

A wireframe illustration of a living room setup, including a tall cabinet, a sofa, a coffee table, a desk with a lamp, and a large display cabinet with a plant.

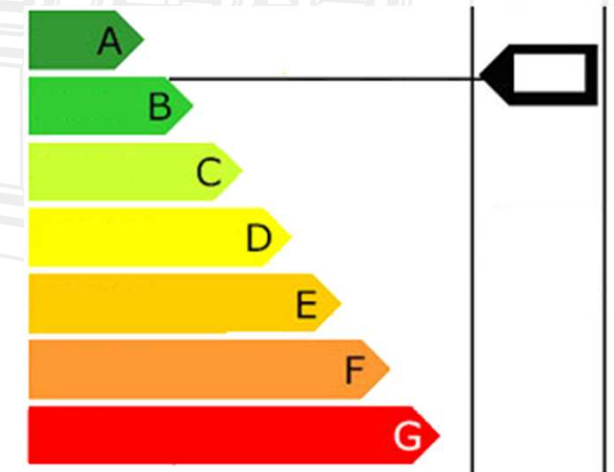
**Before Deployment**

**Wood Team**  
**15/04/11**

**MASTER YOUR  
MANUFACTURING PROCESS**

## Some topics about performances :

- Simplification of components
  - Part/Set representations
  - Tolerances
- Publishings creation
- Block constraint
- 64bits vs 32 bits
- Components with supplier code #C
- Save STD with purge operation geometry
- Do not compute cutting dimensions if not needed
- Textures size

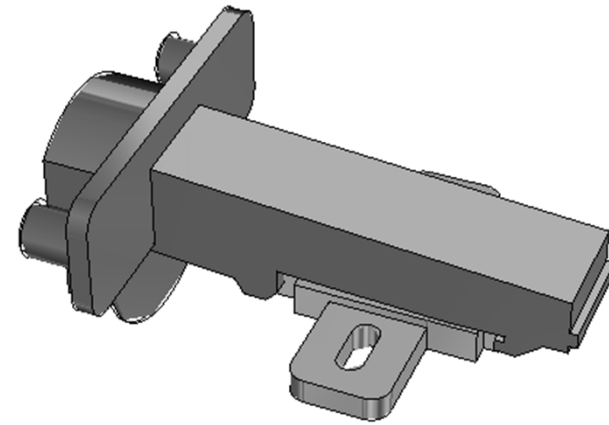
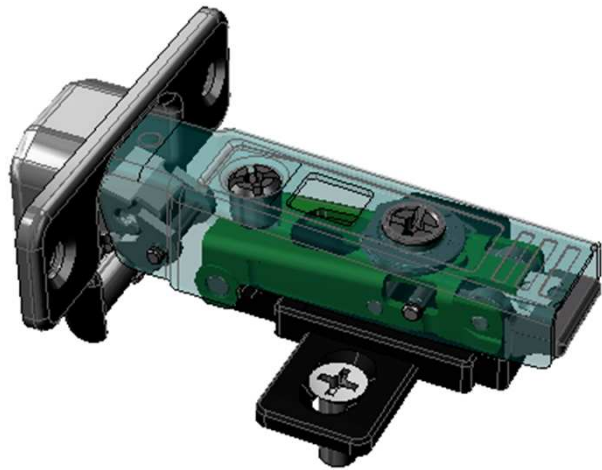


# Simplification of components

Think of your needs! Which details are important?

Are details useful for Rendering, sales documentation, or for Production?

In a simplified representation the Bill of material is the same, and you optimise the file size and the performances.

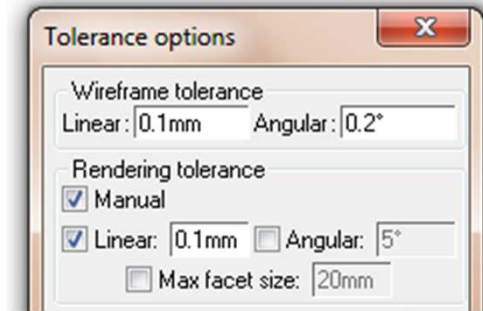


There is different ways to simplify a geometry ( Part/Assembly Simplified representation, tolerancy...)

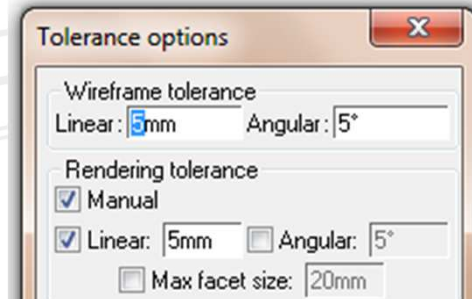
# Graphic document tolerances

Change the default values according to your needs.

The same file with different tolerances goes from 3,5 mo to 11,5mo !



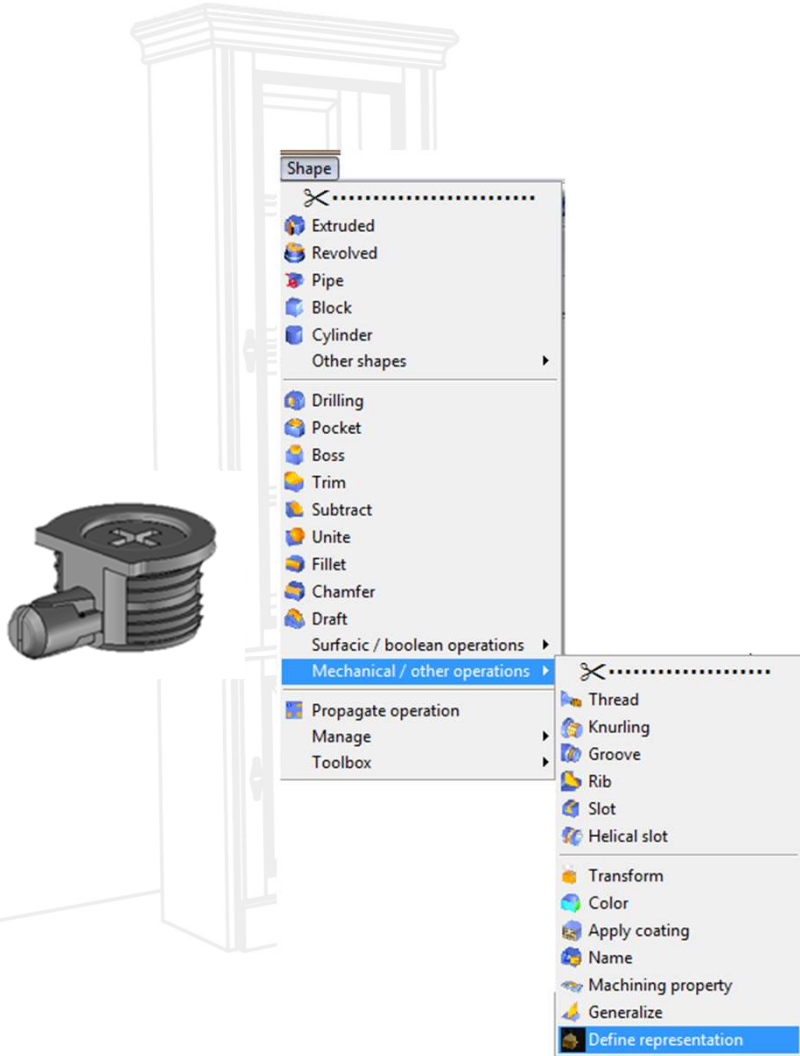
Name	Size
📁 Détaillé	
📁 Simple	
🌐 Assemblage.top	2 407 KB
🌐 Charnière a.top	11 537 KB



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📁 Détaillé	
📁 Simple	
🌐 Assemblage.top	2 407 KB
🌐 Charnière a.top	3 543 KB

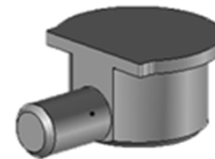
# Simplification of components

**On Parts :** Shape | Mechanical / Other operation | Define representation

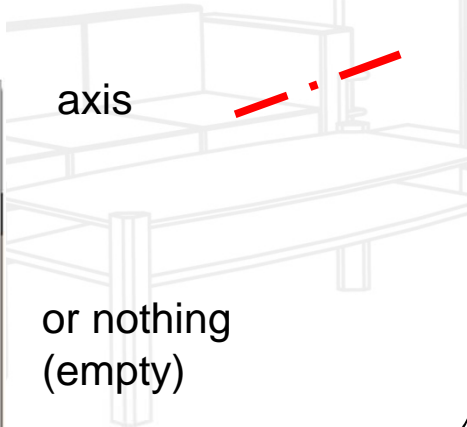


Simplified view as :

shape



axis



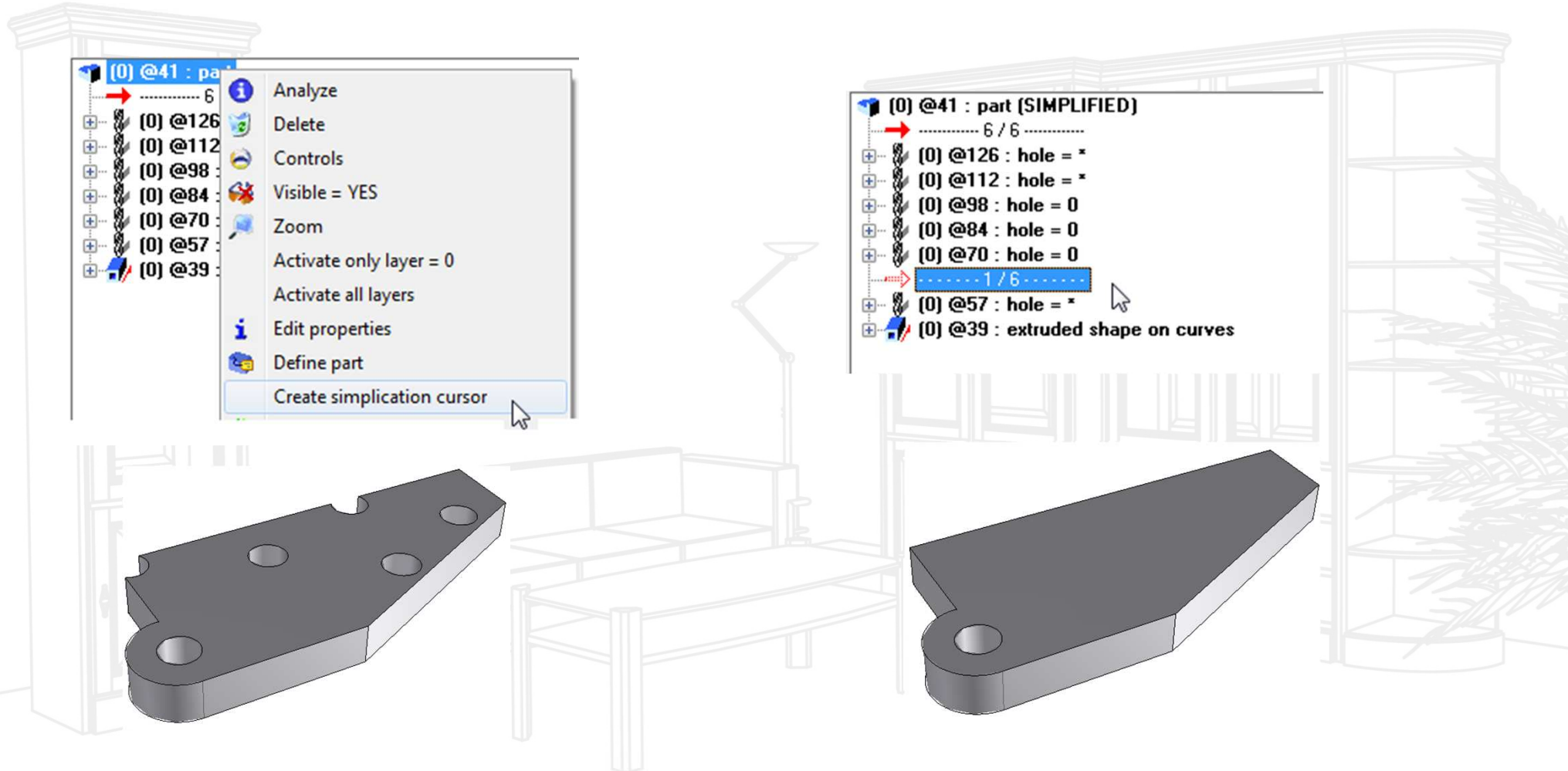
or nothing  
(empty)

- Easy management : Same file
- Work in simplified, mixed or detailed representation.
- Better graphic performances
- Faster drawings calculation



# Simplification of components

**On Parts :** Simplification Cursor ( Right clic on the part in the tree)



This kind of simplification doesn't reduce file size but they improve the graphic performances.

# Simplification of components

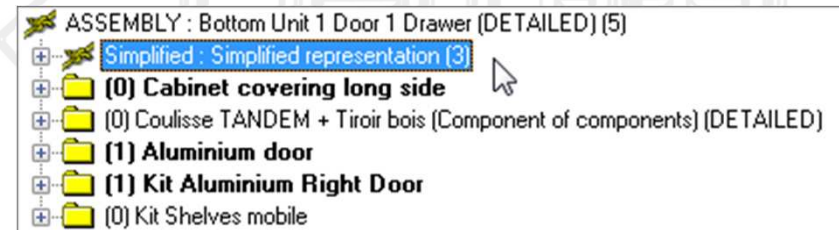
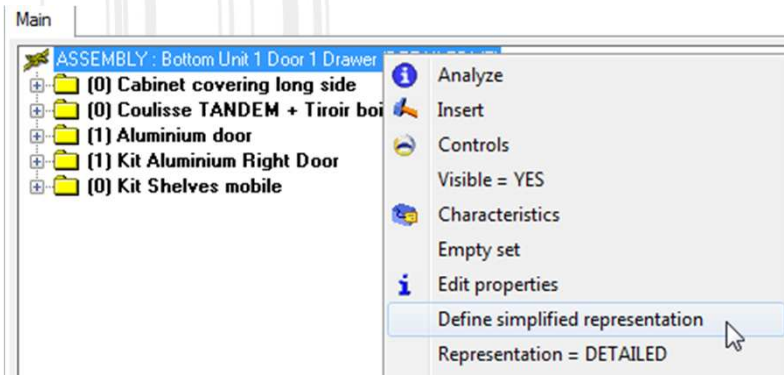
**On Assemblies :** ( Right clic on the Assembly line in the tree)

2 Options : From all Simplified part

From alternative set

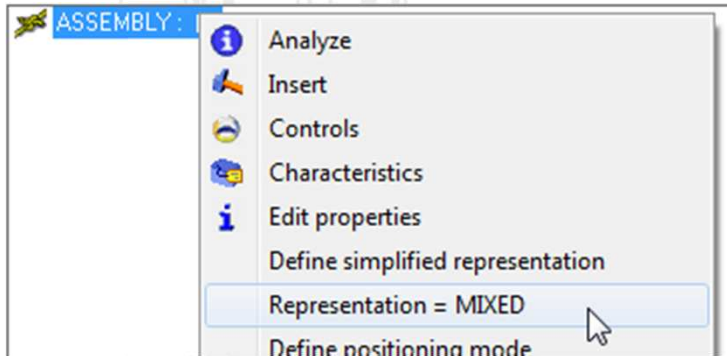
OK Simplified representation= SIMPLIFIED PARTS

OK Simplified representation= OTHER SET Choose a set: Simplified (alternative set) NEW SET

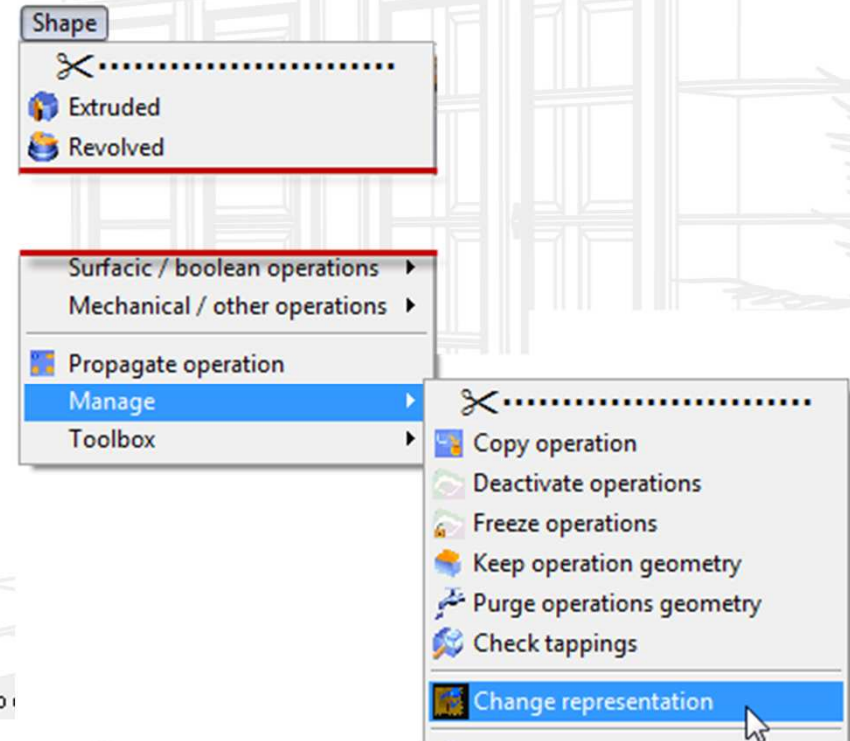


## How to use it:

### Activation from the tree



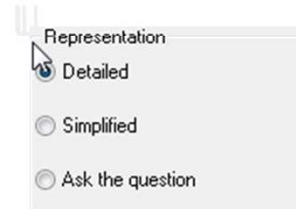
### Activation from a function



### Then select the representation mode



You can define the default value in Tool | Option | Components

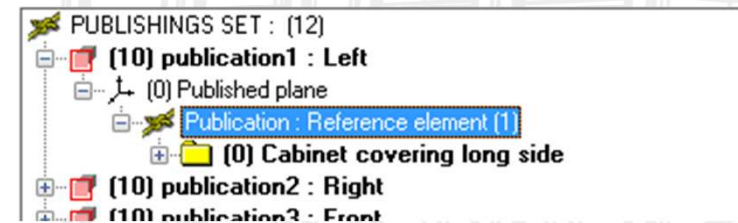
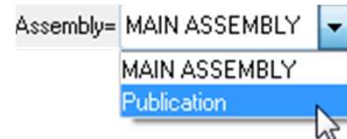
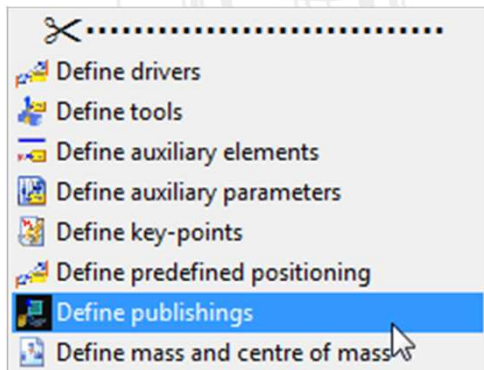


Do not mistake with Component Representation ( DT;NR;SY,SM,SK)

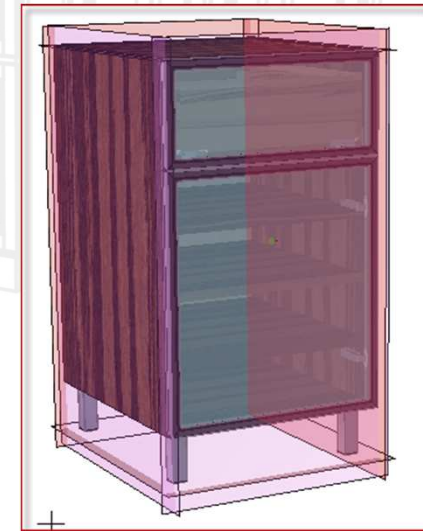
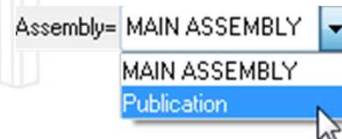
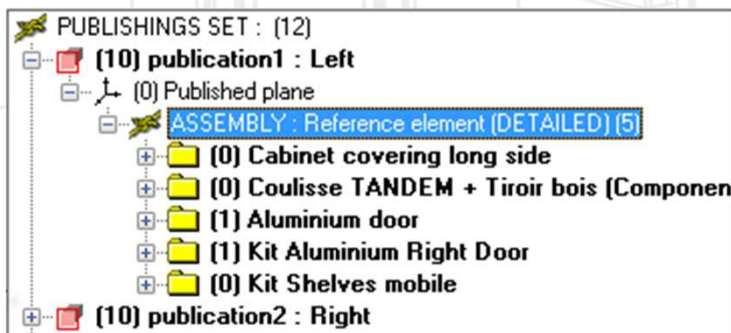


## Automatic Publishing creation

Automatic publishing use the MAIN ASSEMBLY to find the good publishings, use an alternative set with less elements to improve the update of publishing.



Redefine your old auto-publishing with REDEFINE.



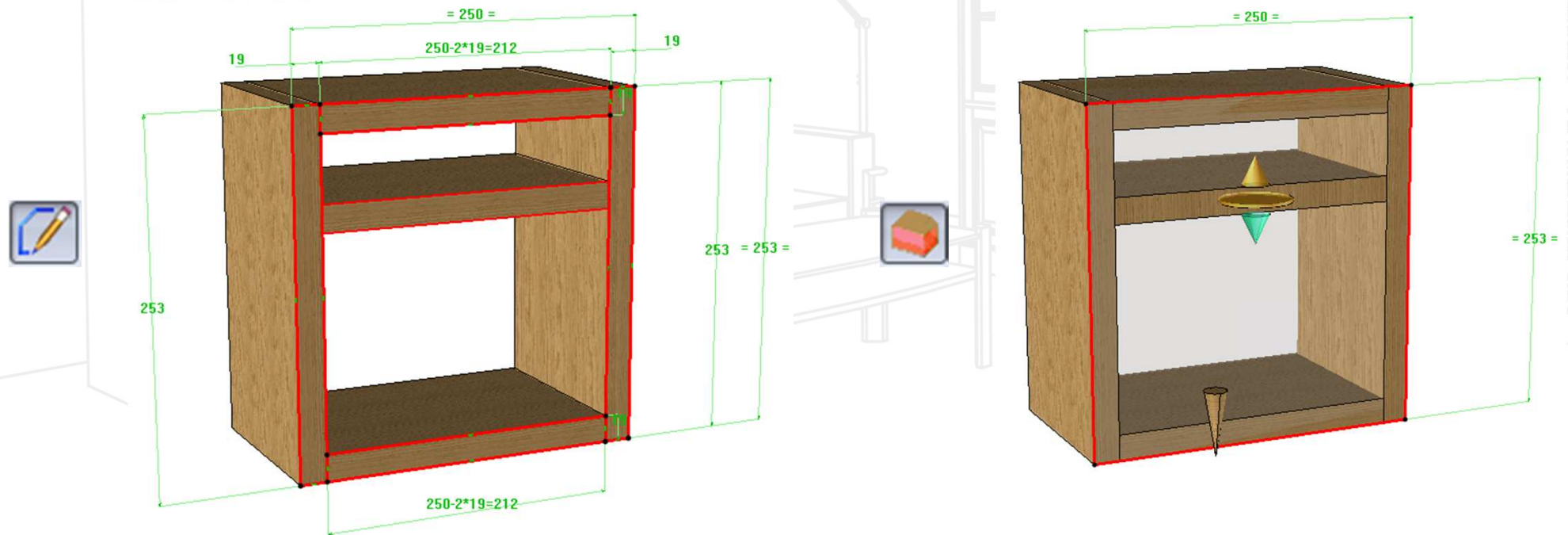
# Block constraint

## Easier and faster...

Until 6.11 constraint block allows you to create rectangular parts in a few clics.

Constraint block does not use a 2D Solver like the 2D function ( picture left ) so the update of the part is much faster than using extrusion of 2D contours, plus the benefits of a cleaner file with less elements.

You can also use some options ( offsets, handles ) so your design is much more flexible.



# 64 bits ? 32 Bits ?

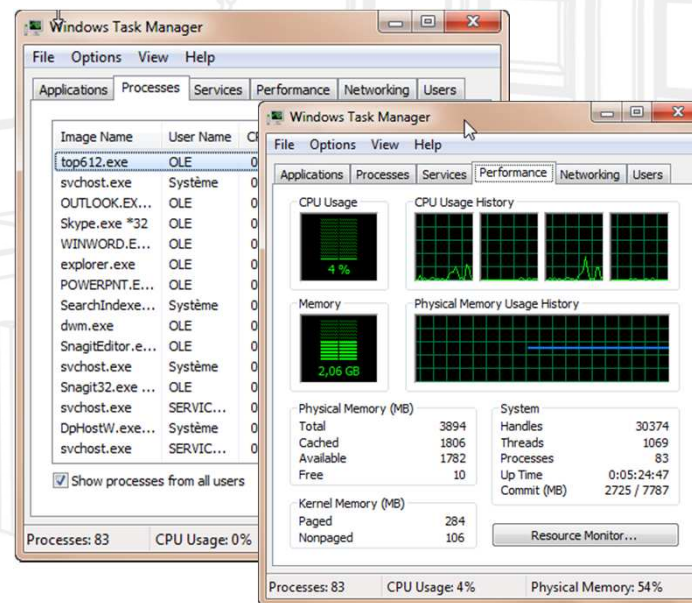
## What you must know...

(check Microsoft web site for more information)

A Windows 64-bit can handle larger amounts of data than a 32 bit system.

Because it's able to use more RAM (4 GB and more), a 64-bit can be more responsive when you run many programs at once. Sometimes it's mandatory in order to open big TopSolid projects.

We advise the CAD TopSolid user to run a 64bit to take benefits of the software, of course 32 bit is compatible with all our software.





# Component with supplier code #C

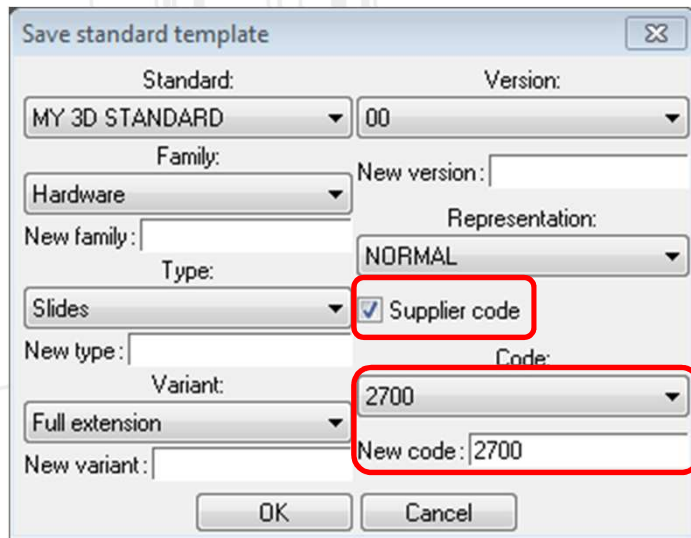
## A new catalog mode...

“Supplier code” allows to use one .top file like a catalog.

The slide component down here will be made of 4 .top files + 1 .cat file

Doing this same slide in one file means use parametric function to get the good geometry. 1 top + 1 cat

Because the #C code replace the file, when you include it without geometrical change, there is no computation and update so the loading is fast and the file size is small.



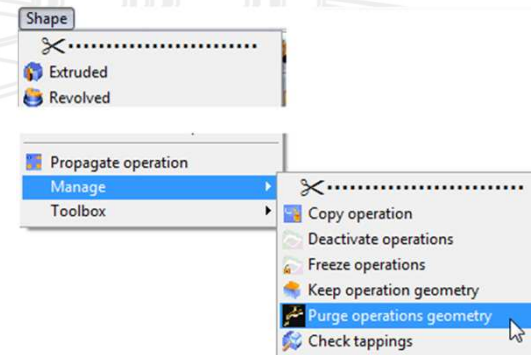
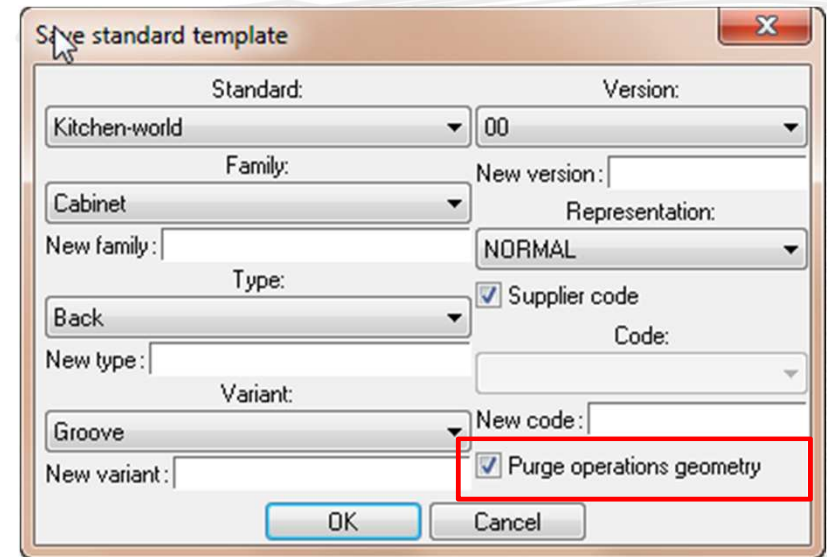
## Reduce the file size of standards

While saving a STD file you can ask the software to purge automatically the operations.

This will reduce the file size, so the component loading will be faster.

This option is usefull when your component has drivers or a catalog.

It's like if you manually purge all parts with the function :  
Shape | Manage | Purge operation geometry





## Add to cutting-up...

All defined parts have this default option on.

Add only cutting-up information on the required parts, the ones you export or you machine for example.

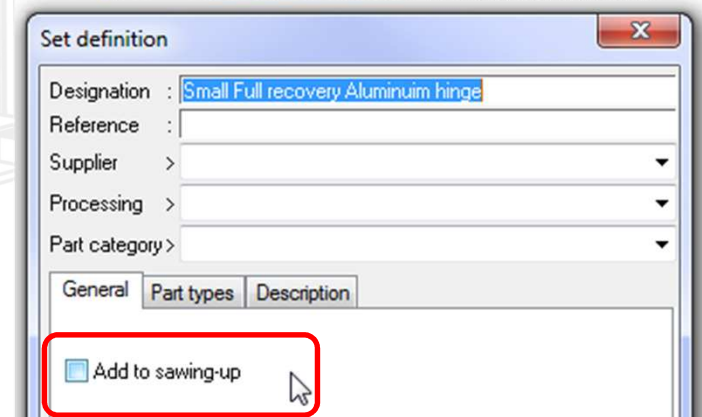
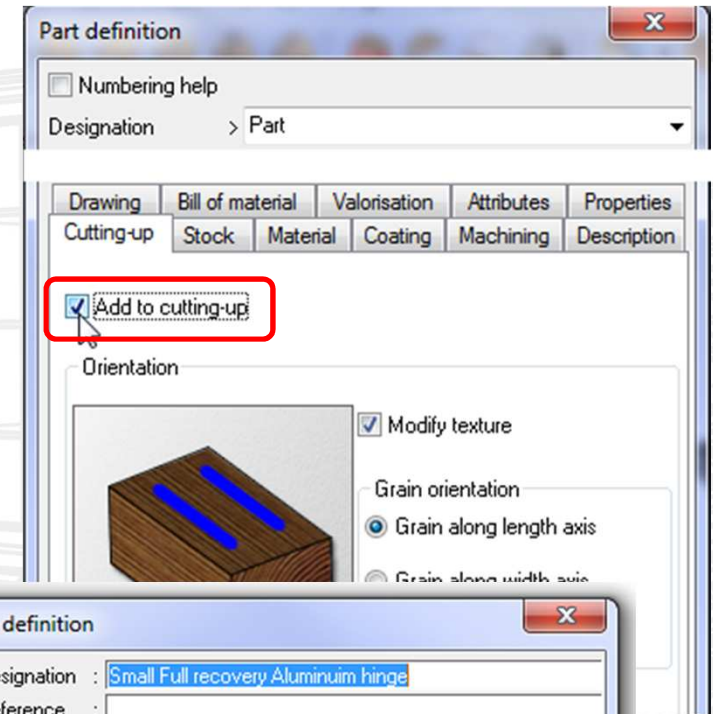
Check this option in define part



and define set



-	1	Bottom Unit 1 Door 1 Front	-	-	-	-	-	-
-	1	Kit Shelves mobile	-	-	-	-	-	-
-	1	Kit Aluminium Right Door	-	-	-	-	-	-
-	2	Small Full recovery Aluminium hinge	-	-	-	-	-	-
-	2	Screw 3,5x9,5	Screw 3,5x9,5	steel	-	-	-	-
-	1	Mounting plate Expando Dis 0	177H5400E	steel	-	-	-	-
-	1	Hinge aluminium 95°	-	steel	-	-	-	-
-	1	Aluminium door	-	-	-	-	-	-
-	1	glass	-	glass	-	469.0	419.0	4.0
-	2	Profil Alu small	Profil Alu small	steel (modified)	448.0	20.5	19.0	
-	2	Profil Alu small	Profil Alu small	steel (modified)	498.0	20.5	19.0	
-	1	Cabinet covering long side	-	-	-	-	-	-
-	1	Aluminium door	-	-	-	-	-	-
-	1	glass	-	glass	-	169.0	419.0	4.0
-	2	Profil Alu small	Profil Alu small	steel (modified)	198.0	20.5	19.0	
-	2	Profil Alu small	Profil Alu small	steel (modified)	448.0	20.5	19.0	
INDEX	NB.	DESIGNATION	REFERENCE	MATTER	COMMENT	LENGTH(FP)	WIDTH(FP)	THICKNESS(FP)






## Compressed picture? Resolution ? Dimensions ?

Consider the file extension of a picture before importing as texture in TopSolid.  
Some file extensions are zipped, but at the end your computer will load the unzipped size!

Example with a jpg file saved in different bmp extensions :



	Z 020 Zebrano 8 bit.bmp	Type: Bitmap image Dimensions: 3300 x 2257	Size: 7,10 MB
	Z 020 Zebrano 24 bit.bmp	Type: Bitmap image Dimensions: 3300 x 2257	Size: 21,3 MB
	Z 020 Zebrano.jpg	Type: JPEG image Dimensions: 3300 x 2257	Size: 3,16 MB

The size (pixels and resolution information ) of the texture is really important, you have to balance between the quality and the size.

Remember that the size of each texture used will be add to the memory while you work,

## Some topics about management

- New file rule creation and Publishings names
- Shapes simplification tools
- Deactivation
- Interchange of Component and Sub-components
- Automatic process rule creation
- Use txt Catalog codes



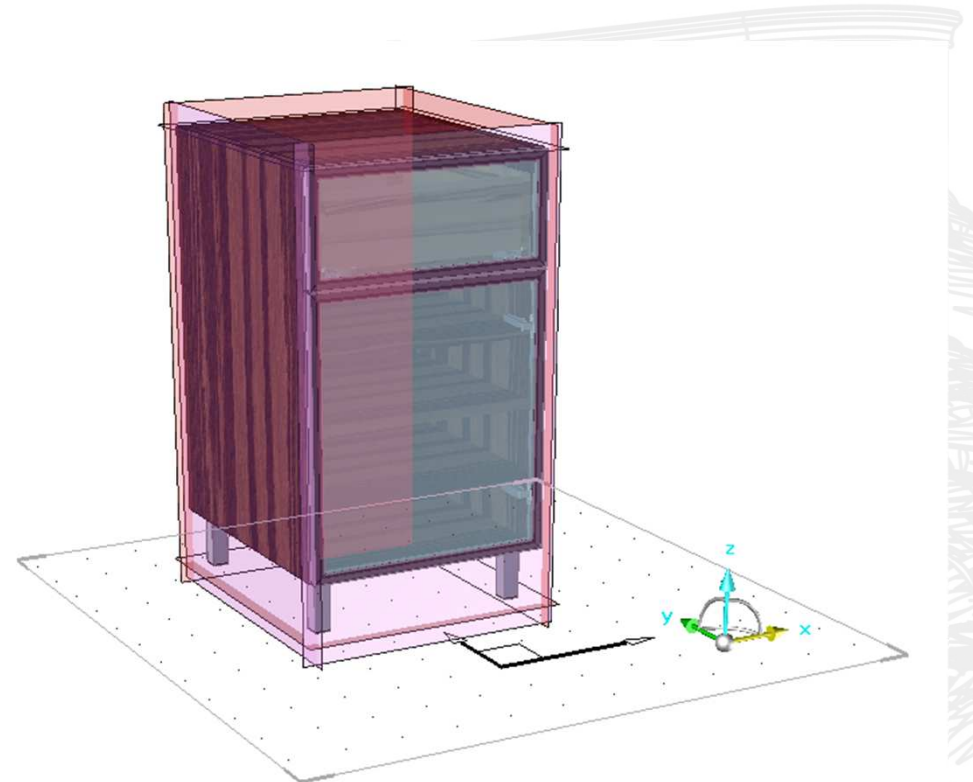
## Starting a new top file.

Use the absolute coordinate system as a virtual ground reference when you start a new top file.

This will help further for interchange, you'll be able to use the positioning sequence for all your units.

Think to predefine default name in Tool | Options

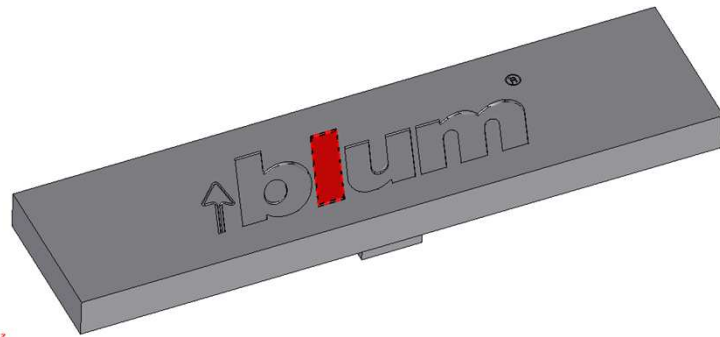
Automatic publications		
Publishing1 X-	:	<input type="text" value="Left"/>
Publishing2 X+	:	<input type="text" value="Right"/>
Publishing3 Y-	:	<input type="text" value="Front"/>
Publishing4 Y+	:	<input type="text" value="Back"/>
Publishing5 Z-	:	<input type="text" value="Bottom"/>
Publishing6 Z+	:	<input type="text" value="Top"/>



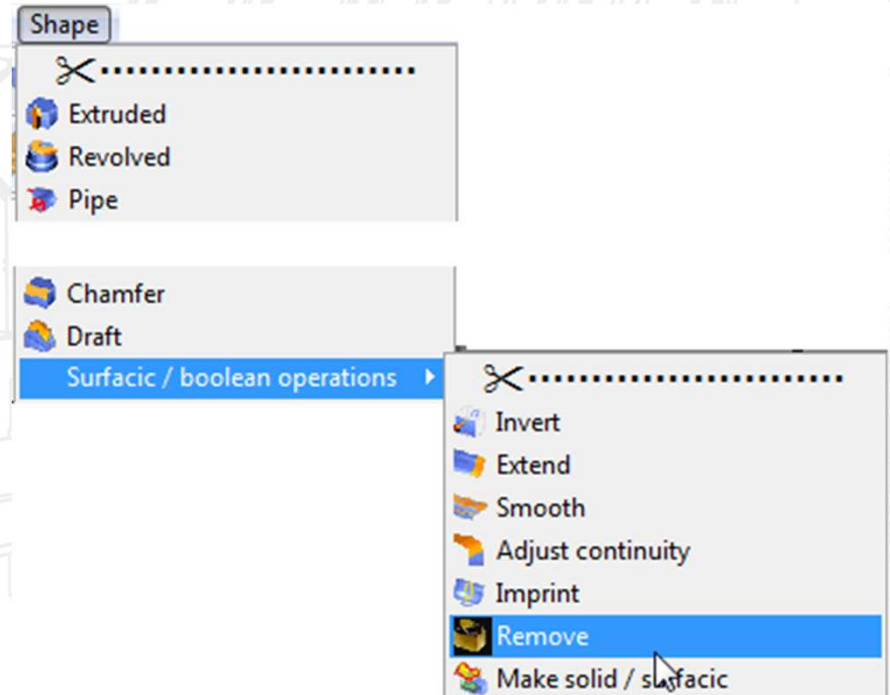
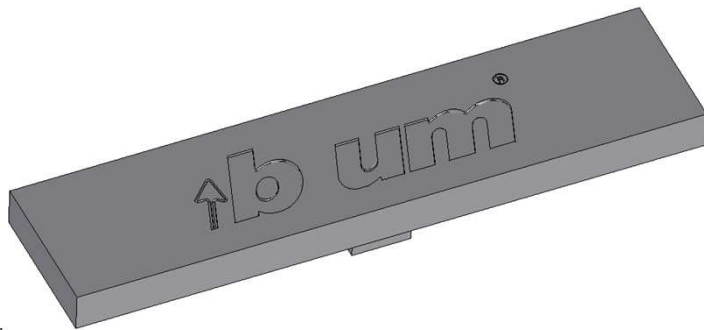
The Publishing designation will be displayed in the TopSolid'Planner functions.

## Manual geometry simplification

When you import 3d files from a supplier you can remove extra faces in order to simplify the geometry and then reduce the file size.



Remove= FACE    Healing= CAP    Face(s) to remove:



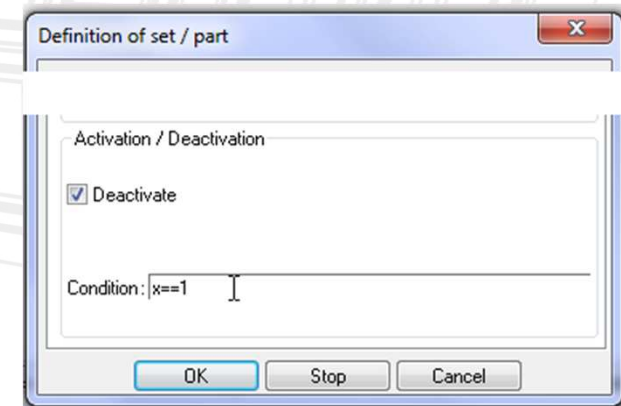
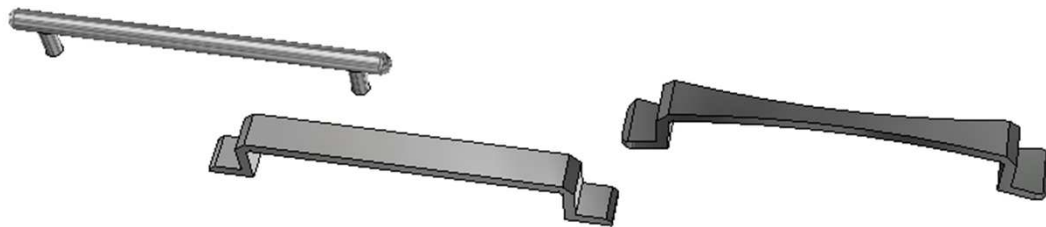


## Component deactivation.

Deactivation is interesting when you need to configure a component like a boolean parameter. Cabinet with or without handle for example?

Do not think that deactivating a component means that you do not load and compute it.

Avoid to deactivate all components to keep the good one, better use interchange to select the good one.



## Rules to Interchange Component and Sub component.

In order to be able to interchange you must follow some basic rules :

### Positioning :

Same names of key points

(if you include by key points)

Same publishing or face names

( if you include by constraints)

### Dimension :

The components must have the same parameter names in order to get the good associativity. If not the component will take the template values and it will not follow the values you gave in the assembly.

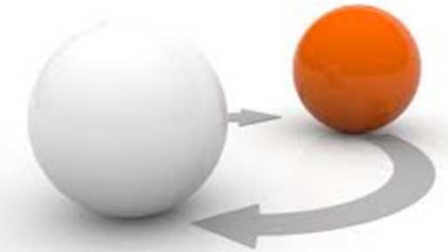
### Processes:

#### **Manual way :**

Same process name, same kind of process type ( pocket  $\neq$  simple drilling  $\neq$  lamed drilling...), same number of process with named parameter in order to keep the associativity.

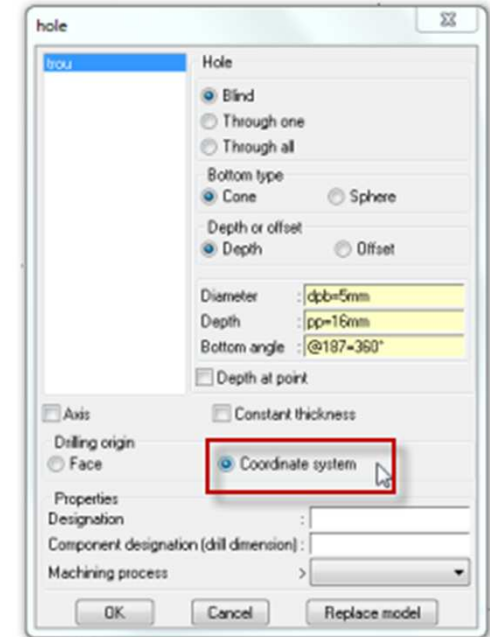
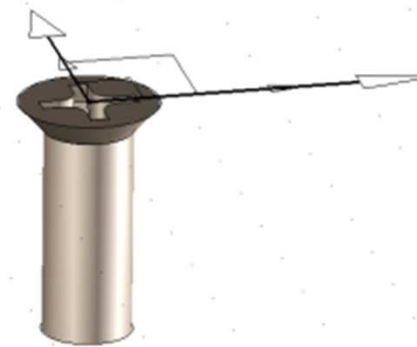
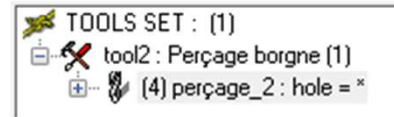
#### **Automatic way :**

There is no specific conditions, just check the process rule creation.



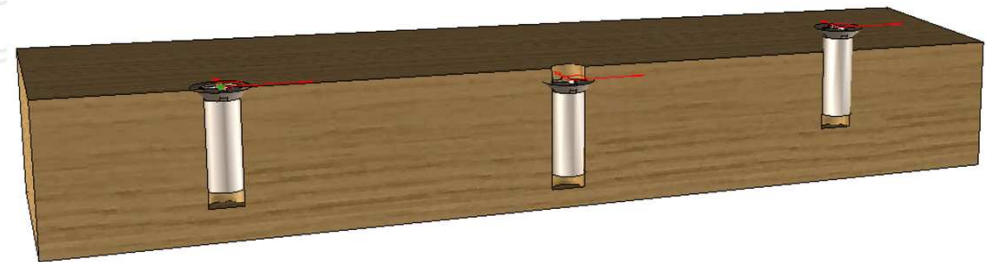
## Drillings Processes :

Coordinate system must be the value in the drilling origin.



## Automatic process activation :

Only the parts in the main assembly will be considered during the activation of automatic processes.



## Only use .cat files for catalogs

You can use Excel to create the catalog but at the end save it as .cat file

TopSolid'Planner only reads cat files + cat files are much faster to load.

