

# MULTI MACHINING

## Configuration of the BOM

TopSolid'Wood 2008 allows the user to customize the machining filenames.  
 The name of the file is calculated in the column of a BOM **DEF=<WOO\_CAM\_FILE\_NAME|...>**  
 The customizing of the column defines the structure of the name of the file.

Example for a part with the properties:

- Designation: Left Side;
- Reference: A001;
- Type: CNC;
- Supplier: Missler;
- Identifier: @112;
- Coating: None;
- Final length: 750 mm;
- Final width: 350 mm;
- Rough length: 770 mm;
- Over width: 20 mm;
- The document has a DGI <\$JOB\_NAME> initialed at the value <Cabinet + Shelves>;
- The part belong to <Cabinet>;

DEFINITION OF THE BOM COLUMNS	FILENAME
DEF=<WOO_CAM_FILE_NAME  \$DESIGNATION\$-\$REFERENCE\$>	Left Side- A001
DEF=<WOO_CAM_FILE_NAME  \$TYPE  Upper\$-\$-\$-REFERENCE  Lower\$>	CNC-A001
DEF=<WOO_CAM_FILE_NAME  \$ELEMENT_IDENTIFIER\$  \$COATING\$-\$MATTER\$>	112-Melamine
DEF=<WOO_CAM_FILE_NAME  Job: \$DGI  Name: @JOB_NAME\$>	Cabinet + Shelves
DEF=<WOO_CAM_FILE_NAME  \$PART_LENGTH  Unit: 4  Prec: 0\$>	750
DEF=<WOO_CAM_FILE_NAME  \$PART_WIDTH  Unit: 4  Prec: 2  Comma: -\$ >	350-00
DEF=<WOO_CAM_FILE_NAME  \$SUPPLIER\$-\$PART_OVER_WIDTH  Unit: 4  Prec: 1  Comma: Void\$>	Missler-20

## Example of a BOM field

```

NAME=CAM_FILE_NAME
“DEF=<WOO_CAM_FILE_NAME|$REFERENCES$-$INDEX$>”
TYPE=STRING
ALIGN=RIGHT
TITLE_ALIGN=LEFT
WIDTH=0.015
VISIBLE=YES
;

```

## Available properties

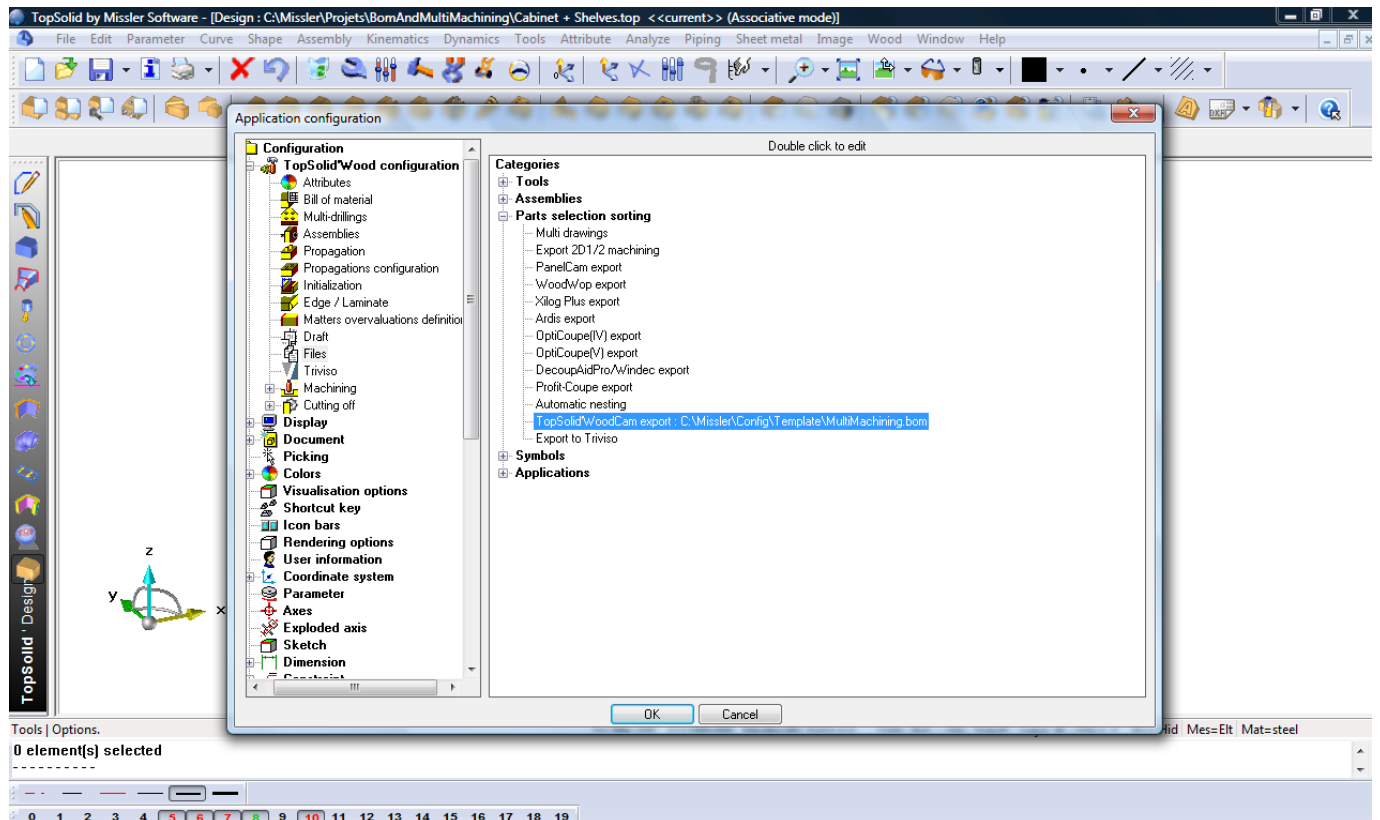
AVAILABLE PROPERTIES	SYNTAXE
<b>DESIGNATION</b> : Designation of the part	\$DESIGNATION\$
<b>REFERENCE</b> : Reference of the part	\$REFERENCE\$
<b>TYPE</b> : Type of part	\$TYPE\$
<b>SUPPLIER</b> : Supplier	\$SUPPLIER\$
<b>INDEX</b> : Index of BOM	\$INDEX\$
<b>ELEMENT IDENTIFIER</b> : Element Identifier	\$ELEMENT_IDENTIFIER\$
<b>DGI</b> : DGI of the document of the part	\$DGI Name: \$
<b>PROP</b> : Property of the part	\$PROP Name:  Field: \$
<b>MATTER</b> : Material of the part	\$MATTER\$
<b>COATING</b> : Coating of the part	\$COATING\$
<b>COMPO CODE</b> : Code of the component	\$COMPO_CODE\$
<b>COMPO PARAM</b> : Parameter of the component	\$COMPO_PARAM Name: \$
<b>COMPO TEXT</b> : Text of the component	\$COMPO_TEXT Name: \$
<b>PART LENGTH</b> :Final length	\$PART_LENGTH\$
<b>PART WIDTH</b> : Final width	\$PART_WIDTH\$
<b>PART THICKNESS</b> : Final thickness	\$PART_THICKNESS\$
<b>PART ROUGH LENGTH</b> : Rough length	\$PART_ROUGH_LENGTH\$
<b>PART ROUGH WIDTH</b> : Rough width	\$PART_ROUGH_WIDTH\$
<b>PART ROUGH THICKNESS</b> : Rough thickness	\$PART_ROUGH_THICKNESS\$
<b>PART OVER LENGTH</b> : Over length	\$PART_OVER_LENGTH\$
<b>PART OVER WIDTH</b> : Over width	\$PART_OVER_WIDTH\$
<b>PART OVER THICKNESS</b> : Over thickness	\$PART_OVER_THICKNESS\$
<b>PART OFFSET X</b> : Offset along x	\$PART_OFFSET_X\$
<b>PART OFFSET Y</b> : Offset along y	\$PART_OFFSET_Y\$

Text in uppercase	Upper
Text in lowercase	Lower

LENGTH UNITS	VALUES
METER	0
MILLIMETER	4
CENTIMETER	5
DECIMETER	6
DECAMETER	7
HECTOMETER	8
KILOMETER	9
MIL	11
INCH	12
FOOT	13
YARD	14
MILE	15

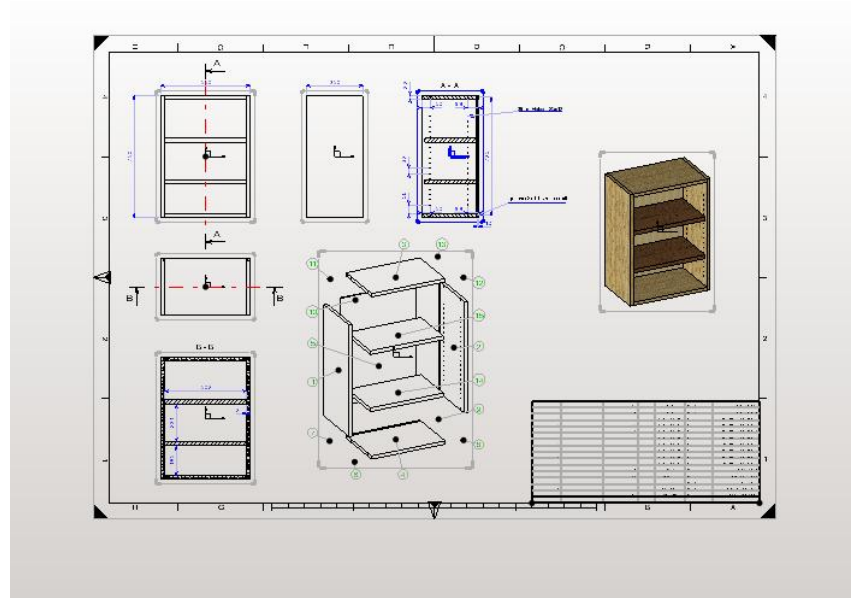
## Configuration of TopSolid

For using the multi machining with a specific BOM you need to go to:  
 <Tools/Options/TopSolidWood Configuration/Files/Part selection sorting/ TopSolidWoodCam Export >  
 and select your BOM template.



## Files used

For this example we will use the assembly below. We will machine the two sides, the top and the bottom using the multi machining function.



15	CU0145		71	1	Shelf	A007	CU0145-Shelf-71
14	CU0145		69	1	Shelf	A007	CU0145-Shelf-69
13	CU0145		65	1	tourillon strié	-	CU0145-tourillon strié-65
12	CU0145		62	1	tourillon strié	-	CU0145-tourillon strié-62
11	CU0145		58	1	tourillon strié	-	CU0145-tourillon strié-58
10	CU0145		55	1	tourillon strié	-	CU0145-tourillon strié-55
9	CU0145		51	1	tourillon strié	-	CU0145-tourillon strié-51
8	CU0145		48	1	tourillon strié	-	CU0145-tourillon strié-48
7	CU0145		44	1	tourillon strié	-	CU0145-tourillon strié-44
6	CU0145		41	1	tourillon strié	-	CU0145-tourillon strié-41
5	CU0145		39	1	Back	A005	CU0145-Back-39
4	CU0145		37	1	Bottom	A004	CU0145-Bottom-37
3	CU0145		35	1	Top	A002	CU0145-Top-35
2	CU0145		33	1	Right Side	A002	CU0145-Right Side-33
1	CU0145		31	1	Left Side	A001	CU0145-Left Side-31
PART_INDEX	PROJECT_NUMBER	PART_NUMBER	NB.	DESIGNATION	REFERENCE	CAM_FILE_NAME	

1

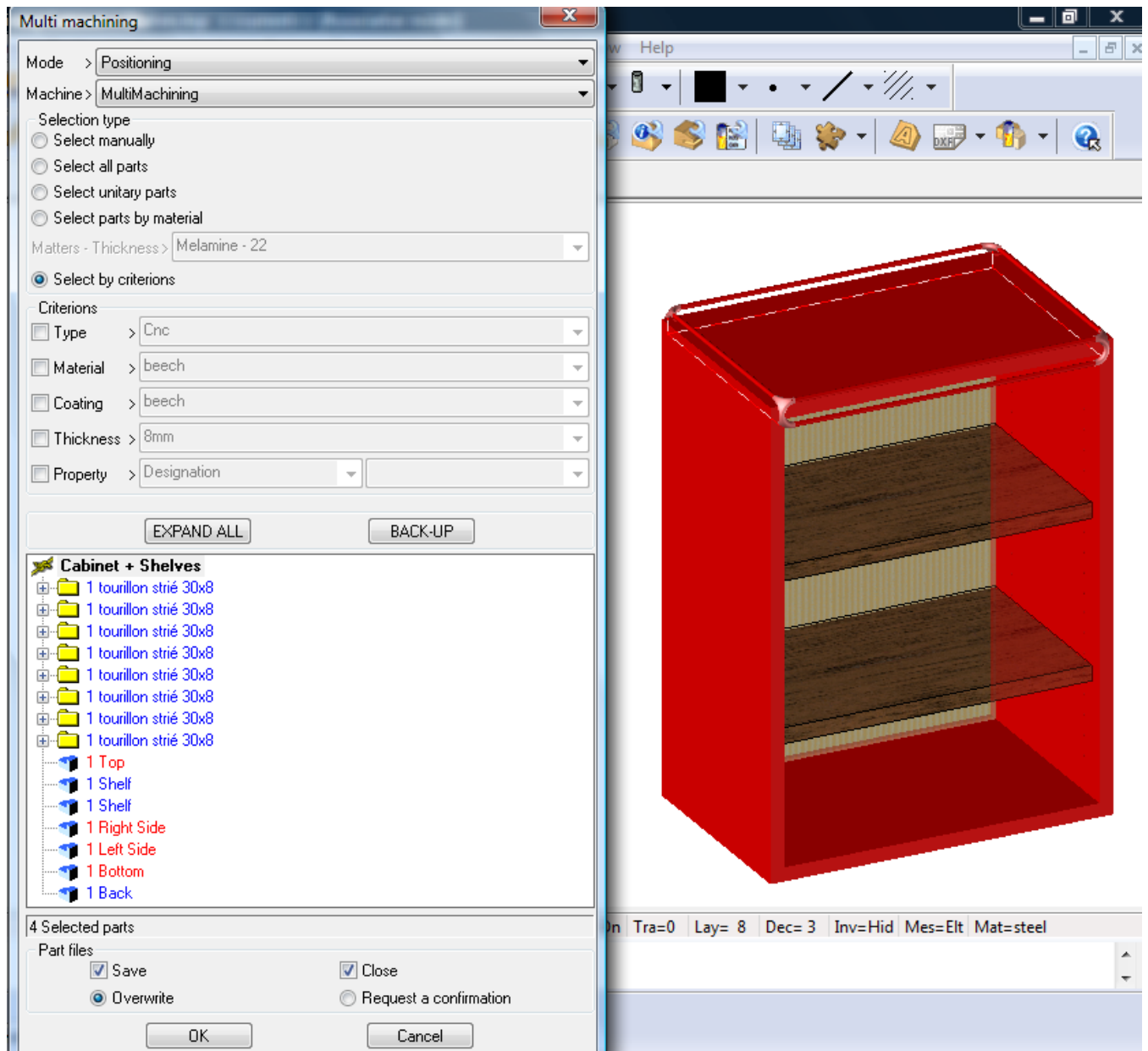
B

A

## Utilization

### Multi machining

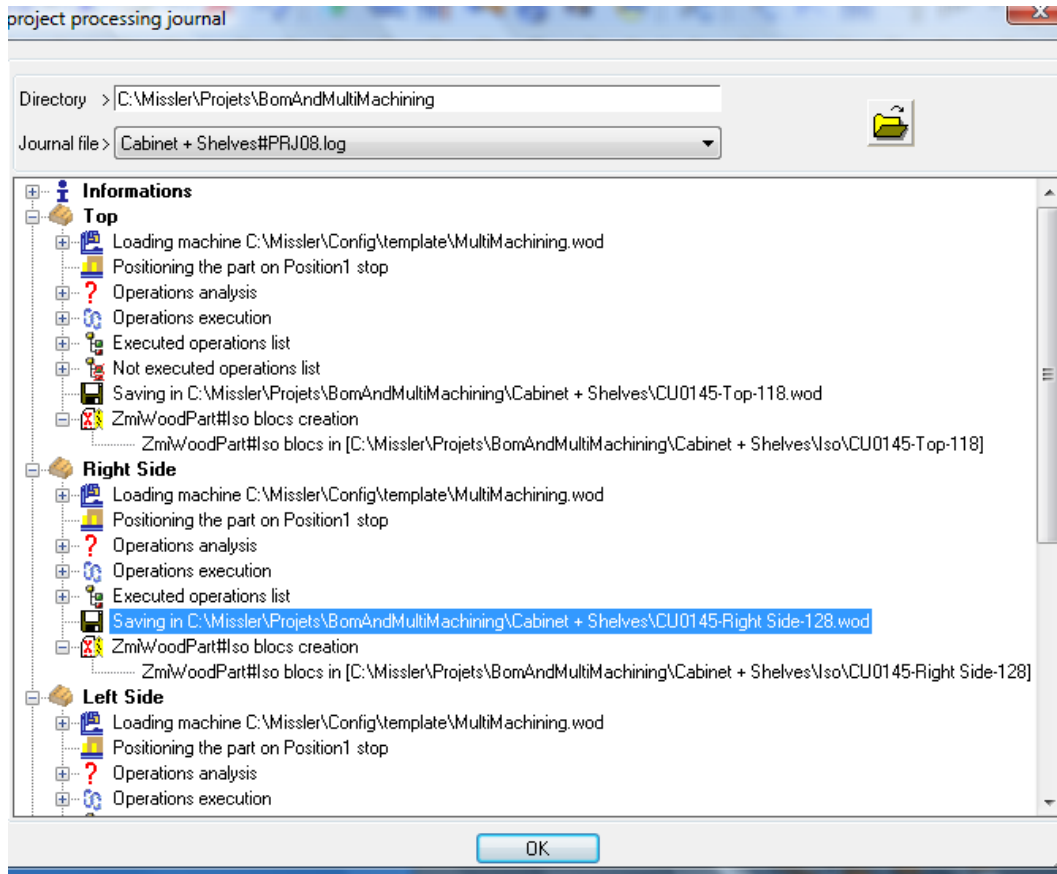
- Choose the document containing the parts for machining;
- Select the mode Positioning, machining and ISO blocks;
- Choose the machine: MultiMachining;
- Select the parts for machining like in the image below:



Validate by **OK**

## TopSolid'WoodCam

A project processing log file will appear with the calculation details of every step of the multi machining.



Using this kind of BOM we can provide a solution to name ISO files using specific configuration:  
< Project number > - < Part designation > - < Unique ID >.

