

PASCAM WoodWorks

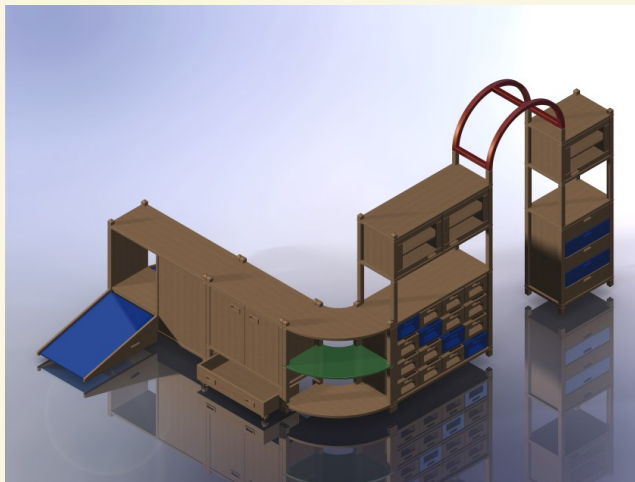


PASCAM WoodWorks and SolidWorks®
- Innovative feature-based technology for
woodworkers and the woodworking industry

Tools for efficiency

PASCAM WoodWorks is a powerful engineering solution for any
woodworker.

It is composed of a neat tool collection based on the powerful semantic feature program technology. It enables woodworking companies to safely create high-quality 3D models of their products in the leading mechanical CAD system SolidWorks® in the most efficient way possible.



You can variously use **PASCAM WoodWorks** for your company:

Use **PASCAM WoodWorks** in the *offer phase*:

- for the photo realistic virtual product presentation.
- for the quantity determination at the preliminary calculation.

Use **PASCAM WoodWorks** in the *production planning*:

- for the automatically created wood lists and the processing data.

Use **PASCAM WoodWorks** in the *production*:

- to the illustration of the product to be manufactured by drawings, slice and online available 3D models.

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www.pascam-woodworks.de

The universal tool for wood- workers and the woodworking industry

Feature-based system,
completely integrated in
SolidWorks®

No restriction on the design
or production of the model

Simple user interface - even
for unpractised users

Business specific modelling
principles can be stored for
re-use

Administration of the 3D
model through use of se-
mantic features

Administration of simple
processing principles up to
very complex ones, includ-
ing production data

Simple profile construction
based on your specifications

Clear administration of part
and assembly variables

Convincing product presen-
tation by easy to use pic-
ture rendering

Easy animation of individual
furniture

Associative deduction of the
construction drawing from
the 3D model, including
sectional drawings and de-
tail views

Arbitrary scaling for 2D pro-
duction drawings

Standard based BOM and
wood list generation and
export

User defined generation
and export of material lists,
edge material lists, etc.

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Improved construction safety

PASCAM WoodWorks helps you to recognize and to eliminate **design faults** as easy and early as possible.

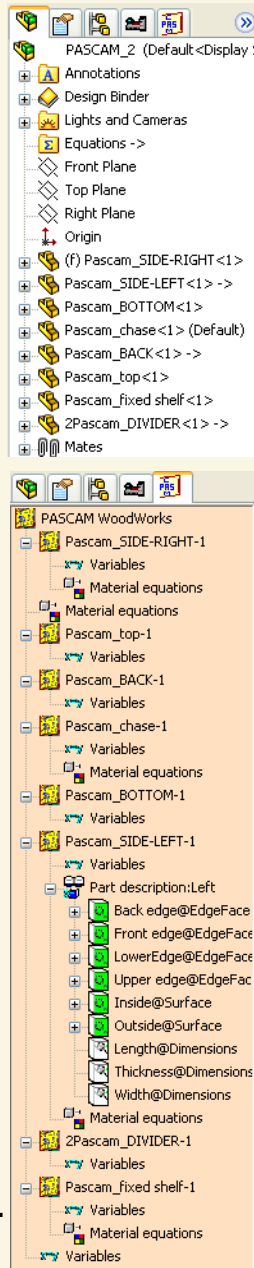
PASCAM WoodWorks helps you to store your **construction knowledge** in the system sustainably and makes it easily available for a vast number of other applications. Thus an optimal design and construction safety is achieved.

By storing and reusing proven template models **PASCAM WoodWorks** is permanently "**learning**" and supports you actively at the product optimization. At individual furniture components, system and standard parts.

Even **highly complex** custom design furniture or store fixtures can be designed and manufactured in a safe and secure manner. Additionally an automatic **documentation** of your modeling process is generated which enables you to carry out subsequent modifications very easily and serves as an excellent information source in a shared design process with other engineers.

Your benefits:

- You can completely concentrate on the **design** and **modeling** of your products.
- Your modeling concept is documented based on feature-technology.
- Company specific standards can be stored and archived regarding connection features and processing features using the **PASCAM** libraries.
- Ease the workload of your design engineers by automation of recurring construction elements - adaptable to your company specifications.
- Storing and archiving of the construction know-how right in the 3D model
→ high protection of investment.



Open and adaptable **PASCAM** Variable management for the clear illustration of all dimensions and equations

Clear orientation of the part with the help of the **PASCAM** Part description

Automated and safe connection of components and subassemblies by means of the **PASCAM** Mate management

Re-use of and application of company approved construction methods/ processes via Drag&Drop from the user-defined **PASCAM** Modifications/Processings library

Inserting of parts by means of a safe part administration from the **PASCAM** Part database

Automatically set up of all wood list specific data by means of the **PASCAM** Part description

Simplified administration of material data by means of the **PASCAM** Material administration

Safe and easy profile generation using the **PASCAM** Profile generator

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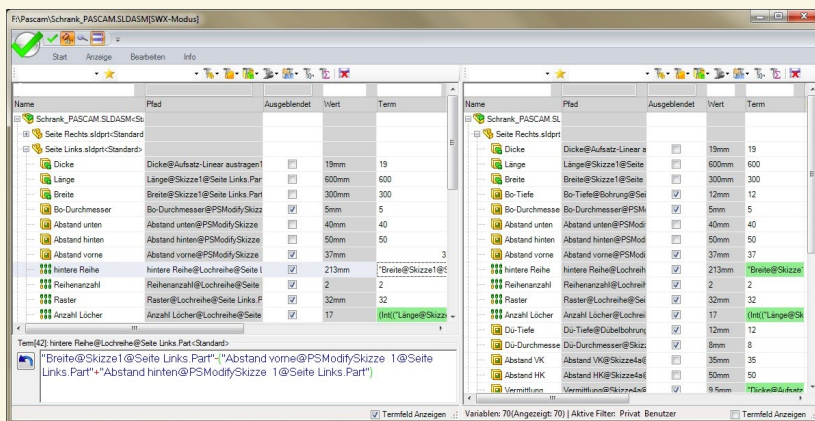


Hierarchical Variable management

Every model can be individually assigned with **intelligent dimensions**. This enables complete control over the dimensions of individual components and/or complete assemblies. **PASCAM WoodWorks** can control feature validity and specify if and when it shall be considered automatically in the model, e.g. the applied number of drawers or cup hinges in the assembly.

Thereby the use of complex template assemblies, like door elements, is getting enormously simplified and efficient.

Modifying the dimensions can be done in the **PASCAM** variable table or also directly in the 3D model.



Your benefits:

- You can freely re-dimension and resize your parts and assemblies.
- Equations are taken automatically into the current assembly.
- Equations are created by Drag & Drop, via keyboard input or a selection in the 3D model.
- The variables are represented clearly in a hierarchical order.



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Efficient use of dimensional variants

Creating dimensional variants by changing the variable values, without (re-) configuring the model

Simultaneous display of variable values and variable equations

Easy change of variable names

Representation of the assembly hierarchy in the variable table

Optional determination of conditions specifically for every assembly

Complete integration in SolidWorks®

Full performance range of SolidWorks® equations

Improved performance using the optional **PASCAM** equation solver

Easy operation by keyboard or mouse via Drag & Drop

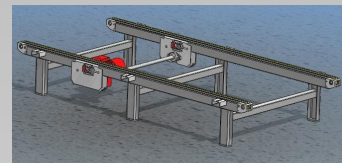
Split screen view option at the **PASCAM** Variable management to simplify and accelerate Paste&Copy operations of table elements

Input fields in the table header to reduce the displayed variables by entering search terms or values

Specification of visible dimensions using filters

Optional storing of additional information to every dimension

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Feature control via conditions

PASCAM WoodWorks can control every feature individually - just like the dimensions - and specify if and when it shall be considered in the model. The control is carried out by means of equations based on the geometry dimensions and is of course automatically applied when inserted into the assembly, where it is again open to any modifications of the user.

The dimensions simply can be selected in the model, copied out of the **PASCAM** Variable management table or copied via Paste & Copy or Drag & Drop from an existing condition.

Variable management PASCAM_2.SLDASM [Referring to part]						
Name	Directory	Private	Value	Term	Virtual	Remark
Eas-PASCAM_2.SLD...						
Cabinet Width	Cabinet Width@Di...	No	60"		60	No
Left Divider opening	Left Divider openin...	No	24"		24	No
2Pascam_DIVIDER...						
Pascam_fixed shelf-1						
Pascam_top-1						
Pascam_BACK-1						
Thickness	Thickness@Panel...	No	3/4"		0.75	No
Height	Height@Sketch1...	No	38"		38	No
Length	Length@Sketch1...	No	58 1/2"	("Cabinet Width@Eas-PASCAM_2")-2"		No
Horizontal Dowell h...	Horizontal Dowell ...	No	7/8"		0.875	No
Symmetric distance...	Symmetric distanc...	No	18.37in	("Height@Pascam_BACK"/2)-("System ...		No
Term for Symmetric distance from edge@Sketch6@Pascam_BACK.Part@Default>						
("Height@Pascam_BACK"/2)-("System Hole@Pascam_BACK"/2)						

Your benefits:

- Easy and integrated validity control of features.
- By coupling the CAM module **PASCAM Bea** with the model geometry the user is able to control CNC machining strategies automatically.
- Clear representation of the conditional rules.
- Simple coupling of features to dimensional modifications.
- No configuration necessary.



Get the full control of your model features

Easy model modifications

Geometrical variants by changing the feature validity, without (re-)configuring the model

Simultaneous display of variable values and variable equations

Easy change of variable names

Representation of the assembly hierarchy in the conditions table

Optional determination of conditions specifically for every assembly

Complete integration in SolidWorks®

Full performance range of SolidWorks® equations

Easy operation by keyboard or mouse via Drag & Drop

Specification of visible conditions by means of filters

Optional storing of additional information to every condition

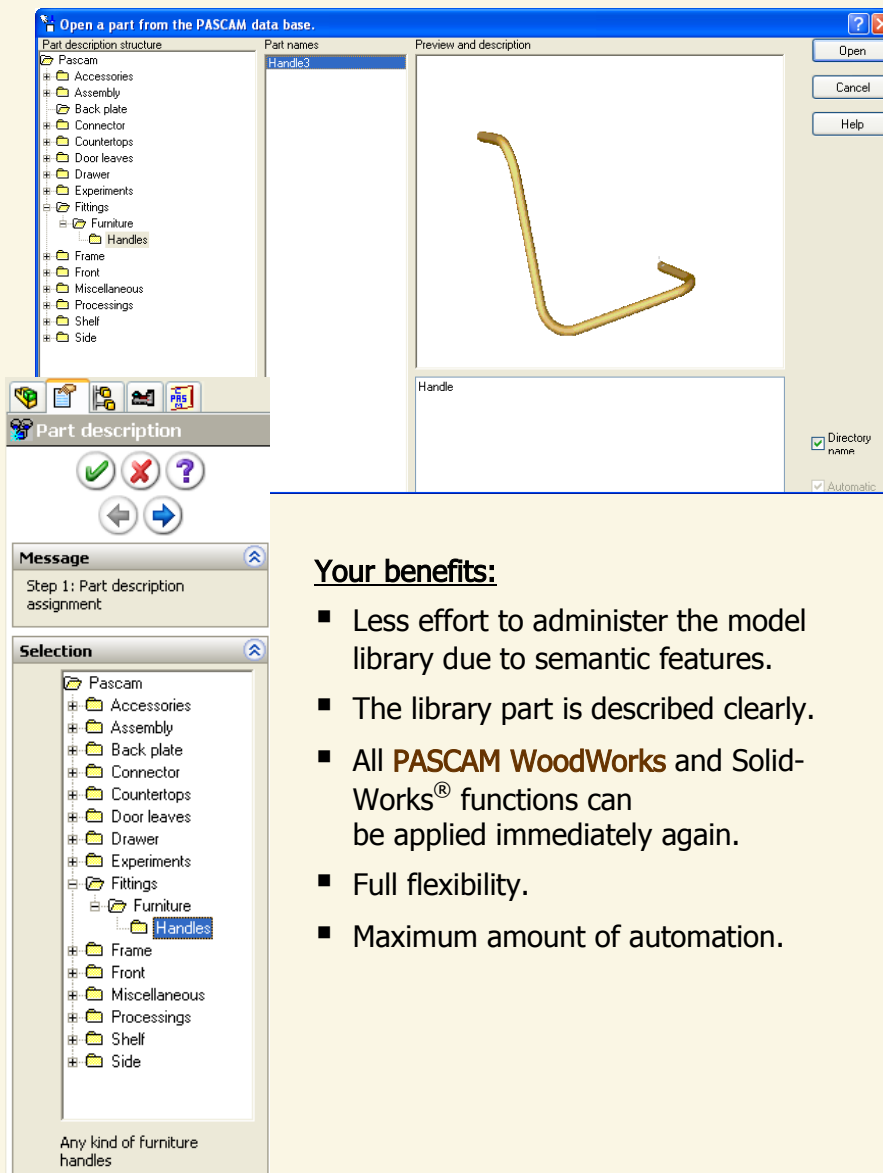
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Component management

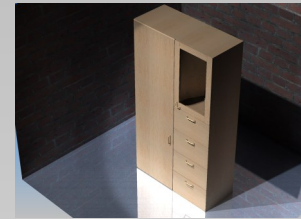
Standard parts like fittings, components or even complete cabinet assemblies can be selected fast and simply from the **PASCAM Part description tree** and inserted into an existing model.

Models, defined by means of the **PASCAM** Part description, are exactly representing your specific design and modeling approach, and can be saved simply by a mouse click into a model library as default models for further use.



Your benefits:

- Less effort to administer the model library due to semantic features.
- The library part is described clearly.
- All **PASCAM WoodWorks** and SolidWorks® functions can be applied immediately again.
- Full flexibility.
- Maximum amount of automation.



Storing of parts or complete assemblies in the **PASCAM** model database

→ library of user defined template models for design standardization and protection from accidental deletion

Automatic assignment into the **PASCAM** Part description tree by the semantic **PASCAM** part description

Assemblies and parts can be arbitrarily complex

Quick insertion of the part via the **PASCAM** part description tree with preview

Multiple parts can be stored at a single **PASCAM** Part description

Every part can be described by an individual text

Optional later modifications of library parts is possible

Use of a MS SQL server

Arbitrary number of library parts and file sizes

PASCAM WoodWorks information's remain unchanged

Free choice of the component directory specifying the storage location in your model

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Modifications/Processings

Recurring used construction methods and processes can be defined and approved once by the company design department and stored in the structured **PASCAM** database. Those modifications can be optionally re-used and inserted into any new model from any user, at any time of the design process. An automatic naming of the inserted features and dimensions is ensured. If the **PASCAM** Part description is used with the models, the insertion is carried out fully automatically.

In case the automation should fail, corresponding missing data or references are requested from the user.

Of course a inserted modification is also documented automatically in the **PASCAM** tree.

Your benefits:

- Secure and safe use of frequently recurring modifications
- Applicable both in the part and the assembly level
- Standard SolidWorks® features are generated so that flexible, subsequent further editing is possible
- Simple application, particularly when using the **PASCAM** part description

Additional benefits by using **PASCAM Bea**:

- Save the CNC manufacturing data automatically with the modification/processing
- Automatic insertion of the indicated manufacturing data and generating the manufacturing features and the optional processing equations.
- Subsequent or additional changes of the manufacturing data at any time



Storing of modifications in the **PASCAM** modifications/ processings database
→ library of user defined template modifications and processings for fast and error free application of frequently recurring design modifications

Open database structure for user defined settings

Subsequent or additional changes to the modifications/processings at any time

Optimal interaction with the **PASCAM** Part description

Standard SolidWorks® features are generated, when applying a modification/processing

User-friendly queries of manual entries at the application

Free assignment of modification/processing names and descriptions

Optimum interaction with **PASCAM Bea** for the automatic generation of manufacturing data, e.g. for CNC-machines

Works also directly in assemblies for the context-sensitive modification of parts

Easy change of model sketches at a wrong orientation by means of a user dialog

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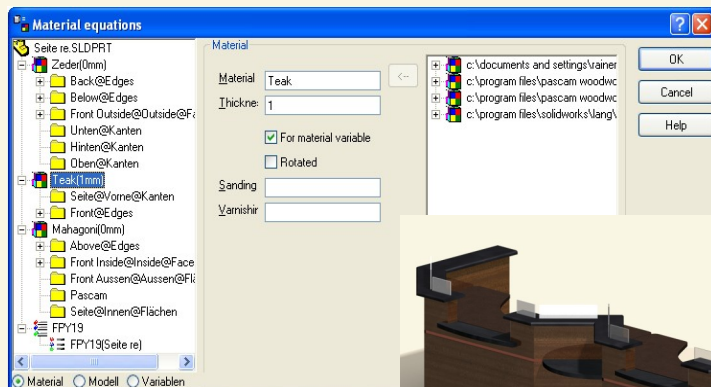


Efficient material management

One notices very quickly at the material management that **PASCAM WoodWorks** doesn't stop with the fast and smart geometry generation of 3D models. **PASCAM WoodWorks** also enables the full associativity of the model data at the material management.

The control of the material is carried out by means of material equations or just by drag & drop. The user is able to exchange complete front materials or inside coatings very easily. The material relations can be set in the **PASCAM** Part description, the material data is then provided to the wood list.

Also further material properties like veneer direction, surface processings etc. can be deposited. Of course the coating strength is also considered as well as a visual feedback of the assigned materials.



Your benefits:

- Central control of material types even across different assemblies.
- Flexible material control for single faces or complete solid models.
- Individual customization variable options for photo realistic model visualization.
- Storage of relevant material information like coating, edge thickness, material direction, etc. for manufacturing.
- Output of material information for your wood and material lists.



Material assignments to complete solid volumes or single faces

The **PASCAM** Material management is fully associative between geometry and material

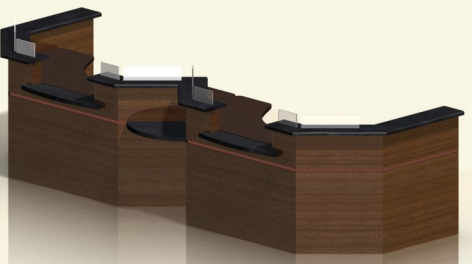
Control via simple assignments of material equations or drag & drop

Option to assign materials to specified surfaces already at the **PASCAM** Part description level

Automated insertion of **PASCAM** material data in wood list

Optional manual addition of **PASCAM** material data to single faces

Applying additional information to the **PASCAM** material regarding the surface composition (e.g. varnishing, sanding)



Material thickness can be submitted into the wood list fully associative as a file property.

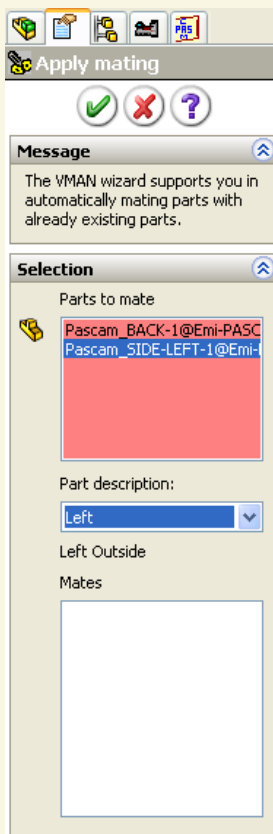
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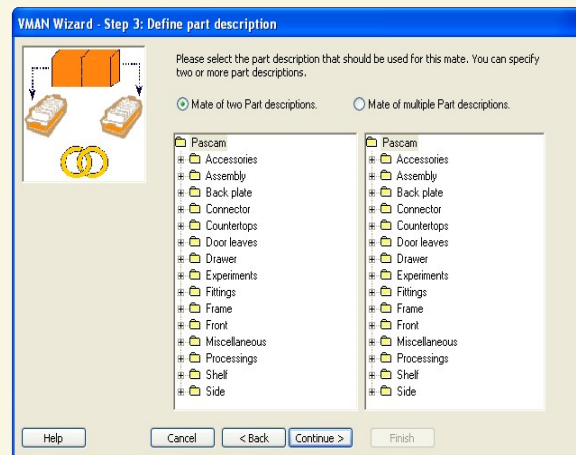
Highly flexible mating automation

All parts of an assembly reference to each other in a geometric and logical way, e.g. a cabinet back panel to a side panel or a rail and stile in frame and panel construction.

Furthermore with **PASCAM** matings you are not only able to insert geometric relations automatically by using equations, but also dimensional relations. Also further actions, like dimension queries or applications of modifications, can be carried out.

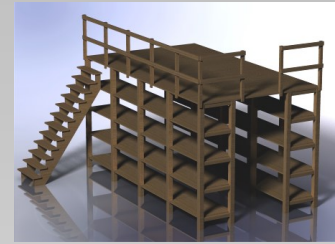


The flexibility in **PASCAM WoodWorks** consists among others in the fact, that the user can teach the system new mates in a Learning-by doing approach. It doesn't matter whether there are two or more parts. Optionally during insertion, values, such as distances or reference planes, can be queried.



Your benefits:

- Automatic geometrical mating.
- Automatic inserting of dimensional relations by equations and value queries.
- Inserting of additional processings like cup hinge or dowel drilling.
- Display of special comments for the design engineer.



Defining a new mating via Learning-by doing.

→ You only have to define *once* an assembly with your user defined geometric and dimensional combinations

Apply all geometric mating options of SolidWorks®

Apply all equations from the **PASCAM** Variable management

To apply the **PASCAM** mating it is only necessary to select the corresponding parts or assemblies. Then an automatic determination of the mating options is carried out.

Capable of mating parts as well as complete SolidWorks® assemblies

New matings can be generated based on existing default **PASCAM** matings

Apply Modifications/Processings to a mating

A mating can automate insertion of further parts

An automated **PASCAM** mating can name the generated matings automatically to enable an easier documentation

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Quick application of woodworking joints

Mating of components is a key element of **PASCAM WoodWorks**. In many cases new information is generated just by connecting two or more parts with each other. This information can be translated into

manifold, automated operations.

By applying and inserting „**PASCAM** Quick joints“ not only the physical mating of the components in the assembly is modelled, but also all corresponding templates and patterns for drilling, routing, cutting and sawing.

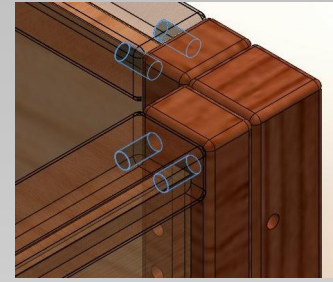
A user-defined joint-database serves as the technical basis for the **PASCAM** Quick joints. This woodworking joint library is fully open for user-generated content regarding typical, woodworking fasteners and joining elements. It can be efficiently used to automatically assemble any woodworking model with common woodworking joints like i.e. dowels, minifix or tongue and groove.

The highly flexible **PASCAM** Quick joints are universally applicable in all woodworking areas, i.e. at cabinet makers or manufacturers, whose products are based on face frame or frame construction (doors, windows).



Your benefits:

- User-generated, data-based woodworking joint library for efficient modelling in all woodworking areas
- Automatically assembling of woodworking components with woodworking fasteners and joining elements
- Practically relevant reproduction of individual, every-day modelling jobs in the user company - due to user generated, company-specific content



PASCAM Quick joints

Application of all geometric mating options of SolidWorks® available

Modelling and Application of all typical woodworking fasteners, joining elements and techniques

The content of the **PASCAM** Quick joint library is fully user generated, based on the typical company-specific joining elements and techniques

Freely configurable with any kind of automatic **PASCAM** Modification for drilling, routing, cutting and sawing machining templates

Easy compilation and storage of standardized, knowledge-based design and joining processes of the user company in the **PASCAM** Quick joint database

Central user administration/authorisation for the **PASCAM** Quick joint database

Company-wide server access to the **PASCAM** Quick joint database for all employees involved in the design process

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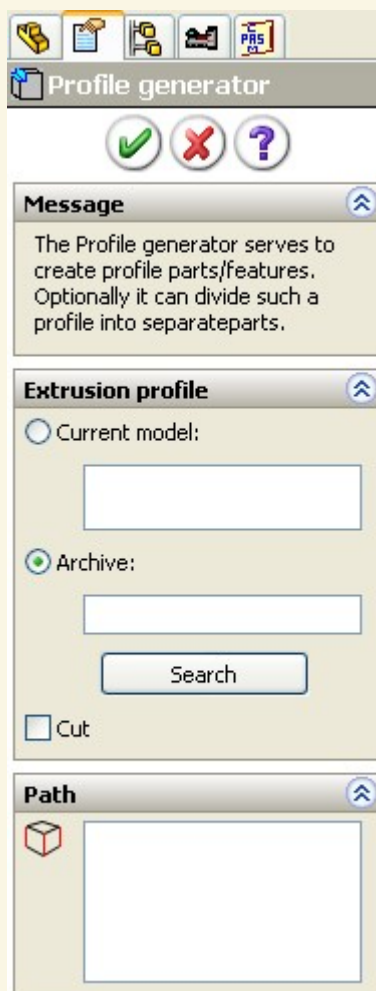
Efficient profile modelling

Profiles can be found everywhere in woodworking. Be it wreath profiles, profile bars for glazing, or decorative mouldings.

PASCAM WoodWorks takes this specific requirement of woodworkers into account with the **PASCAM** Profile generator.

Design a 2D sketch of your profile with SolidWorks®, either directly in your model or save it on your hard disk. To generate the profile you just have to specify the extrusion path:

Either at a completed 2D- or 3D-sketch or you click at the corresponding model edges in your 3D model. **PASCAM WoodWorks** then automatically generates the corresponding extrusion profile.



This profile can be generated per request also in single parts along the extrusion path. Corresponding mitre cuts are per default bisecting the angle and are of course fully associative.

Your benefits:

- Safe profile generation with non-standard features at closed contours is done automatically.
- You can freely generate profiles in every shape or form.
- Simple handling of the profile management.
- You can have single profile parts created automatically.
- Dimensional changes are applied automatically
- Counter-profiles by means of a cut out-function - applicable by checking the corresponding box
- Flexible handling by optional manual user prompts



Automatic profile generation at open and closed extrusion contours

Profile sketch applicable both from the hard disk or directly from the drawing

Simply creating the 2D profile sketch based on an inserting point

The profile extrusions can be both model edges and completed 2D sketches

Automatic separation of the profile parts based on the extrusion geometry, where the profile parts are generated fully geometrically

Optional subsequent separation of profile parts → also with data detailing

Possibility of user intervention at the positioning of the 2D profile

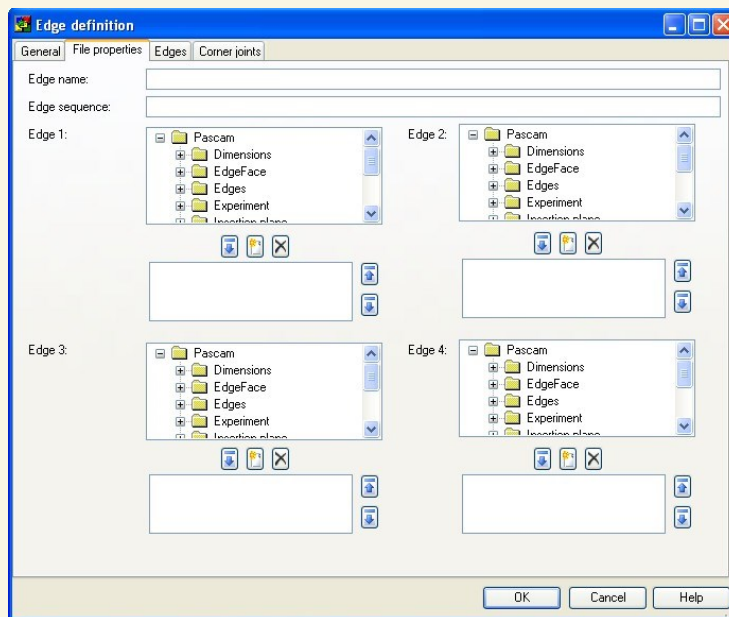
The **PASCAM** Profile generator creates standard SolidWorks® features, enabling easy and flexible subsequent editing and modifications

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Efficient edge modelling

The **PASCAM** Edge modelling enables the efficient modelling of edge layers and surfaces and their application to fibre boards.



Solids of edges and surfaces are generated, which can not only be used for fast 3D-modelling but also to derive the corresponding lists, based on the comprehensive surface and edge information. There are already a vast number of profiles and their corresponding corner connection variants available in the **PASCAM** Edge library. The library can be easily extended by adding user defined profiles. Subsequent editing and easy replacing of generated edge profiles is available. Furthermore you are able to define and automatically insert material surfaces for coating fibre boards with the **PASCAM** Edge modelling.

Your benefits:

- Automatic generation of edge layers and coating material for surfaces by edge features and surface features.
- Automatic integration of dimensional relations by equations and material specification.
- Adding of CNC machining strategies, like routing and edgebanding (in preparation).
- Output of the correct edge sequence in the exported edge list.

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Free configurable edge profiles

Create edge profiles based on the **PASCAM** Part description

Automatic derivation of edge lists

Import option for existing material databases (e.g. from trade-specific business software)

Edges visible in the sectional view

Completely parametrical edge profiles

Free veneering of edges

Edge sequence for manufacturing per user specification

Visualization of edges with texture materials

Edge representation suppressible in the model at any time

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Efficient hardware management

You are able to insert furniture hardware from third-party manufacturers very comfortable and efficient by Drag & Drop from the **PASCAM** Hardware library - even automated per request. As an alternative you

can emulate this 3D component model data in shortest time yourself and add those hardware components with all your company-specific information into the **PASCAM** Hardware library.

The library can be easily extended by adding user designed furniture hardware in SolidWorks®, in case you don't want to use such components provided by suppliers. Store your self-provided as well as your most used supplier components into the **PASCAM** Hardware library for quick re-use. The furniture hardware is automatically positioned correctly when inserting into the assembly. The drill holes to mount the fittings are automatically recognized by **PASCAM Bea** with all relevant manufacturing information. A later design modification of the whole assembly using **PASCAM WoodWorks** will therefore affect the inserted hardware in a complete and associative manner. This guarantees a comprehensive variant construction in a

secure and fast way.

Your benefits:

- Safe and efficient automatic inserting of supplier hardware, including the necessary CAM machining strategies, i.e. drilling templates for hinges
- You can create all kind of furniture hardware fittings yourself and add them to the **PASCAM** hardware library
- Simple handling of the **PASCAM** hardware library
- Flexible design modifications by the integration into the **PASCAM** variant modelling concept with fully associative automatism



Quick and safe inserting of furniture hardware by the **PASCAM** Hardware management

Simple application of purchased components from all known furniture hardware suppliers (if 3D solid models are provided)

Easy user defined addition of supplier components for a simplified 3D representation

Create your own furniture hardware with the full design freedom of SolidWorks®

Fully automatic positioning of the hardware referring to other assembly components by the **PASCAM** Part description

Automatic control of design modifications by the fully associative mating of the inserted hardware

The **PASCAM** Hardware management creates standard SolidWorks® features, to enable flexible, subsequent further editing

Optional full visualization of the kinematics (motion simulation) of the hardware

Applicable to all kind of parts

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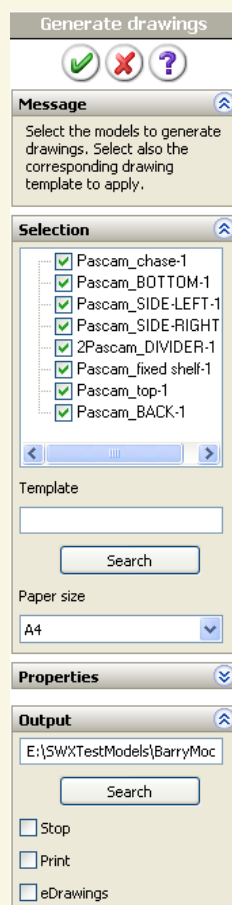
Project management

There is an option available to transfer your frequently used standard parts fast and easy into project-specific parts by copying the model - with all dependences - into the current directory. This can also be carried out automatically during insertion. The naming is performed automatically according to a predefined scheme.

Your benefits:

- Simple and safe duplication of project-specific 3D model data
- Automatic replacing in the assembly
- Automatic renaming out of the model template directory, which is freely definable

Automated 2D drawing generation

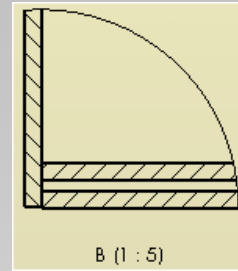


The automated drawing generation is available for the generation of 2D drawings for project-specific components and subassemblies.

Just select the parts and subassemblies you need 2D drawings of from within the complete 3D assembly. You may specify a drawing template and all relevant 2D drawings views are generated automatically. Optionally they also can be send to a printer or generated as eDrawings per request.

Your benefits:

- Time saving by automated 2D-drawing generation of multiple components in larger assemblies.
- Optional user input for touch-up operations.
- All generated drawings with full associativity to the assembly and the parts.



Automatic duplication process

Dependent elements are copied automatically as well

Optional subdirectory generation for every assembly

All relevant modifications are carried out automatically in the current model

Based on SolidWorks®-standard-drawing template

Drawing header and parts list will be filled in automatically

Overall view of the assembly (complete assembly) permanently available

2D-drawings assembly-wise associative to the basic 3D model

Optional print-out of drawing or generation of eDrawings

Optional output of multiple parts on a single drawing sheet

Optional selection of print-out models based on file properties

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Additional automation options

Do you need even more automation? No problem. We offer you the following additional tools:

Batch-mode via XML

We provide a batch-mode option for automatic operations, i.e. to control CNC machines. Just copy the XML-file with the description of your model into a directory and the software is taking care of the rest. You can modify models, adapt, create 2D drawings or generate CNC manufacturing data of adapted default parts.

CNC-manufacturing by PASCAM Bea

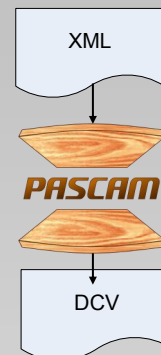
If you need CNC-data to control your woodworking machines flexible and efficiently, **PASCAM Bea** is your tool of choice. **PASCAM Bea** works completely associative to the SolidWorks®-model geometry and paves the way for an easy and intuitive application of machining strategies to the manufacturing-geometry.

Product configuration in SolidWorks®

If you are interested in the efficient configuration of existing products or the customized assembling of product components, then **PASCAM con@3D** is the right solution. Due to its modern client/server-architecture it is quite easy to adopt the configurators user interface to your company-specific requirements. As a standard configurator we offer a cabinet configurator, a door configurator and a general configurator. A configurator for interior design is in preparation.

Your benefits:

- Specific engineering tools according your special requirements solve your problems in a fast and secure way.
- SolidWorks®, **PASCAM WoodWorks** and **PASCAM Bea** guarantee a solid basis for the full data consistency from the 3D model up to the CNC manufacturing.



XML is a standard text file format with a clear description and a very good readability

Recurring processes can be automated freely

The integrated CNC-data generation is crucial for a safe data flow right up to the CNC machine

Up to date CNC-data preparation is ensuring the highest security in the generated CNC-programs

The technology information is available in a very transparent form in SolidWorks®

Simple and easy product configuration with graphic preview

All data are generated in SolidWorks® and will be also modified after the input of product data in SolidWorks®

This ensures consistent and integrated data preparation right up to the CNC machine even when using the product configuration

Modifications in the product configuration will immediately affect all areas

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A picture paints a thousand words

Show your customer a sketch of your model as a photo realistic picture or animation and discuss the details. A good product presentation is a powerful vehicle to show the capabilities of your company.

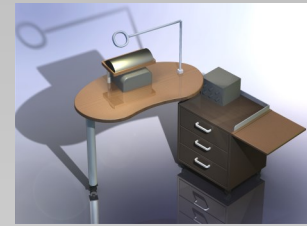
Thanks to the feature modeling there is a plentitude of data available for the subsequent sales order processing after the offering phase of your custom-designed product.

So 2D-manufacturing drawings can be derived associatively just by Drag & Drop. Part lists with final dimensions are available as well as the material information and other lists in Excel tables.



Your benefits:

- You can integrate the pictures generated with SolidWorks® / **PASCAM WoodWorks** into your homepage or advertising brochures
- You can convince your customers with an interactive 3D presentation of your product.
- You can open yourself new ways with the joint capabilities of SolidWorks®/**PASCAM WoodWorks** in the offer phase, at production planning and production.
- A smart and efficient 3D planning in co-operation with your manufacturing partners and customers guarantees a higher customer satisfaction.
- The use of the most modern 3D CAD technology demonstrates the future-proof capabilities of your enterprise to customers and business partners alike.



It is a very easy to generate attractive, photo realistic pictures using the rendering and ray tracing capabilities of the PhotoView 360 Add-In.

Thanks to the enhanced capabilities widely used by SolidWorks® users in by the consumer goods industry, advanced ray tracing methods, i.e. from glass materials, mirror effects and refractions are no problem

PhotoView 360 is completely integrated in SolidWorks® and is fully associative to the generated 3D model

Simple generation of animations by the SolidWorks® Animator

Simple recording of movement sequences

Several overlaying movement sequences

Please turn to your local SolidWorks® reseller for further information on PhotoView 360

PASCAM WoodWorks



Integration and standardization - the protection of your investment

Data are precious. You may notice this, if data are lost or can't be processed any more. Due to the "run the best" philosophy, **PASCAM WoodWorks** enables the customer to access all its data through standard applications. E.g. the wood list is available as an Excel-sheet, where it simply can be edited, converted or printed according to your specific needs.

PASCAM software solutions use a genuine client server database (Microsoft SQL server) so that your data potential can grow safely and the highest data security is ensured. The Microsoft SQL server database is free for up to 5 users.

For recurring processes a **PASCAM-API** is available, which is open to be programmed with every simple programming language, such as VBA of MSWord. This enables you to adapt **PASCAM WoodWorks** to your specific needs and requirements even more efficiently.

Furthermore a key issue at the development of **PASCAM WoodWorks** was set at the seamless integration into SolidWorks®. **PASCAM WoodWorks** is embedded so well in SolidWorks® that a user often doesn't notice which functions of which application he is actually using. This means a simple and familiar user interface for you with short training and acclimatization time. And since SolidWorks® observes the Windows® standard, the operation principle is learnable in a few hours.



Your benefits:

- High security in your investment
- Application of mature technology and leading software solutions
- Easy learnability, since existing software standards are used and the application is based on Windows® standard input techniques



All relevant construction data available in a single Microsoft SQL server database.

All derived manufacturing lists (i.e. wood list) are available as Excel tables and can be used and reprocessed accordingly.

A meaningful and informative drawing is available. Also suitable for simple 3D constructions.

PASCAM API and SolidWorks® API guarantee efficient interfaces for an even more efficient adaptation to your specific company.

Powerful converters available for the import and/or export of all common, standard CAD formats like DXF, IGES, ParaSolid etc.

Also highly compressed special data formats available for web publications.

All data in SolidWorks® and **PASCAM Woodworks** are fully associative/ interchangeable. This ensures high manufacturing safety and investment safety of the entire software system.

PASCAM WoodWorks



Semantic feature technology in wood

The semantic feature concept is still hardly found in the woodworking industry or woodworking workshops. Odd enough, because feature technology is the only thing that enables the economic and efficient design and manufacturing of product variants, which is a key requirement for woodworkers.

Feature-technology is the comprehensive description of a model, e.g. of a cabinet with all of its relevant properties, its composition, the connections of the components, the materials etc.

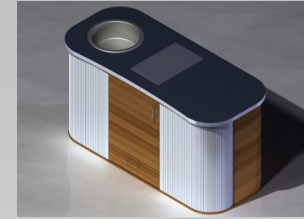
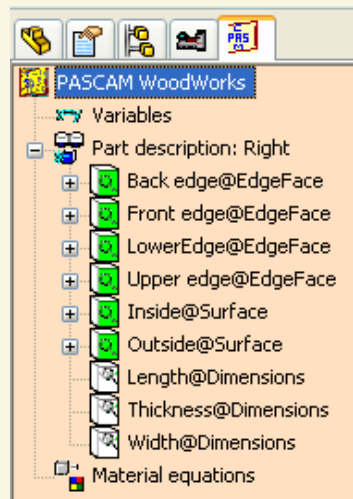
PASCAM WoodWorks enables to establish semantic relations in the model assembly. This means the components get intelligent. The description turns a simple solid cuboid into a fully defined cupboard side, on which the user of the CAD system can apply automated processing steps.

PASCAM WoodWorks will help you to generate 3D models which include only those data you need for your current job. Only you will decide which data are saved in the system. You are also able to generate your own features using a "Learning-by Doing" approach — just design it once and **PASCAM WoodWorks** will make it a standard feature for later use. This is how you will "train" the system to your specific way of manufacturing.

The result is a CAD/CAM system, exactly according to *your* needs.

Your benefits:

- The most simple application of recurring operations in all functions
- Individually adaptable for changing manufacturing directions
- Optional user configuration without software manufacturer
- Newest software technology, promising future developments
- Corresponds to the woodworker's way to design and manufacture
- High scalability of the data, enabling quick modeling in the planning stage and the comprehensive design for manufacturing.



The latest modeling technology.

Individually adaptable to your business norms.

PASCAM Woodworks uses your concepts / design approach.

Efficient configuration via Learning by doing with the option of subsequent user adaptations.

Transparent data representation of all actions.

Simple operation by wizards also for temporary users.

Automatic documentation of your modeling ideas by modifications in the **PASCAM** part description.

Intelligent parts by **PASCAM** part descriptions → plenty of information automatically available in the whole CAD system.

High design safety supported by storing and recurring on approved modeling details and principles → this saves your investment.

Modeling procedure is the same as in "real" manufacturing → high manufacturing safety, since the manufacturing is already taken into account at the start of the design process.

Highly detailed scalability of the data.

PASCAM WoodWorks



"If you want to drive a nail into a wall, you can get somebody, who does it for you, or you buy a hammer yourself, so you can do it on your own from now on."

- The motto of **PASCAM WoodWorks** -

PASCAM is developing innovative and efficient products - proven and tested in practice. We are able to offer comprehensive services for our customers due to the close and trustful collaboration with SolidWorks®.

PASCAM is providing world leading 3D-CAD feature modeling solutions for the specific needs and requirements in wood-working. Our software solutions have been developed with the unique expertise of the company founder regarding "wood specific" CAD construction, his knowledge of conventional woodworking and the efficient control of powerful CNC machines, in close cooperation with carpenters, joiners and the woodworking industry.

The **PASCAM** products have proven their outstanding efficiency in a variety of companies worldwide. Regardless of the size of the company, the materials processed or products manufactured.

PASCAM is successfully supporting exclusive cabinet makers and joiners, as well as mass manufacturers of cabinet furniture. Manufacturers whose products are based on face frame or frame construction (doors, windows), and others that rely on frameless sheet material, like bathroom and kitchen manufacturers, shopfitters, yacht builders, etc.



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The use of the most advanced development tools based on the established operating system Microsoft Windows ensures a reliable, economical and efficient software for our customers.

At the development we always pay attention on a lean and clean structuring of the software which means a low maintenance effort of the software during its lifespan.

Use of modern software development concepts like UML guarantee sustainable further development capacities in **PASCAM** software solutions.

System requirements:

- SolidWorks 2013 or later
- Windows 7 or later (64-bit)

Sales partner:

