**PartExplorer**

**Plug-ins for professional part management**

**Use case scenario: Classification of parts and other objects**

**Page 1(5)**

1. Is your company wasting too much time in searching parts?
2. Is the diversity of parts too high and should it be decreased?
3. Are your engineers re-inventing things instead of re-using solutions?
4. Are the results of your previous efforts unsatisfying or un-accepted?
5. Would you like to automate classifying parts with high comfort?
6. Would you like to have a project with a break-even of six months?

**PartExplorer** is the perfect solution for your classification - acceptance guaranteed. You will automate classifying re-usable parts, and will successfully reach your classification goals with a tool, that fits seamlessly into your PLM-processes to close its gaps and allocate spread data.

Increase your company’s innovation in using your time for new inventions, instead of long unsuccessful searching resulting in wasting time for re-invention of things that have already been there.

**Use case scenarios:**

- **Data-Quality-Management**
- **Diversity-management**
- **Intelligent part catalogs**
- **Engineering-functions**
- **CAD-Data-management**
- **BOM**
- **Web-Server**

**New! Automatic Classification**

A classification will definitely speed up finding parts.

Each part costs your company from EUR 1,000.-- to EUR 7,500.-- for:
- Creating and maintaining master data
- Selection and contracting suppliers
- Order management, quantity depression
- Stock administration
- Service management, service costs
- ...

Increasing problems: Long search times lead to increasing diversity of parts, and in lack of any classification this will lead to increasing search time.

Take maximum benefit of a turnkey system supporting your daily work:

- **NEW:** Automatic classification of parts.
  - No manual data input necessary.
- **NEW:** Automatic selection of classes.
- **NEW:** Flexible tree structure (virtual links).
- Picture-guided, intuitive user interface.
- Drag&drop classification.
- Included standard classification structure or free definition of other class. structures.
- User specific configuration of tables.
- Automatic dublicate-part tracer.
- Configuration-/Accessory-Logic-module.
- Integrated workflow for quality management of your classification process.
- Integrated article and document master data module or using API for synchronization of external PLM-systems
- CAD-integration to all common CAD-systems including their model manager.
- Configuration of rights for roles, users and usergroups.
- Multilingual, uni-code.
- For Windows and unix, on ORACLE, DB2 or mySQL.

**Eliminating double parts**

- **Benefit of classifying parts**
  - Necessary: Acceptance
- **Benefits of classifying parts**
  - Increasing search time (10-20min. per day and user/engineer)
  - Decreasing search time
  - Increasing re-use of parts (EUR 1,250.-- per part)
  - Decreasing double parts (EUR 1,250.-- per part)

**Product changes reserved**

**CADBAS** GmbH
Kruppstrasse 166
45145 Essen
Tel.: 0201/247 23 0
Fax: - 50

cad_bas@cadbas.de
http://www.cadbas.de

**CADBAS**

Please turn...
PartExplorer
Plug-ins for professional part management
Use case scenario: Classification of parts and other objects
Page 2

Optional accessories:
✓ 3DSearchIT: 3D shape-based search engine incl. dubicate- and cluster-analysis.
✓ Support creating your own classification structure according to DIN 4000, 4002, eCl@ss, UN/SPSC or other criteria.
✓ Standard part system as data source and for geometry generation.
✓ BOM and project-module incl. parts used- in function.
✓ Synchronization of or direct access to article or document master data of ERP- or DMS-systems.
✓ EDM-interface for direct insertion of models from EDM-Vault into the CAD.
✓ Standard interfaces for synchronization of or direct access to classification data of ERP or PLM systems.
✓ Customer specific configuration or programming of functions and interfaces (e.g. access to available stock, ....)

Intuitive multiple search methods
For us it is important, that you will find the required information quick, to increase the re-use and avoid increasing diversity of parts. The PartExplorer may allocate data which is spread over different systems, to be seen with on look. This saves up to 20 minutes per user every day. Additional 2-5min per part can be saved using the integrated accessory- and configuration module.

There are lots of ways to find the needle in the haystack using the classification structure, automatic keywording, synonyms, search histories, personal favorites, autofilter, class specific properties, master data, preference indicators, order number, configurations, accessibility relations, and so on.

Classification causes quicker finding. The intuitive user interface of the PartExplorer causes its acceptance.
Automatic classification of parts

PartExplorer will finally put an end to the main criticism of classification systems: 1st. How to find the right class for the part I want to classify? 2nd. The manual effort entering the values of the classification properties.

PartExplorer will automatically evaluate the right class for a part based on the name, description, part number or any other criteria with hardly any customization. The only thing to do is to drag & drop the part into the class opened. In conjunction with the 3D-search engine 3DSearchIT the part may also be automatically put into the right class by just the look of its shape.

In case the part is a standard, company standard or buy part it will take its properties from the catalog and write it to the class where you just put the part into. Sounds like witchcraft? No, its not. We just consequently use standardized properties according to DIN 4002.

But what about the self-drawn parts, especially those made from semi-finished products such as profiles or sheet metal? The best solution is to write the main dimensions into the class table (see screen shot of page 2), and leave all the other properties to the algorithm of the 3D-search engine. This saves a lot of needless work without any loss of quality.

Additional information...

You may find further information on separate product sheets concerning the following points:

✓ 3D-search engine - 3DSearchIT.
✓ Management of master data inside PartExplorer or synchronization to ERP-systems.
✓ Standards, company standards, and catalogs (standard part system).
PartExplorer
Plug-ins for professional part management
Use case scenario: Classification of parts and other objects
Page 4(5)

Automatic dublicate analysis
You will love this function once you get to cleaning up your part spectrum or even harmonizing site specific part numbers. The dublicate analysis will find similar parts by equations or tolerances across master data and class specific properties. Those may then be blocked for further use in new products or even be deleted.

3DsearchIT for geometric searching delivers also fully automatic cluster- and dublicate analyses of all your 3D-models.

Classification structures
PartExplorer contains a ready-to-use classification structure which you may start with right-away. If needed, you may create a new structure, modify the existing according to your needs or standards like DIN 4000, 4002, eCl@ss, UN/SPSC, FSF. Classification structures within other systems may be imported and can be synchronized continuously.

New are the virtual links: Any node of the classification structure may be virtually linked to other places. All data of classified parts however will only be entered once.

Properties may be hierarchically bequeathed to accomplish comprehensive search.
Unique are our graphical properties, which represent values by pictures to allow picture-based searching.

Rules for assembling the configuration
Flange: \( da = 48,3; \ s = 2,6 \)

Use case scenarios:
- Data-Quality-Management
- Diversity-management
- Intelligent part catalogs
- Engineering-functions
- CAD-Data-management
- BOM
- Web-Server

Rule for assembling the configuration
Pipe: \( d_1 = 48,3 \) and \( d_i = 43,1 \) using the relation rule: \( (da - d_1)/2 \leq s \leq (d_i - da)/2 \)

Selective list of potential parts
List of selected parts

Pipe \( d_1 = 48,3 \) and \( d_i = 43,1 \)

Pipe \( d_1 = 48,3 \) and \( d_i = 43,1 \)

Pipe \( d_1 = 48,3 \) and \( d_i = 43,1 \)

Pipe \( d_1 = 48,3 \) and \( d_i = 43,1 \)

Pipe \( d_1 = 48,3 \) and \( d_i = 43,1 \)
Automizing your classification process (Workflow)

PartExplorer supplies a special “classification status” for automizing the classification workflow. This indicates the status and quality of a classification record of a part. The state will be set manually or by automatism when classifying parts depending on the role and rights of the user. A harmonizer comparable to the one releasing master data may so assure high quality data.

An integrated mail tool may be used to automize standard processes like request for new classes, communicating insufficient data, and so on.

Configuration of user profiles

Rights of user profiles (roles) may be configured in any detail according to your needs. Roles may be applied to users or user groups. Configuration covers for example read and write access to data, defining role specific search strategies or search pattern as well as execution of commands and functions.

Part-, document-, and model management

Master data for parts, documents and CAD-models of PartExplorer may be synchronized with the leading PLM system or may be managed by the PartExplorer itself. Interfaces to ERP-, DMS, and PDM-systems are available, partly with direct access to the original data. In all cases of interfaces we follow the philosophy: Any information (data field) shall have only one data source (system), where it will be edited.

Documents of any kind or number (drawings, quality statistics, ...) may be referenced to parts or classes. They can be viewed by internal or external viewers. User-Exits allow access to drawing archives, available stock, proclamations, and so on.

Please refer to the more detailed information on our product sheet regarding the management of part and document master data.

CAD-integration

Geometry of the parts can directly be loaded to your CAD-system. The PartExplorer contains CAD-interfaces to all common CAD-systems (AutoCAD, CATIA, Inventor, ME10, MicroStation, Pro/E, SolidEdge, SolidWorks, Unigraphics) with no extra costs. The user’s right of loading CAD-geometry may be configured by the user profile which includes checking the release status of the selected part.

New geometry can easily be checked into PDM or the model management of the PartExplorer. Clicking a CAD-geometry within CAD will force the PartExplorer to indicate its meta data.