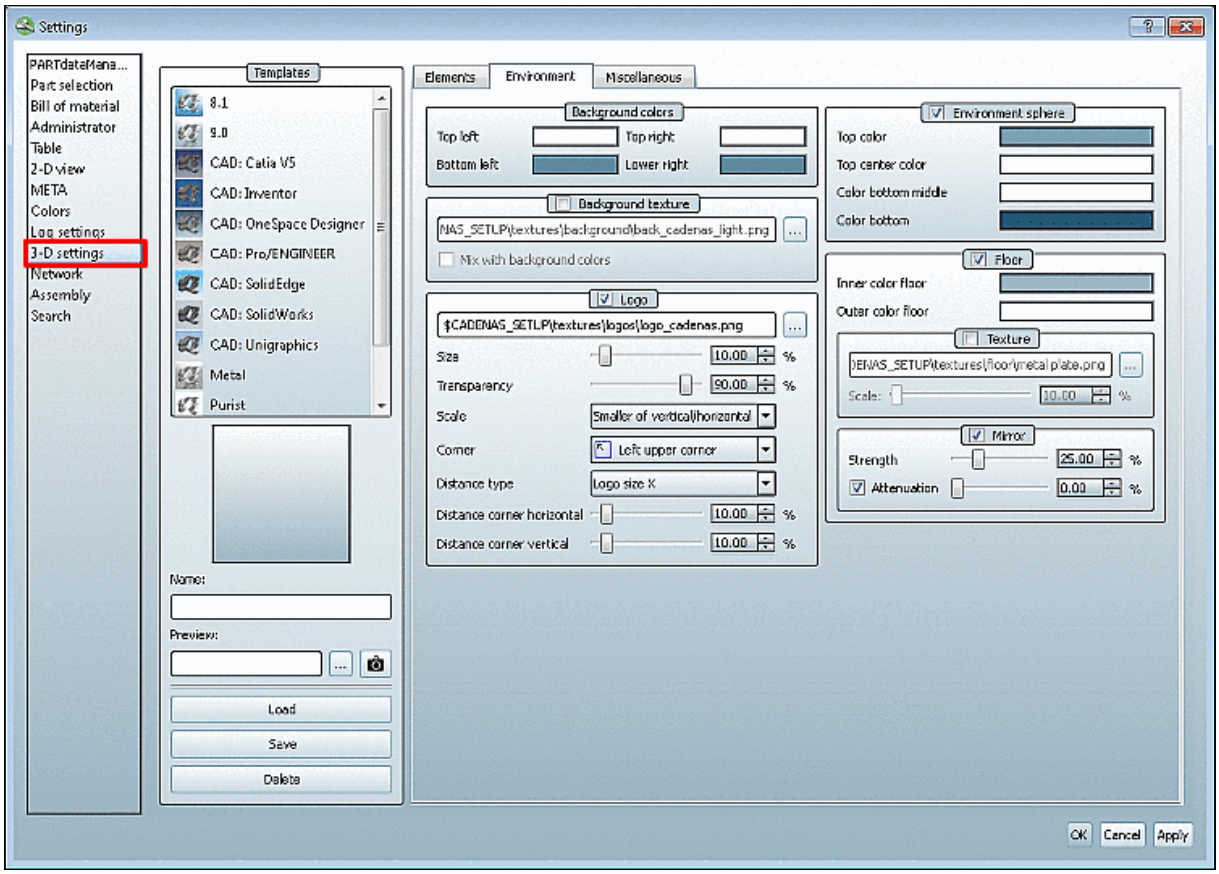
With color 1 and color 2 you determine the display type (in this example red/green).



2.1.4.11.3. "Environment" tabbed page

The **Environment** tabbed page is divided into the following areas:

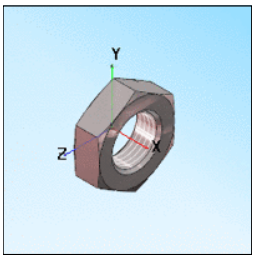
- Background colors
- Background texture
- Logo
- Environment sphere
- Floor



Environment tabbed page

These are described in the following.

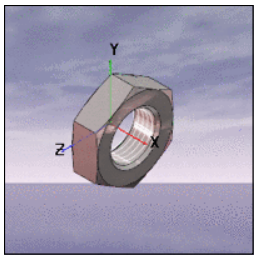
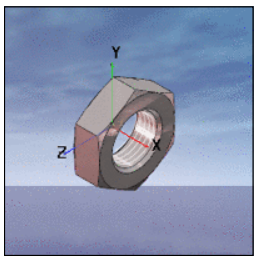
2.1.4.11.3.1. Background colors

Background	Description	Display
Background color	Each **background color** opens by clicking on the color selection window, with which you can individually design the background used in the 3D preview.	

Note

Complex background graphics can slow down usage - for example when rotating a body - enormously .

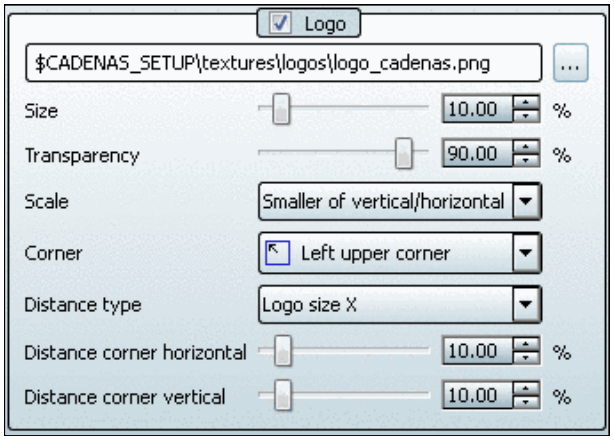
2.1.4.11.3.2. Background texture

Background	Description	Display
Texture	Via Browse ... you can import image files as background (see figure). This option has precedence over the color fields!	
Mix with background colors	Sets the texture onto the color fields.	

Note

Complex background graphics can slow down usage - for example when rotating a body - enormously .

2.1.4.11.3.3. Logo



- Using the **checkbox** you can turn the logo on and off.
- With Browse ... you adjust the desired logo.
- **Size** (in percent of entire face)
- **Transparency**: (100% is invisible)
- **Scale**

  Via **Scale** you control the calculation mode for the logo size.

  - Window vertical

    The logo size is calculated from window height.
  - Window horizontal

The logo size is calculated from window width.

- Smaller of vertical/horizontal

  The logo size is calculated from the smaller window height and width.

- Larger of vertical/horizontal

  The logo size is calculated from the larger window height and width.

- **Corner**

  You can assign a reference point for the positioning of a corner or central point.

- **Distance type**

  The selection under **Distance type** controls the reference value of **Distance corner horizontal** and **Distance corner vertical**. This is helpful for logos with large deviations of height and width.

  - Window size

    The vertical distance is calculated via the window height and the horizontal distance over the window width.

  - Logo size X and Y

    The vertical distance is calculated via the logo height and the horizontal distance over the logo width.

  - Logo size X

    The vertical as well as the horizontal distance are calculate from the logo width.

  - Logo size Y

    The vertical as well as the horizontal distance are calculated from logo height.

- **Distance corner horizontal**
- **Distance corner vertical**

2.1.4.11.3.4. Environment sphere

Settings made via **Environment sphere** and **Floor** have precedence over the settings made in **Background colors** and **Background texture**.

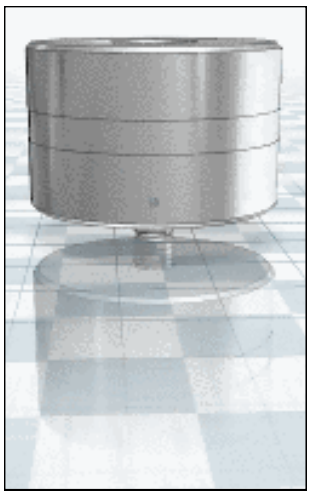
- Top color
- Top center color
- Color bottom middle
- Color bottom

2.1.4.11.3.5. Floor

- **Inner color floor** (front)
- **Outer color floor** (back)
- **Texture**

  Using scaling you can set the repeat rate of the texture. The higher the value, the rougher the texture.

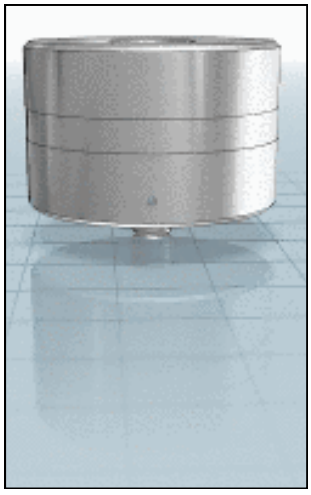
5 %



20 %

- **Mirror**
  - **Strength**
    The strength of the mirroring indirectly influences the brightness of the floor
  - **Attenuation**
    The higher the percentage value, the more the mirroring weakens downwards.

turned off



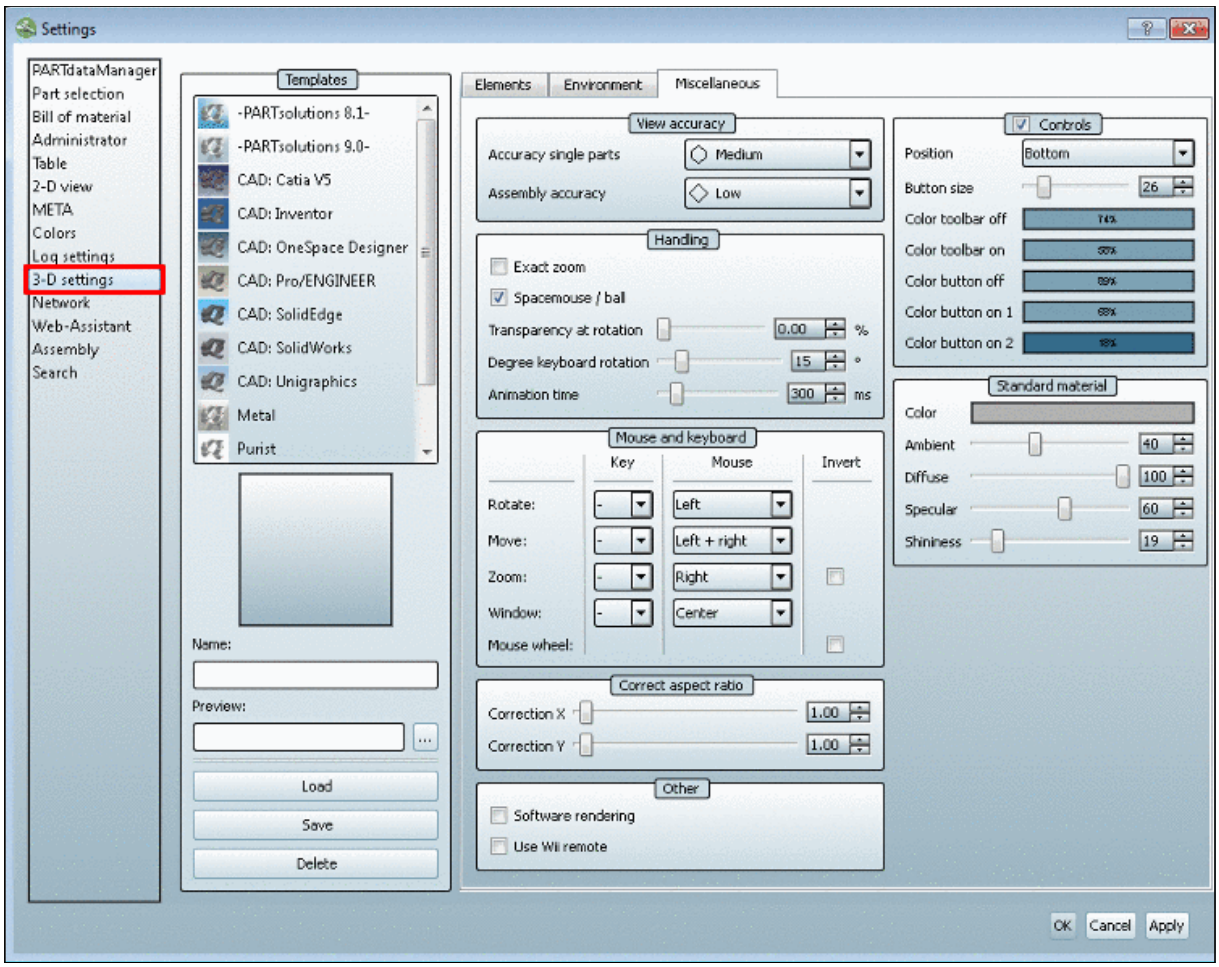
0 %

median value

2.1.4.11.4. "Miscellaneous" tabbed page

The **Miscellaneous** tabbed page is subdivided into the following areas:

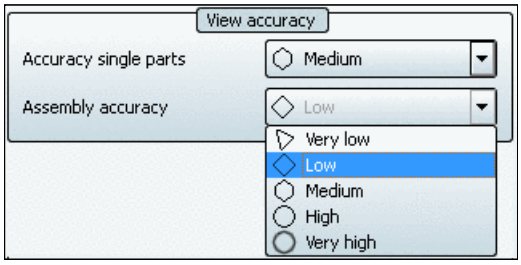
- View accuracy
- Handling
- Correct aspect ratio
- Other
- Controls
- Standard material



"Miscellaneous" tabbed page

These are described in the following.

2.1.4.11.4.1. View accuracy



You can set the exact display for **Single parts** and **Assemblies** separately.

Select the desired accuracy in the list field. The accuracy is important for circular curves, for example.

Note

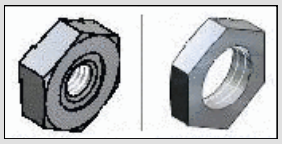
A higher depiction accuracy is connected to a need for a higher storage capacity!

Note

For problems with graphic display (resolution or trajectory) we recommend **activating Software rendering**.

Note

The problem may also be the cause of the operating system, in the lack of display quality (for example, line thickness of the edges and thread) .

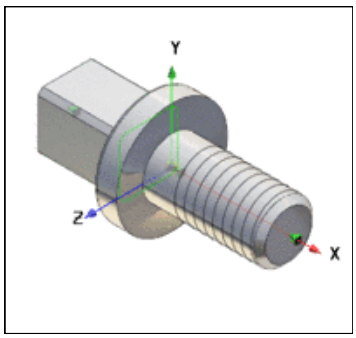


Check if the **color quality** under Windows -> Desktop -> Settings is set to **32 Bit**.

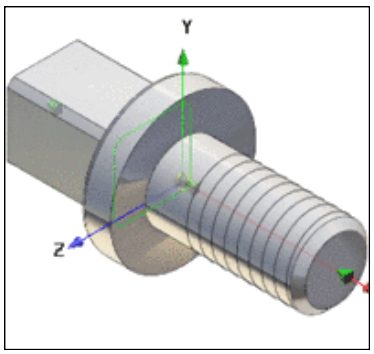
2.1.4.11.4.2. Handling

- **Explicit zoom**

With the **Zoom all** button you bring the display of the part onto a balanced measurement. The part is large enough, but still does not protrude over the 3D view window during rotation. If the option **Explicit zoom** has been set, the display within the window es maximally enlarged.



Zoom all without **Explicit zoom**



Zoom all with **Explicit zoom**

Note

This setting is especially recommended in combination with creating a preview.

- **Spacemouse / ball**

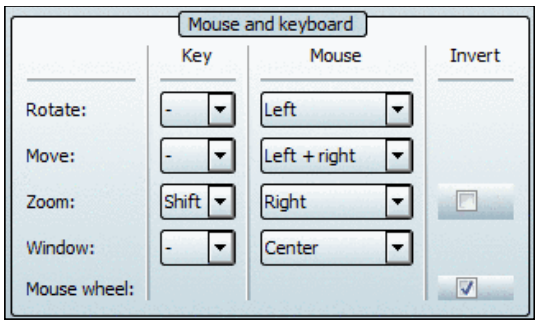
  In case you have implemented such an "instrument", you can make it available for PARTdataManager via this option.
- **Transparency at rotation** :

  When you move a 3D body via mouse key, with a click on the respective mouse button the transparency is turned on. Here you can control the size of transparency.
- **Degree keyboard rotation**

  During turning the part wanders stepwise with the adjusted angle value.
- **Animation time** : ...defines the time span within which the part changes between the different perspectives.

2.1.4.11.4.3. Mouse and keyboard assignment

Assign which functions are connected to which mouse movements and which key combinations.



Moue and keyboard assignment

- **Rotate**, **Move**, **Zoom**:

  From the list fields select which mouse button will contain the functions **Rotate**, **Move**, **Zoom**.

  In the list field under key, you can optionally combine the mouse action with a key combination (Alt, Caps, CTRL). If not , leave it "**-**".
- **Zoom**:

  Mouse movement upwards enlarges.

  Mouse movement downwards minimizes.

  If you activate **Invert** the opposite comes into effect.
- **Window**:

  Enlarge by pulling open a frame.
- **Mouse wheel**: (click, pull, release)

  With the **Mouse wheel** you can zoom in/out. Scrolling down minimizes the picture. If you activate **Invert** the opposite comes into effect.
- Mouse wheel: ("normal" click on part)

  Makes part transparent.

  No settings options here.

2.1.4.11.4.4. Correct aspect ratio

On 16:9 reproducers, the 3D view is distorted. The function **Correct aspect ratio** fixes this problem.

TO correct image width, use **Correction X**, and for correcting image height, use **Correction Y**.

2.1.4.11.4.5. Other

- **Software rendering**

  Software rendering switches the 3D display into the "Software controlled" mode (Open GL, Windows). **Software rendering** stands for a reliable, if not as "challenging", display mode.

Note

If the option is **deactivated** the assembly display runs on the **Graphics card** of your system. This mode is to be favored, if you have installed a high-quality graphics card.

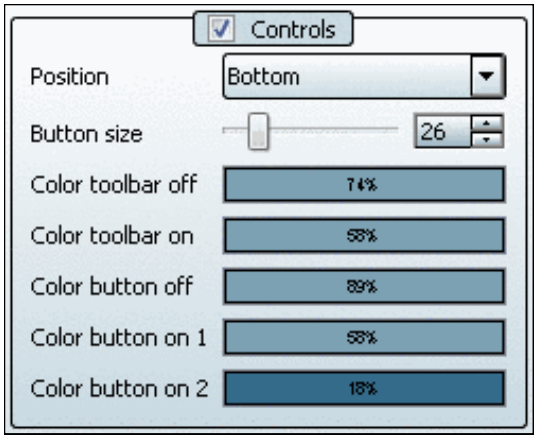
Note

Having problems with graphic display (resolution and/or path of motion) it is recommended to **activate Software rendering**.

- **Use Wii remote**:
  See http://de.wikipedia.org/wiki/Wii.
- **Use Kinect**:
  See http://de.wikipedia.org/wiki/Kinect.

2.1.4.11.4.6. Controls

You can also adjust position (top / bottom), size and color in the toolbar in the 3D view.



- **Color toolbar off**
  Color of toolbar when mouse is outside of toolbar.
- **Color toolbar on**
  Color of toolbar upon mouseover.
- **Color button off**
  Color of button when mouse is outside of toolbar.
- **Color button on 1**
  Color of button when mouse touches toolbar.
- **Color button on 2**
  Color of button upon mouseover.

Note

The **% value in the color field** is the alpha canal in the settings dialog. It controls the **transparency**.

2.1.4.11.4.7. Standard material

Color

Note

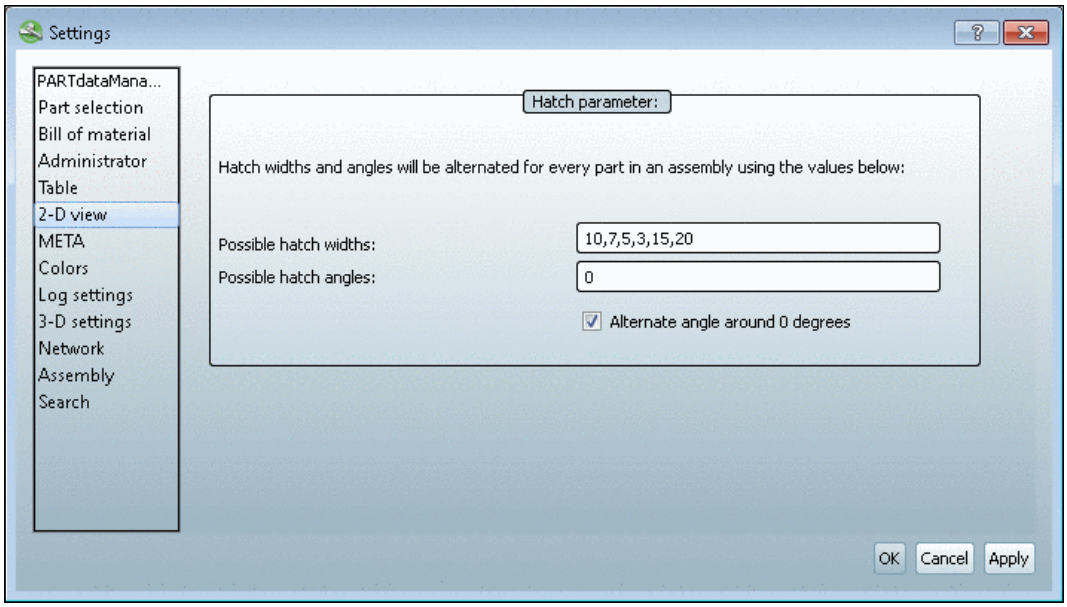
The settings are influenced by the setting under **Elements**, **Display**,**Highlight texture**.

- **Ambient**
  Floor lighting
- **Diffuse**
  Luminous intensity
- **Specular**

Highlight strength

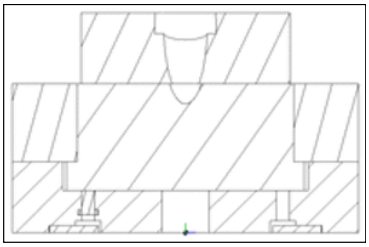
- **Highlight**
  Highlight width

2.1.4.12. "2D view" tabbed page



Hatch parameter :

Sectional cuts are marked by hatches in the 2D preview. How these are changed for each part of an assembly can be configured via the following settings:



- **Possible hatch widths**: In order to hatch the assembly parts so that they are even more clearly silhouetted against each other, different widths have been applied. You can reduce the selection of widths and also enlarge it with additional values.
- **Possible hatch angles**: Set an angle to which the default hatch angle of 45° is alternately added to and subtracted from.

  In other words, if for example you enter the value of 10, the hatch lines show up in the 2D preview at a 55° angle instead of 45°.
- **Alternate angle around 0 degrees**: The value set after that is alternatively added and subtracted.

Example:

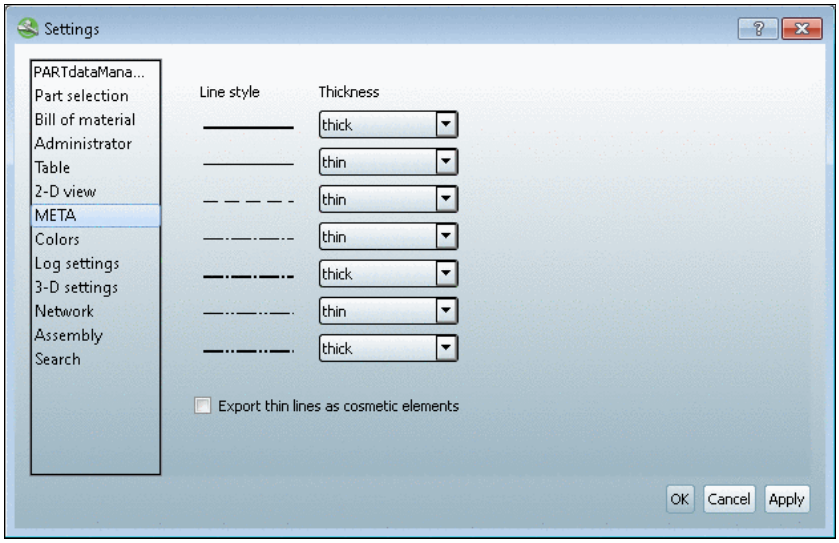
Possible hatch angles: 0.00,10.00,20.00,30.00

In the example, the first hatch angle is therefore 45° (+0°), the second 35° (-10°), the third 55° (+20°) and the fourth 25° (-30°).

Note

Possible hatch angles has priority over **Possible hatch widths**, i.e., the set hatch widths are used additionally only when the various angles have been "exhausted".

2.1.4.13. "META" tabbed page

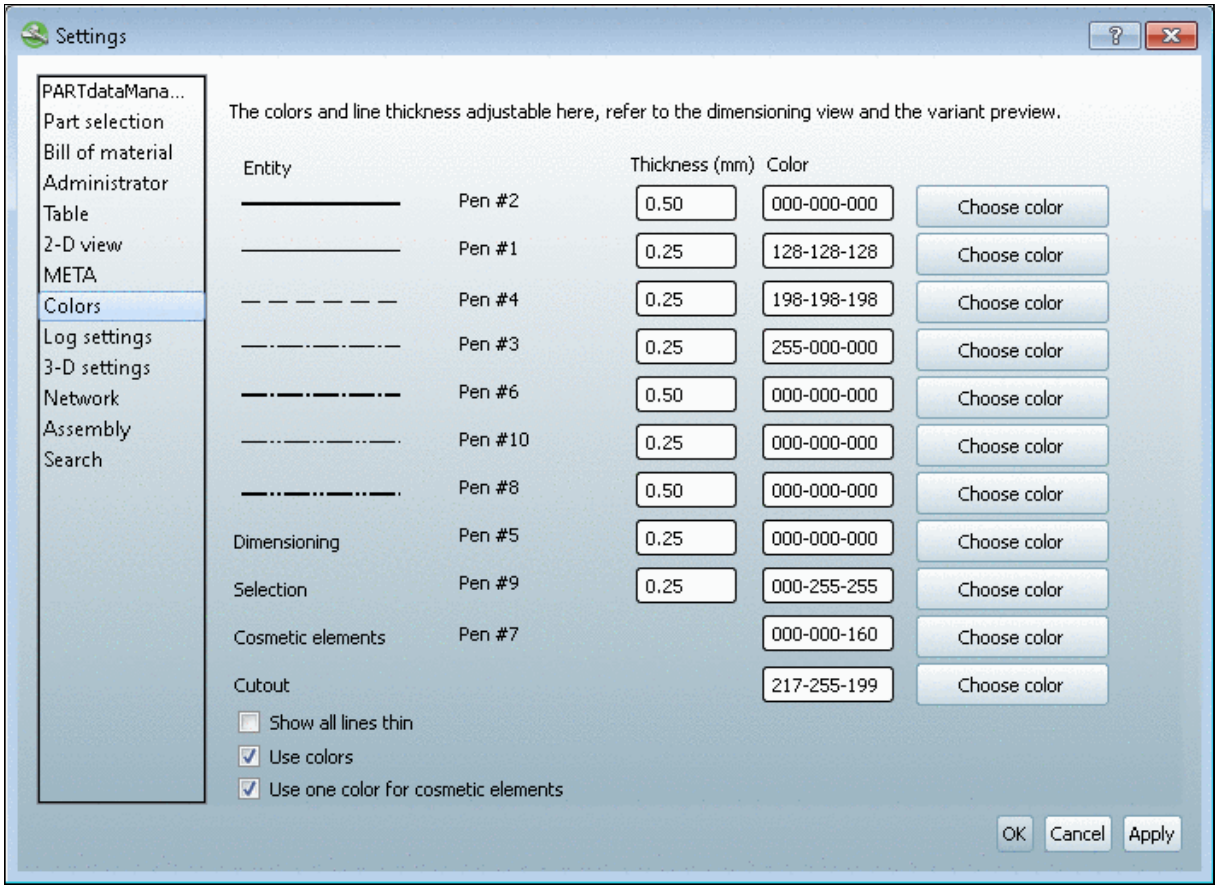


This is where you can define the line types with which a component is exported to your CAD system.

Export thin lines as cosmetic elements : ...gives thin lines the label "Cosmetic element" when exporting to the CAD system.

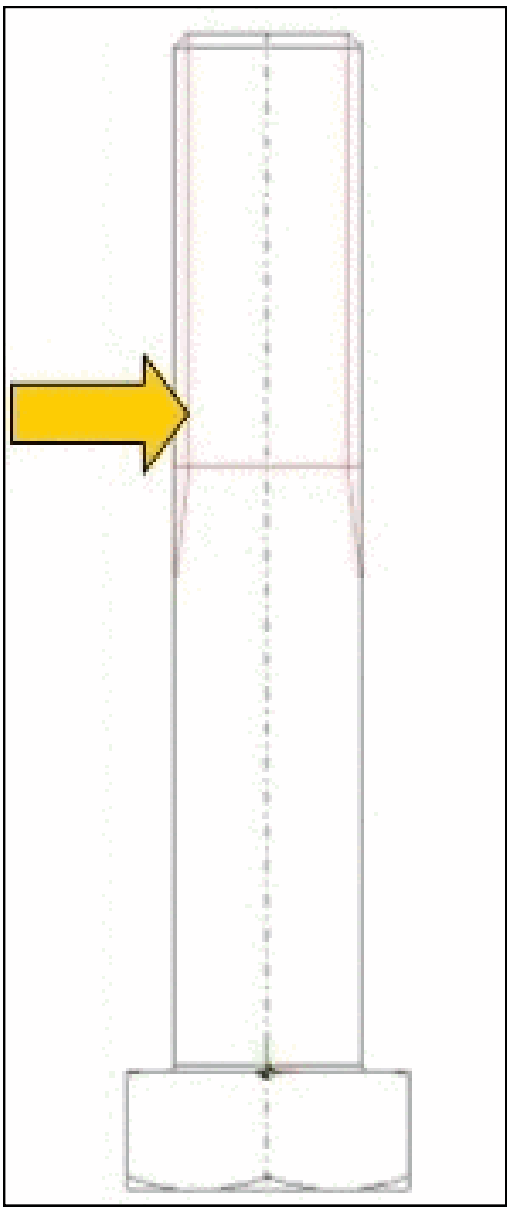
2.1.4.14. "Colors" tabbed page

The settings on the colors tabbed page refer to the dimensioning view and the variant preview.



- **Dimensioning**: Dimensioning text
- **Selection** : The color set here refers exclusively to the part area, which you set via frame (context menu command: "**Selection: Mark region**"") in the 2D preview.

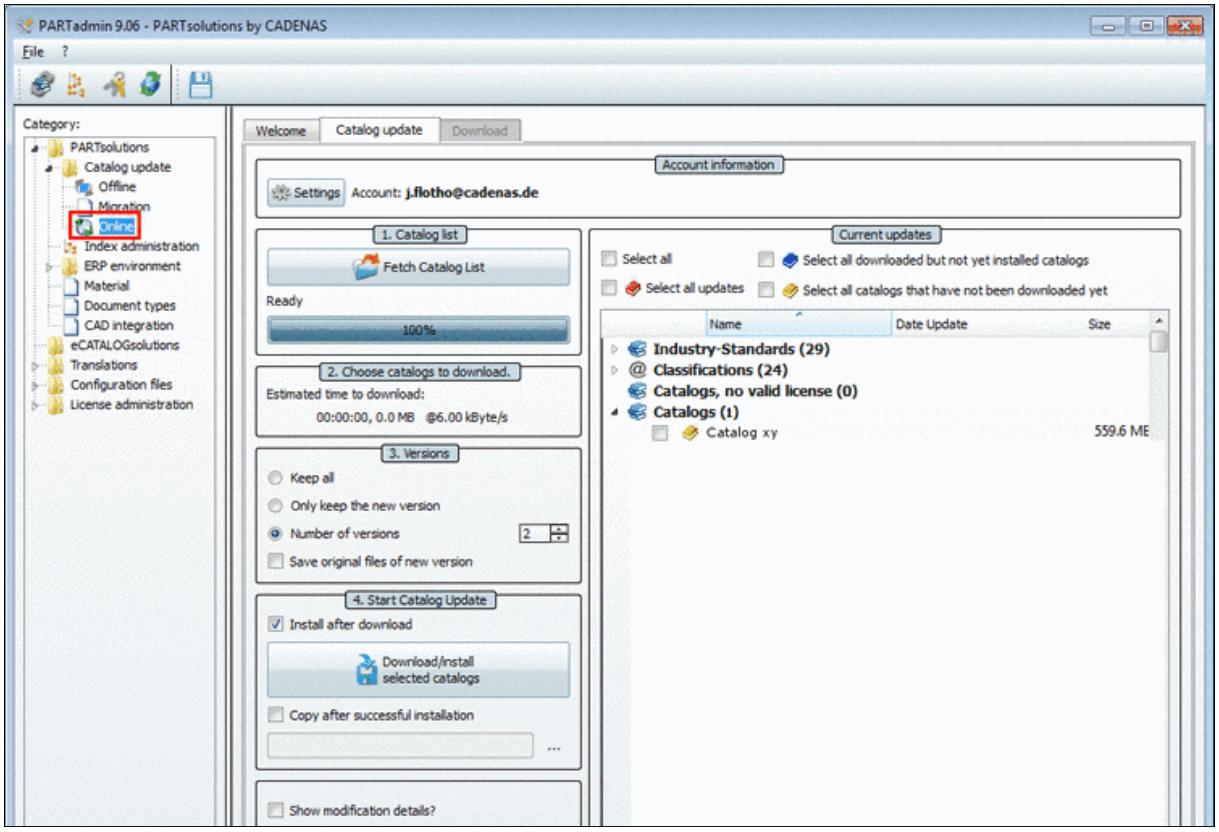
- **Cosmetic elements** : The colors set here refer exclusively to the cosmetic elements (for example, thread) of the 2D view.



- **Cutout** :
- **Show all lines thin** : Sets thick lines to setting "0.0".
- **Use colors** : if this option is deactivated, all color preferences are ignored and replaced by "black".
- **Use one color for cosmetic elements** : Activates or deactivates the settings of the **Cosmetic elements** field.

2.2. PARTadmin - Catalog update

With same manufacturer catalogs you can conduct an online update via **PARTadmin**.



Online variant

Therefor do the following:

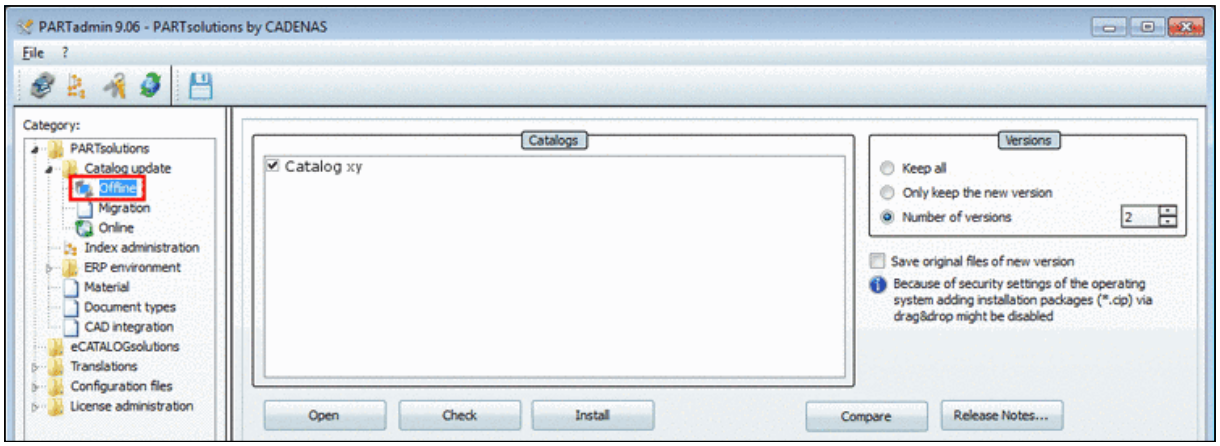
1. Open **PARTadmin** (close all other CADENAS programs)
2. Choose **Category** -> **Catalog update** -> **Online**

   or click on the icon  .
3. First call up the assistant via **Settings** and follow the instructions.
4. Click **Fetch Catalog List**.
5. Activate the check box at the desired catalog.
6. Define whether you would like to keep older versions. See also Section 2.2.2, “ Versions ”.
7. Click **Download/install selected catalogs**.

   -> Now you can open the catalog update in PARTdataManager.

> **Note**
>
> If you deactivate the **Install after download** option, then at the moment the catalog update stays in the temporary directory (has been defined in the settings assistant). Now you can open the catalog in the offline variant (**PARTadmin** -> **Category** -> **Offline**), conduct **Check** or **Compare** and finally install. See also Section 2.2.1, “ "Check" and "Compare" before catalog update ”.

2.2.1. "Check" and "Compare" before catalog update

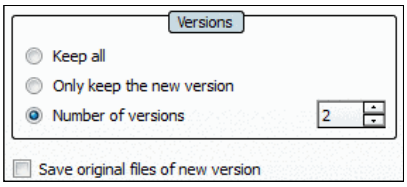


Proceed as follows:

1. Choose **PARTadmin** -> **Category** -> **Catalog update** -> **Offline**.
2. Click **Open**.

   Now select the CIP file which is located in the temporary directory in the Explorer window.

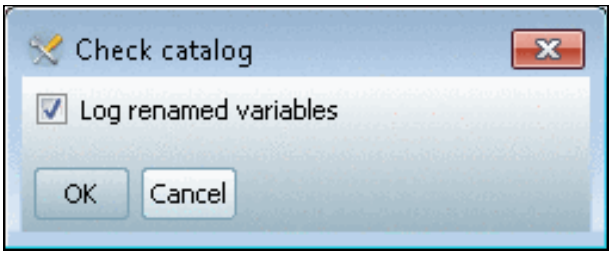
   -> The catalog is displayed in the **Catalogs** area.
3. Under **Versions** select one of these options:

   - **Keep all (recommended for ERP)**
   - **Only keep the new version**
   - **Number of versions**

   Optionally activate **Save original files of new version**.
   See also Section 2.2.2, “ Versions ”.
4. **Check**

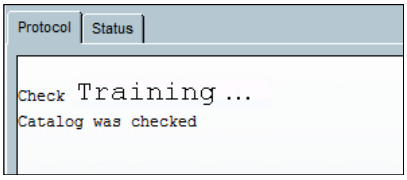
   Clicking on **Check** opens the **Check catalog** dialog.

   Check catalog

   After clicking **OK** a test run takes place that gives an overview about which part families are new or have been changed and which are no longer available in the new catalog (tabs **Protocol** and **Status**).

   After the **test run** has finished, a message, such as the one to the right, will appear.

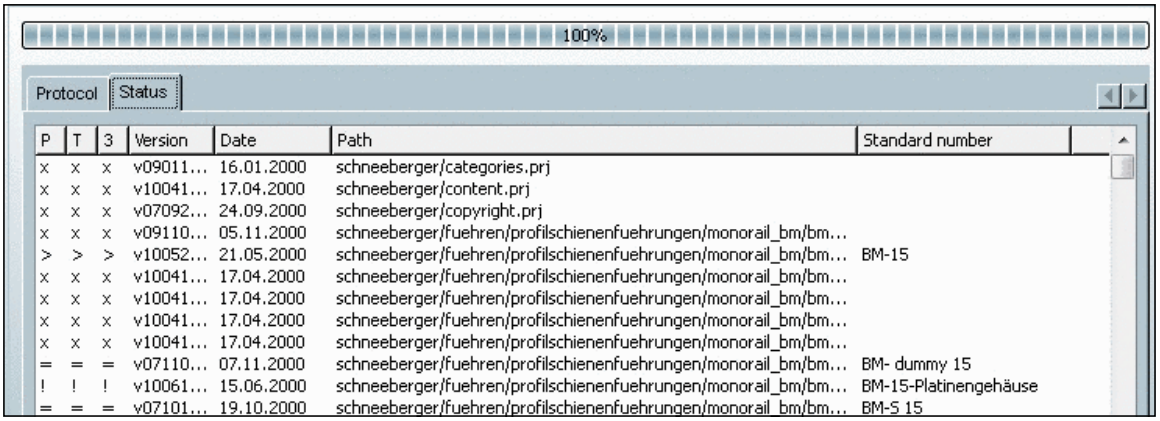
   Protocol

Optionally, you have available: **Log renamed variables**

On the **Status** index page you can find an exact list of the status of individual projects.

The table to the right explains the meaning of the symbols.

Field/column	Meaning
P	...stands for project
T	...stands for table
3	...stands for 3-D view
!	First appearance
>	New version
=	Same version



Status index page

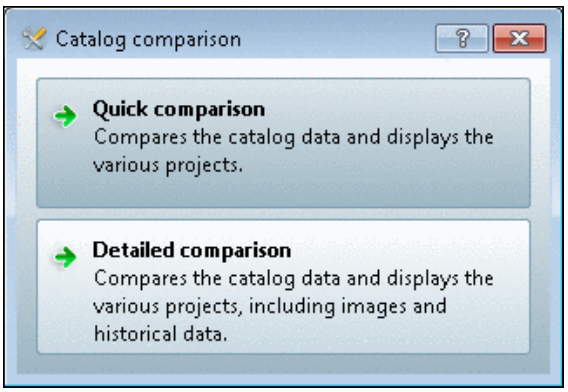
5. **Compare**

By clicking on **Compare**, the **Catalog comparison** page opens. You have two selection options:

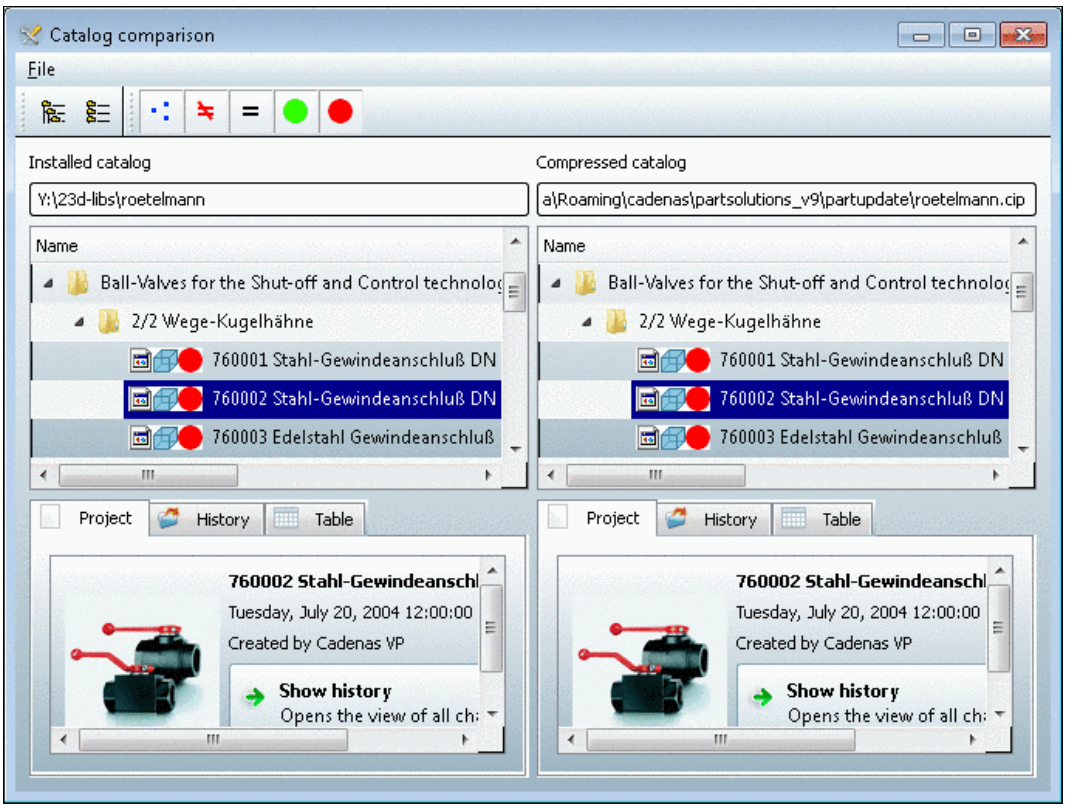
- **Quick comparison**

  Compares the catalog data and displays the various projects.
- **Detailed comparison**

  Compares the catalog data and displays the various projects, including images and historical data.



Catalog comparison



Catalog comparison

Under **Installed catalog** and **Compressed catalog** old and new versions are placed face-to-face. For each selection your receive detailed information regarding changes on the **Project**, **History** and **Table** index pages.

	**Expand all**
	**Collapse all**
	**Display of the orphaned projects** (only available on one compared page; blue font color and symbols)
	**Show different projects** (geometry or table)
	**Show equivalent projects**
	**Show only projects with ERP number**
	**Show only projects without ERP number**

Gray font color: older

Red font color: newer

Blue font color: only available on one page

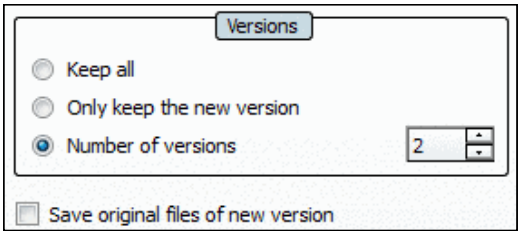
6. Install

In order to start the catalog update click Install.

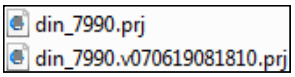
-> Now you can open the catalog update in PARTdataManager.

2.2.2. Versions

In the **Versions** dialog area you decide with which older catalog versions to proceed.



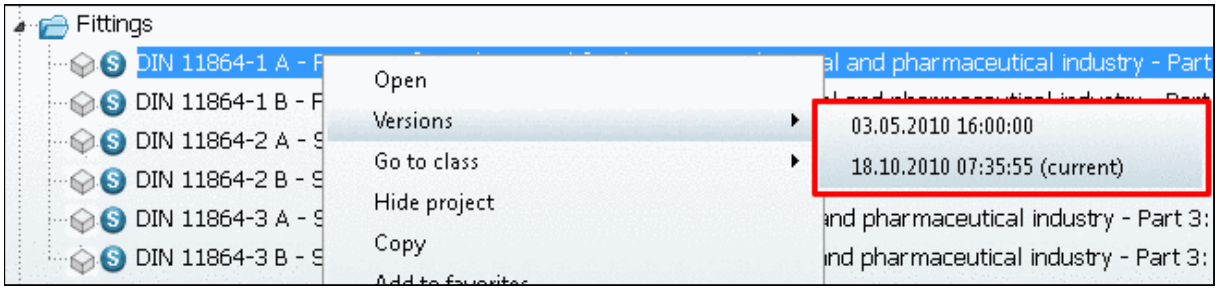
In this dialog area old catalog versions that are no longer needed can be removed from the directory tree. If catalogs are renewed through updates in the course of time, then the already existing catalog data are not deleted, but receive a time stamp appendix in the file attachment, which stands for the respective version of the catalog (see figure to right).



Snippet from Explorer

The higher the number, **the newer** the status of the catalog.

In PARTdataManager, in the context menu of parts the versions are displayed and this way can be loaded if needed.



Display of versions in PARTdataManager

Keep all (recommended for ERP)	No version of a catalog will be deleted. For an ERP integration with LinkDB, all versions are saved in the LinkDB (may be hidden for "normal use").
Only keep the new version	All older catalog versions will be deleted except for the newest ones.
Keep number of versions	You may select for yourself how many versions you would like to keep. Should you enter "1", his will result in the same as the previous point.
Save original files of current version	If you activate this option, the index management creates "**backup files**" of the newest catalog version. These can then be recognized in the directory tree through the **extension "original"**. This deems useful if you want to make changes to current parts with eCATALOGsolutions, but want to keep the latest status just for safety reasons.

Chapter 3. Appendix

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