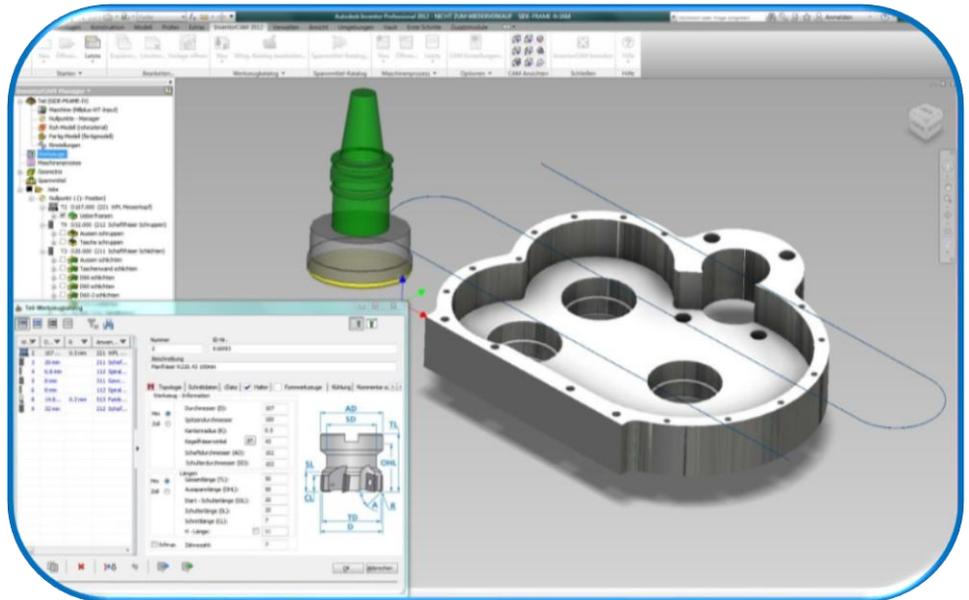


# WT-SolidCAM Interface



Manual

**WinTool Interface 2.1.1 for SolidCAM**

The WT-SolidCAM interface enables you to select tool assemblies from the *WinTool* database and to integrate these in the SolidCAM environment.

The tool assemblies used in the SolidCAM project can be saved in a tool list in the *WinTool* database.

Requirements:

- *WinTool* 2011 Professional or later
- SolidCAM 2013 or later

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## Purpose

The WT-SolidCAM interface enables you to select tool assemblies from the *WinTool* database and to integrate these in the SolidCAM environment.

The tool assemblies used in the SolidCAM project can be saved in a tool list in the *WinTool* database.

## Requirements

- *WinTool* 2011 Professional or later
- SolidCAM 2013 or newer. The special option WinTool must have been enabled in the dongle. We recommend you to install the latest service packs.

## Notes

The set-up is designed for SolidCAM 2016 and copies the sample post-processor / documentation (DPP) in the SolidCAM 2016 Post-processor / Documentation (DPP) folder. For all older versions, the post-processor has to be copied manually, see chapter [SolidCAM 2014, 2013, 2012 and InventorCAM](#) on page 5.

From **SolidCAM 2014 SP3**, DXF contours which start with a curve on the front end (CUT layer) can be processed correctly. In older versions, such contours will be imported incompletely. That concerns lollipop cutters, for example.

## Copyright

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## Installation

### Update

If an existing installation is updated, the files "WT-SolidCAM-Interface.cfg" and "WT-MakeList.cfg" have to be copied in a safe location in the installation directory.

Proceed like during a new installation. Upon completion of the installation, make sure that the interface settings are correct (see page 6).

**Important:** After the installation, "WT-SolidCAM-Interface.cfg" has to be edited. Open the file with a text editor. If it is not already there, add the line "ignore\_TransferredFlag=True" in any place:

Save the change and close the text editor.

```
[WT-SolidCAM-Interface]
# Exchange Path configuration
# -----

OutputPath=
# Default OutputPath is "Exchange" folder in local path

UserModelsPath=
# Default UserModelsPath is "UserModels" folder in local path

SelectCutData=True
# If "True", the interface imports cutting conditions for work
# A selection window opens if there are multiple or no cutting
# If "False" or empty, the first cutting condition is transferr

ignore_TransferredFlag=True

# --- End of configuration file ---
```

### New Installation

The current user requires the necessary Windows administrator rights to install the WT-SolidCAM interface.

Start the file "Setup.exe" from the installation CD or the unpacked zip file you downloaded from the WinTool website.

Please make sure that the special option WinTool was enabled in your SolidCAM dongle license. You find the information in the readme.txt sent with the SolidCAM license:

```
Special options
Editor Mode : 0
No G-Code: 0
GPX : 0
winTool: 1
G-Code Simulation: 0
Education: 0
Iscar tools only: 0
Constant z only : 0
Reduced 3D(No Milling) : 0
Prismatic HSM: 0
```

If *WinTool* is not enabled, you have to request a new license file from your interface supplier. It can be enabled for free if you purchased the WT-SolidCAM interface from a *WinTool* dealer.

### SolidCAM 2015, 2014, 2013 and InventorCAM

In the WT-SolidCAM interface installation directory, there is a directory "Integration Files" with the post-processor files "Millplus-WT-Input.gpp" and "Millplus-WT-Input.mac". In case of a new installation, they have to be copied in the post-processor directory of SolidCAM or InventorCAM.

### SolidCAM 2018

In the WT-SolidCAM interface installation directory, there is a directory "Integration Files" with the documentation (DPP) "WinTool-MakeList\_rev2.DPP". In case of a new installation, they have to be copied in the Post-processor / Documentation (DPP) directory of SolidCAM or InventorCAM.

For details on the post-processor, see chapter "[Adjustments in the post-processors / Documentation \(DPP\)](#)" on page 10.

## Configurations

### WT-SolidCAM Interface Configuration

WT-SolidCAM interface settings can be managed in the configuration window. It is opened via START > Programs > WinTool > WT-SolidCAM Interface > WT-SolidCAM Configuration:

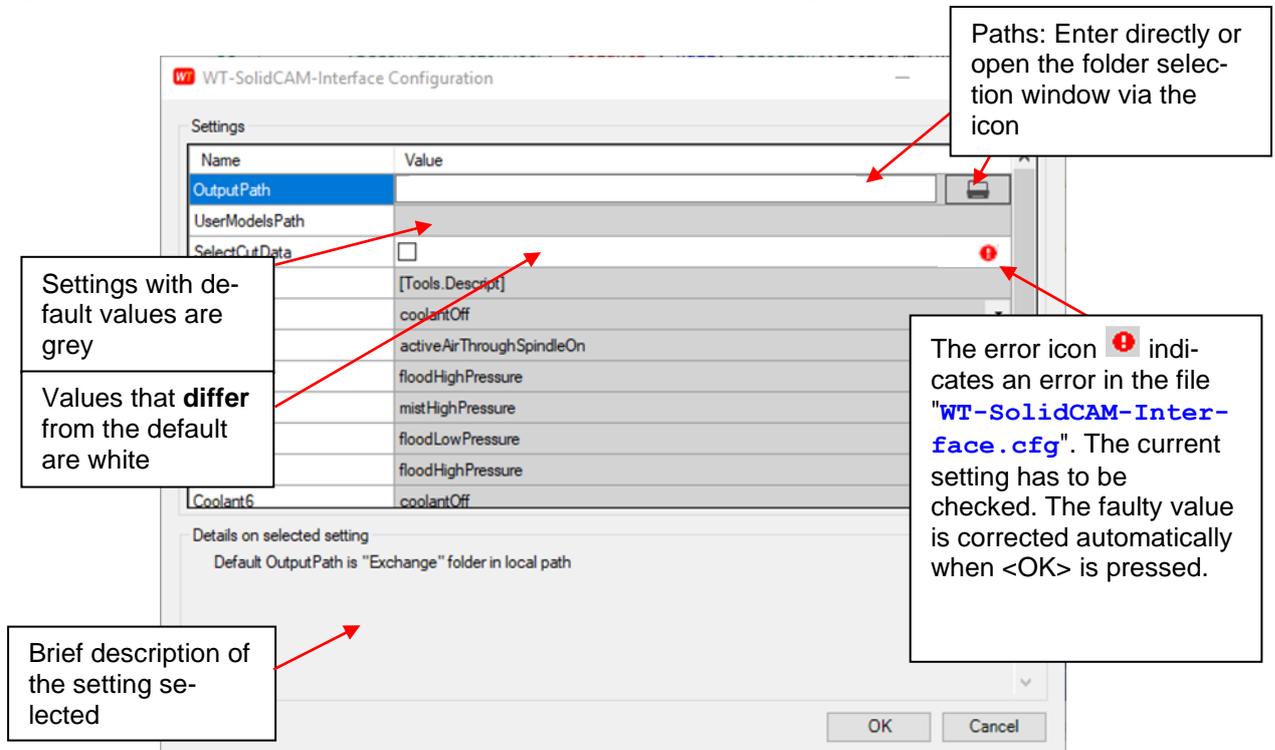


Figure 1 Instructions WT-SolidCAM Interface Configuration Window

All settings are saved in the file **WT-SolidCAM-Interface.cfg** in the installation directory.

### OutputPath

This setting must **not** be changed, it has to remain blank. Then the directory **<WT-SolidCAM interface installation directory>\Exchange** is used. The csv files for feeding into SolidCAM are saved in this directory.

### UserModelsPath

Special contours have to be saved in this directory. Chapter "

Custom Tool Assembly" on page 19 describes the creation of special contours.

Unless otherwise defined, the directory <WT-SolidCAM interface installation directory>\UserModels is used.

**Important:** The directory must have no '\' at the end.

**Notes:**

All users should use a common "UserModelsPath" (e.g. via network drive). The directory should be included in the back-up plan.

In order for the DXF files to be processed by SolidCAM, they are adjusted by the interface and temporarily saved in the subdirectory "Converted" in the "UserModelsPath".

## Coolant0-Coolant9

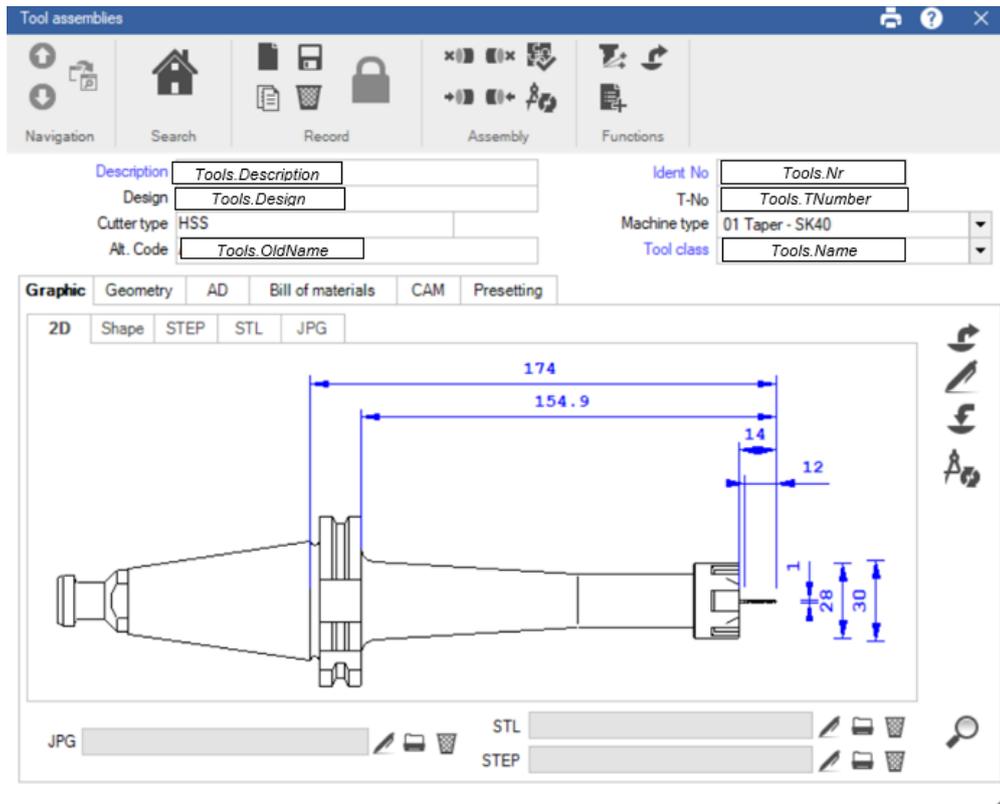
The Interface will assign the 10 WinTool coolants based on the settings, to the SolidCAM coolants.

WinTool Coolant Types			
No.	Description	No.	Description
0	-	5	5 Flood 2
1	1 Air	6	6 On internal
2	2 On	7	7 Mist internal
3	3 Mist	8	8 Flood 1 internal
4	4 Flood 1	9	9 Flood 2 internal

## Description

As in SolidCAM 2.0 and newer the Description is used to better identify tools, the interface makes it configurable how the Description is generated while importing Tool assemblies from WinTool, making imports more flexible. It is up to the user to define a custom naming convention. The interface, however, will provide a default convention which is backward compatible with older SolidCAM Interface installations. With the new SolidCAM Interface 2.0 (and newer) placeholders (put in square brackets) can be used to modify the Tool Name. Most Tool values made in WinTool are supported. A short list of supported placeholders:

*Tools.Nr, Tools.TNumber, Tools.Comment, Tools.Name, Tools.MachineNr, Tools.Descript, Tools.Design, Tools.MaskNr, Tools.ToolWidth, Tools.ToolLength, Tools.OldName, Tools.MDate, Tools.StockState*



Special placeholders with dependent meanings:

- *TNumber* – (without Tools prefix) will become T from Lists if a list is imported, otherwise T from Tools if a tool is imported.

**Important Notes:**

- Placeholders have to be put in square brackets.
- Parameter Description is limited by SolidCAM to 150 characters.

**Example:**

A setting like

[Tools.Nr] - [TNumber] - [Tools.Descript]

could be translated to

616021 - 0 - End Mill HSS 4x19 4FL

if imported via Tool assembly, or to

616021 - 123 - End Mill HSS 4x19 4FL

when imported via Tool list.

**SelectCutData**

When this setting is disabled (**false**), no cutting conditions will be transferred. When this setting is enabled (**true** = default), the cutting condition selection is displayed and a value is transferred.

**Note:** The cutting condition window only opens during import in SolidCAM if at least one cutting condition was created for the *WinTool* tool selected.

The cutting condition selection process is different when a tool assembly, a list or all tools of a holder type is/are imported:

Import	Procedure
<b>Tool assembly</b>	The cutting condition window opens and a cutting condition has to be selected.
<b>Tool list</b>	<p>All cutting conditions assigned to a certain material are transferred.</p> <p>The material is saved in the "General Data" tab in the tool list window.</p> <p>If no material was assigned, the cutting condition window of the first tool assembly opens. The material of the selected cutting condition is saved and used to select the cutting conditions for the remaining tool assemblies.</p> <p>If no cutting condition suitable for the material is available for a tool assembly, the cutting condition window opens and a cutting condition has to be selected.</p>
<b>Machine tools</b>	<p>All cutting conditions assigned to a certain material are transferred.</p> <p>The cutting condition window of the first tool assembly opens. The material of the selected cutting condition is saved and used to select the cutting conditions for the remaining tool assemblies.</p> <p>If no cutting condition suitable for the material is available for a tool assembly, the cutting condition window opens and a cutting condition has to be selected.</p>

## SolidCAM Configuration

### Disable Adapter in Machine Definition

In order to prevent the adding of an additional adapter for the tool assemblies, the tool adapter has to be set to "NONE" in the machine definitions.

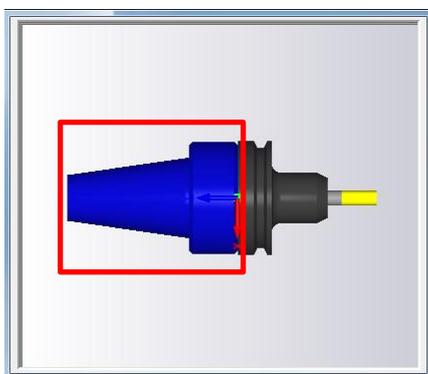


Figure 2 Standard Adapter

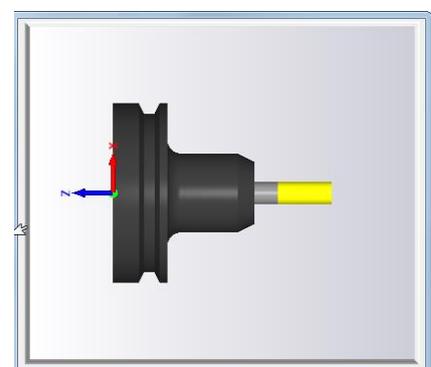


Figure 3 Adapter "NONE"

Start the machine ID editor (`<SolidCAM installation directory>\MachineIdEditor.exe`) and open the machine definition used. Set the "Adapter Type" to "NONE" for the "Stations". Save the file.

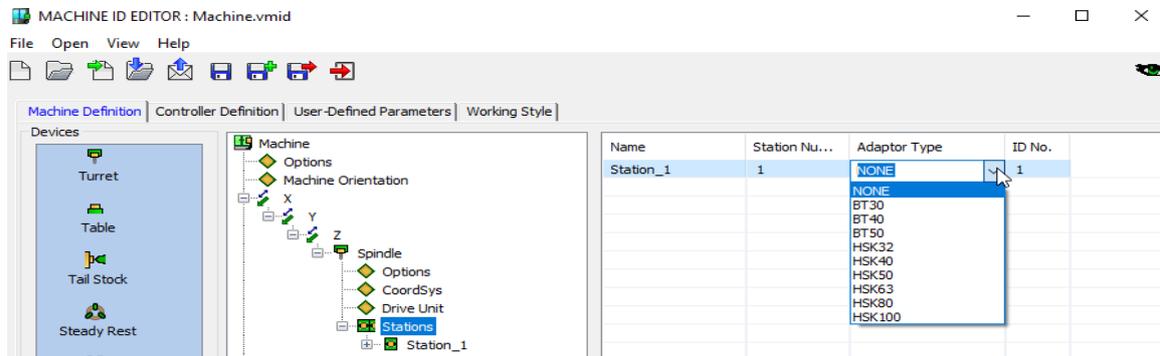


Figure 4 Window Machine ID - Adapter Type NONE

In order for the zero point to be correct, there has to be a tool adapter "NONE" with the holder overhang length 0. The tool adapters can be set in the menu "SolidCAM" > "Tool Library" > "Tool holders".

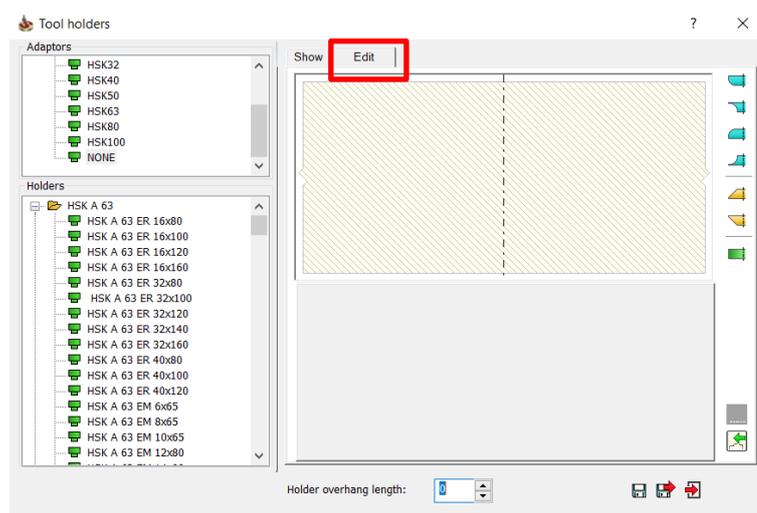


Figure 5 Set Holder Overhang Length

### Set *WinTool* as Default Tool Table

Set the *WinTool* tool table as default in SolidCam. Then the *WinTool* interface is started automatically when the tool import button is pressed. Proceed as follows:

1. Start SolidCAM without loading a project and carry out the following changes in the settings in the tab SolidCAM Part under «CAM Settings...»:

- Set tool table format and tool table to "WinTool":

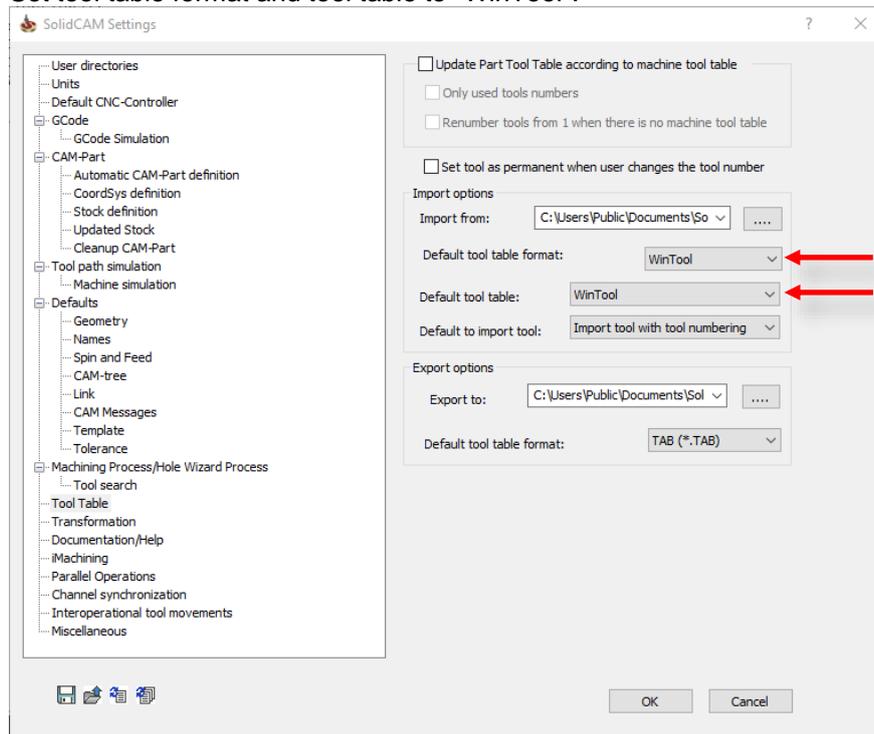


Figure 6 Set Table and Format to WinTool

## Adjustments in the Post-processors / Documentation (DPP)

After installation, the post-processors / documentation (DPP) can be edited in addition to support the *WinTool*/list creation with *WTMakeList.exe* (see separate manual) as well.

The post-processor file [Millplus-WT-Input.gpp](#) (SolidCAM 2016 and earlier) supplied by the WT-SolidCam interface / documentation (DPP) file [WinTool-MakeList\\_rev2.DPP](#) (SolidCAM 2018) comprises functions which generate an exchange file used by *WTMakeList.exe*. During the WT-SolidCAM interface installation, the post-processor is copied in the SolidCAM Post-processor folder (see figure below).

### Procedure

Make sure that the current Windows user has write permissions for the post-processor file. Open the directory where your SolidCAM post-processors are stored. It is visible in the SolidCAM settings (by default, it is in the directory [<SolidCAM installation directory>\Gpptool](#) or [C:\Users\Public\Documents\SolidCAM\<SolidCAM Version>\Gpptool](#) at SolidCAM 2020+).

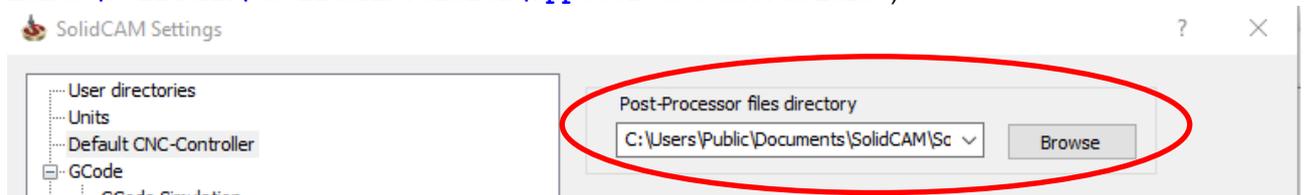


Figure 7 Open the Directory for SolidCAM post-processors

When the setting is greyed out, you have to close all open projects first.

### SolidCAM 2016 and older

Open the file [Millplus-WT-Input.gpp](#) with a text editor and copy the functions [@udr\\_wintool\\_array](#) and [@udr\\_wintool\\_export](#) in the post-processor to be edited.

The variable `strWinToolMakeListPath` in the function `@udr_wintool_export` determines the directory in which the exchange file for WTMakelist.exe will be saved. By default, it is `OutputPath`, e.g. `'C:\\Program Files (x86)\\WinTool\\WT-SolidCAM-Interface\\Exchange'`

**Note:** When the path is changed, select `'C:\\Program Files (x86)\\...` instead of `'C:\\Programs (x86)\\...`

Now the functions have to be called up:

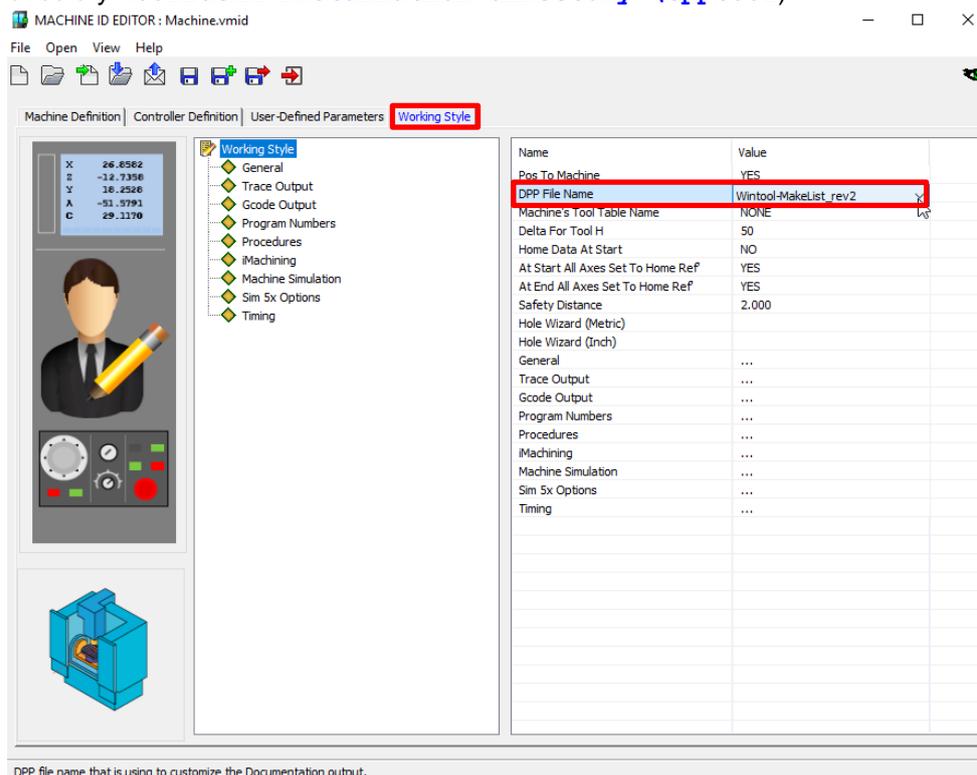
- Call up `@udr_wintool_array` as last statement in the function `@def_tool`
- Call up `@udr_wintool_export` as last statement in the function `@end_of_file`

If `@def_tool` and `@end_of_file` are not available, they have to be defined, e.g.:

```
@def_tool
  call @udr_wintool_array
endp
```

### SolidCAM 2018

Start the machine ID editor (`<SolidCAM installation directory>\\MachineIdEditor.exe`) and open «Working Style», then select, in the line «DPP File Name», the file of WinTool which was copied in the directory `<SolidCAM installation directory>\\Gpptool`)



DPP file name that is using to customize the Documentation output.

**Note:** To make the starting of WTMakelist.exe easy, it is best to pin it to the task bar. You find the WTMakelist.exe in the WT-SolidCAM interface installation folder, e.g.: `C:\\Program Files (x86)\\WinTool\\WT-SolidCAM-Interface`

Simply select the file with a right click and select the function "Pin to Taskbar".

## WinTool Configuration

### Assignment of Tool Classes

To enable assignment of the values in *WinTool* to the SolidCAM tool types, the respective suitable SolidCAM tool type is assigned in the *WinTool* tool classes (see examples in the *WinTool* default database)

The assignment is carried out in the field "Description" for each tool class. The window is opened in *WinTool* under Tools > Settings > "Class":

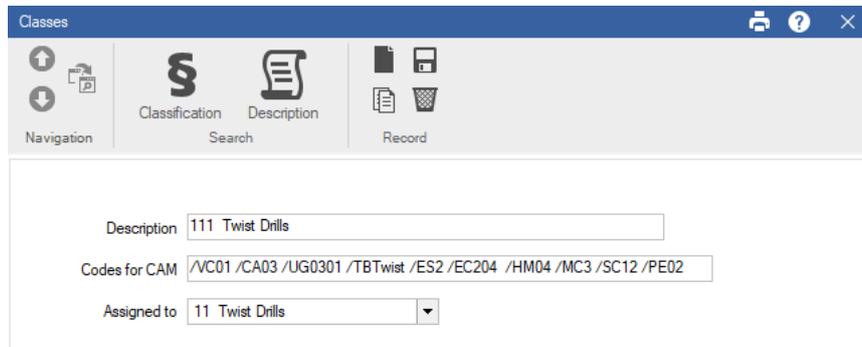


Figure 8 Assignment of Tool Classes

Note: If there is no assignment in a classification, a dialogue window which enables assignment opens automatically when the interface is used (see further below).

### Supported SolidCAM Tool Types

Description in SolidCAM	Description in Interface	Type Configuration in WinTool
	Ignore	/SC00
End mill	EndMill	/SC01
Rough mill (Bull Mill)	RoughMill	/SC02
Copy mill	BallNose	/SC03
Face mill	FaceMill	/SC04
Dove tail mill	DoveTailMill	/SC05
Taper mill	TaperMill	/SC06
Slot mill	SlotMill	/SC07
Ball-nose cutter	LollipopMill	/SC08
Engraving Tool	Engraving	/SC09
Center drill	CenterDrill	/SC10
Spot drill	SpotMill	/SC11
Drill	Drill	/SC12
Chamfer drill	ChamferMill	/SC13
Tap drill	TapMill	/SC14
Reamer	Reamer	/SC15
Insert drill	Bore	/SC16
Thread mill	ThreadMill	/SC17
Taper thread mill	ThreadTaperMill	/SC18
Measuring probe	Probe	/SC19
Internal turning	InternalGeneral	/SC30
External turning	ExternalGeneral	/SC31
Internal grooving	InternalGrooving	/SC32
External grooving	ExternalGrooving	/SC33
Internal threading	InternalThreading	/SC34
External threading	ExtrenalThreading	/SC35

Tool assemblies assigned the class "Ignore" will not be imported. It is intended for items not to be imported in SolidCAM, e.g. collet chucks.

## Comment Fields

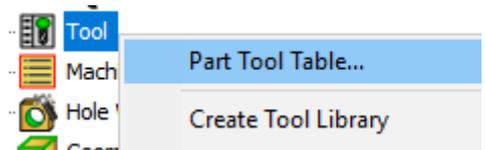
The SolidCAM fields comment 1-5 are filled with data of the tool assembly as follows:

1	Tools.Design (design)
2	Tools.OldName (old code)
3	Tools.MSign (changed by)
4	Tools.ReplacedBy (replaced by)
5	Tools.MDate (modification date)

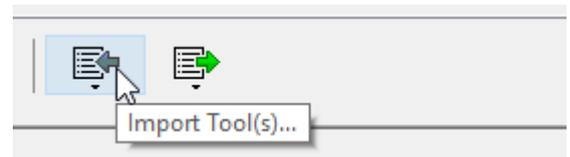
## Use

### Importing Tools in SolidCAM

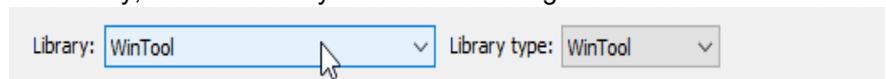
In order to import tool assemblies from *WinTool*, the tool table has to be opened first:



Click on "Import".



If the interface is not started automatically, select the entry "WinTool" once again from the list in the new window:



**Note:** If *WinTool* is not shown in the combo box, carry out the steps described in chapter [WinTool is not displayed in the tool table](#)

When the *WinTool* interface starts, the following selection window is displayed:

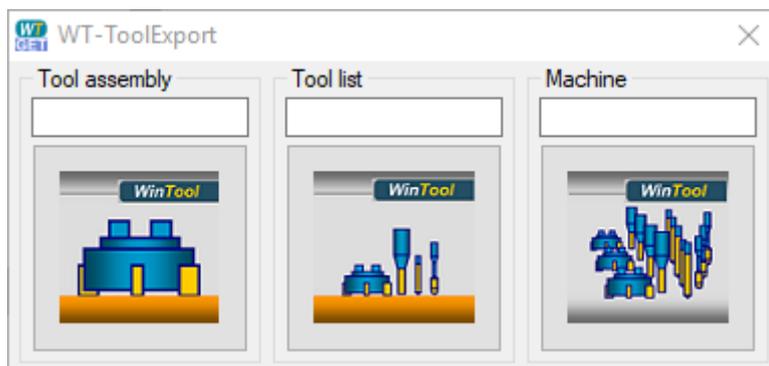


Figure 9 Menu WT-ToolExport

Here, you can now enter a tool number or use the icon to start the selection window for tool assemblies, a tool list or "all tools of a machine type".

The selection window for tool assemblies offers you numerous search filters and sorting options.

Click on the classification selection icon to filter  the tools based on the *WinTool* classification:

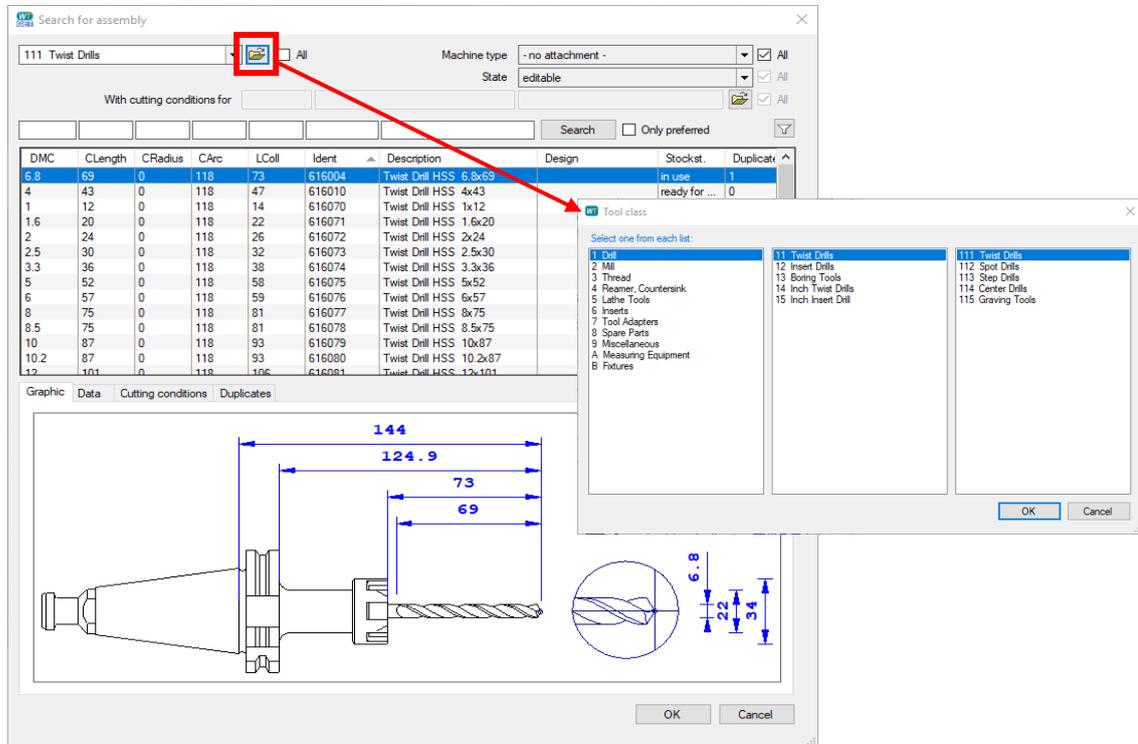


Figure 10 Filter Tool Assemblies

Please note also the filter options by holder and machine type, approval status and cutting conditions and suitability based on material:

The function  enables the search filter combo boxes for the individual columns:

DMC	CL...	CR...	CArc	LColl	Ident	Description	Design	Stoc...	D...
6.8	69	0	118	73	616004	Twist Drill HSS 6.8x69		in use	1
4	43	0	118	47	616010	Twist Drill HSS 4x43		ready for ...	0
1	12	0	118	14	616070	Twist Drill HSS 1x12			
1.6	20	0	118	22	616071	Twist Drill HSS 1.6x20			
2	24	0	118	26	616072	Twist Drill HSS 2x24			
2.5	30	0	118	32	616073	Twist Drill HSS 2.5x30			
3.3	36	0	118	38	616074	Twist Drill HSS 3.3x36			
5	52	0	118	58	616075	Twist Drill HSS 5x52			
6	57	0	118	59	616076	Twist Drill HSS 6x57			
8	75	0	118	81	616077	Twist Drill HSS 8x75			
8.5	75	0	118	81	616078	Twist Drill HSS 8.5x75			
10	87	0	118	93	616079	Twist Drill HSS 10x87			
10.2	87	0	118	93	616080	Twist Drill HSS 10.2x87			
12	101	0	118	106	616081	Twist Drill HSS 12x101			

Figure 11 Filter Options

You can also use the characters > , < , >= , <= for filtering:

>10	
DMC	CL...
10.2	87
12	101
14	108
16	120
12	101

Figure 12 Filter Functions

In the tabs "Data" and "Cutting conditions", you can look at additional information about the tool assembly:

The screenshot shows the 'Data' tab of the tool assembly configuration. It includes several input fields for tool parameters:

- Diameter (D): 10.2
- Dia step 1 (Da): 0
- Collision Dia (Dx): 34
- Predrilling Dia (Dp): 0
- Shank Dia (Ds): 0
- Depth of Cut Rad (Xc): 0
- Cutting width (B): 0
- Length of Cut (Lc): 87
- Length (La): 0
- Collision Length (Lx): 93
- Length: 164
- Width: 0
- Radius (r): 0
- Side angle (s): 0
- Nose angle (v1): 118
- Stage 2 angle (v2): 0
- Stage 3 angle (v3): 0
- Pitch (p): 0
- Inclination (g): 0

Below the input fields is a table titled 'Overview Data Tool Assemblies':

Nbr	UNr	Descript	Design	MID	L	D
1	1157	Collet Chuck ESX/ER20x71		Product-1157		
1	1124	Twist Drill HSS 10.2x87		Product-1124		
1	1008	Pull Stud	DIN 69872 A for SK 40	Product-1008		
1	1145	Collet ER20/11-10	double slotted	Product-1145		

Figure 13 Overview Data Tool Assemblies

If you have enabled the option **SelectCutData** in the WT-SolidCam interface configuration, the cutting condition window opens after selection of a tool. Select the cutting condition to be exported or create another one and then select it.

Confirm the selection with "OK" to import. If you select "Cancel", no cutting condition will be transferred with the current tool. If you select "Abort", the complete process is cancelled and no values will be imported in SolidCAM.

The 'Assembly cutting conditions' window displays a table of cutting conditions for the tool assembly '616080 Twist Drill HSS 10.2x87':

DMC	StNr	ap	ae	Dia	z	Vc	fz	S	F	Type	Coolant type	P	T	Remark
111	1.0711	0	5.1	103	1	0	0	0	0	Finishing	-	0	0 s	
211	1.0301	0	5.1	105	1	0	0	0	0		-	0	0 s	
411	1.4000	0	5.1	14	1	0	0	0	0		-	0	0 s	
611	0.6010	0	5.1	3	1	0	0	0	0	Roughing	-	0	0 s	

Below the table, there are input fields for parameters: ap, ae, D, z, Vc, fz, S, F, P(kW), T. A dropdown menu shows '111 Free cutting-steel up to 500 N/mm²'. A 'Remark' field contains 'Finishing'.

Figure 14 List Cutting Conditions Tool Assemblies

If the assignment of the *WinTool* class with the SolidCAM tool type is missing for a tool, the following selection window opens:

The 'Select Style' dialog box shows a list of tool types on the left and a 3D model of the tool on the right. The message reads: 'The current tool doesn't have a valid ToolStyle assigned. Please select one from the List below.' The tool is identified as '616094 end mill edging R220.69 100mm'. The 3D model shows dimensions: 11.0, 90.9, 3.5, 1.5, and 100. At the bottom, there are 'OK', 'Cancel', and 'Abort' buttons, and a checkbox for 'Store in assigned Tool Class'.

Figure 15 Assignment Tool Assembly to SolidCAM Tool Type

Check "Store in assigned Tool Class" to save your selection in the *WinTool* class configuration permanently (see further explanations in chapter "WinTool Configuration" on page 13).

- "OK" confirms the selection.
- "Cancel" stops this tool import.
- "Abort" stops the complete transfer (e.g. of a list).

**Note:** If the type "Ignore" is selected, all tool assemblies which were assigned to this class will not be imported (e.g. clamping or measuring equipment).

Now the tool assembly is on the SolidCAM "Tool List" list. It still has to be imported into SolidCAM in order to be used in the project. This is done with a right click via "Import All tools" -> "with tool numbering"

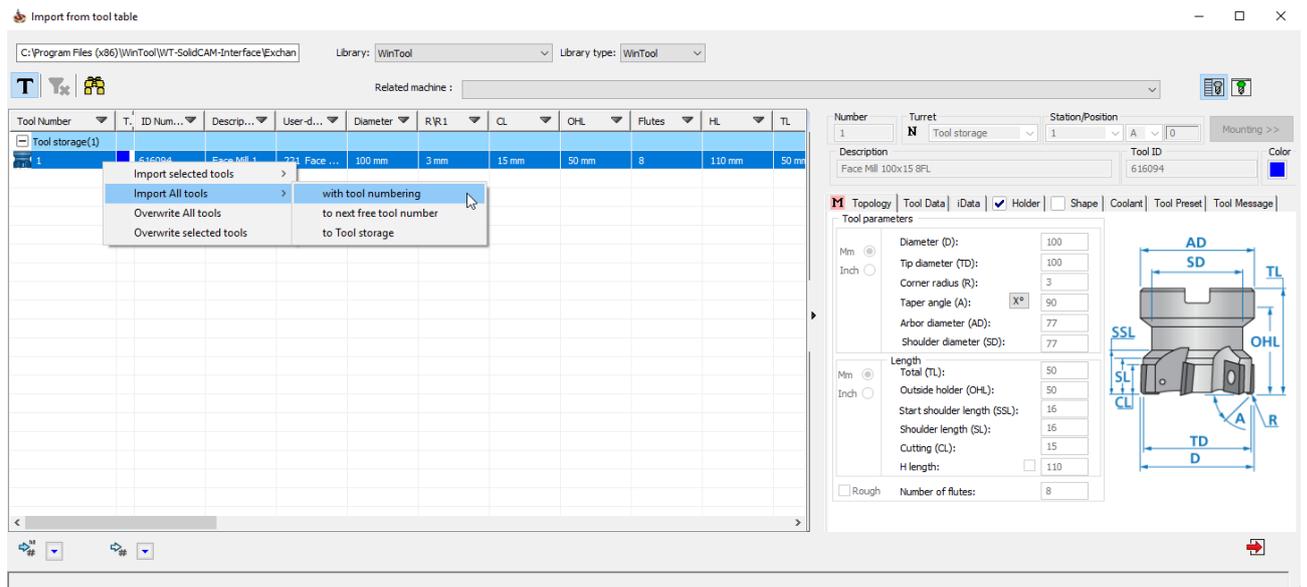


Figure 16 Import in SolidCAM for Project Use

Please confirm with OK then and close the window. Now the imported *WinTool* tool assembly can be used in the jobs.

## Import as Custom Tool

If the parameters of a SolidCAM tool type are not sufficient to correctly represent a tool assembly (e.g. Corner Round End Mill), the cutter shape of the DXF contour can be imported in SolidCAM. It is imported if:

- The "User Model" is enabled with SolidCAM in *WinTool* for the tool assembly in the tab "CAM" :

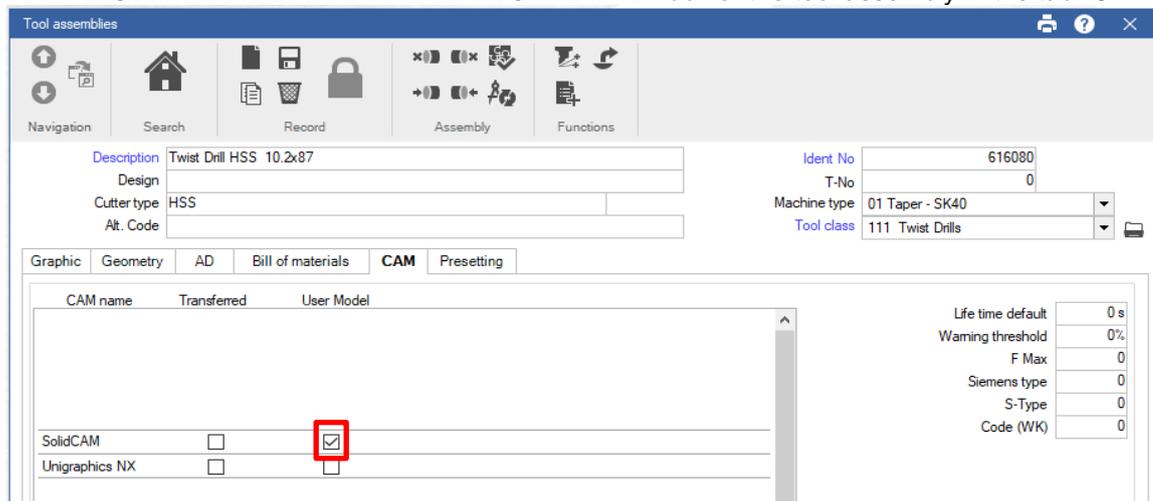


Figure 17 Import the DXF Contour

- The DXF contour is saved in the directory [UserModelsPath](#) and can be edited; for more detailed information, see the chapter [Special Contour for Tool Assembly](#)
- Or if a DXF contour was defined for the name-giving component of the tool assembly (*only WinTool 2013 or later*)

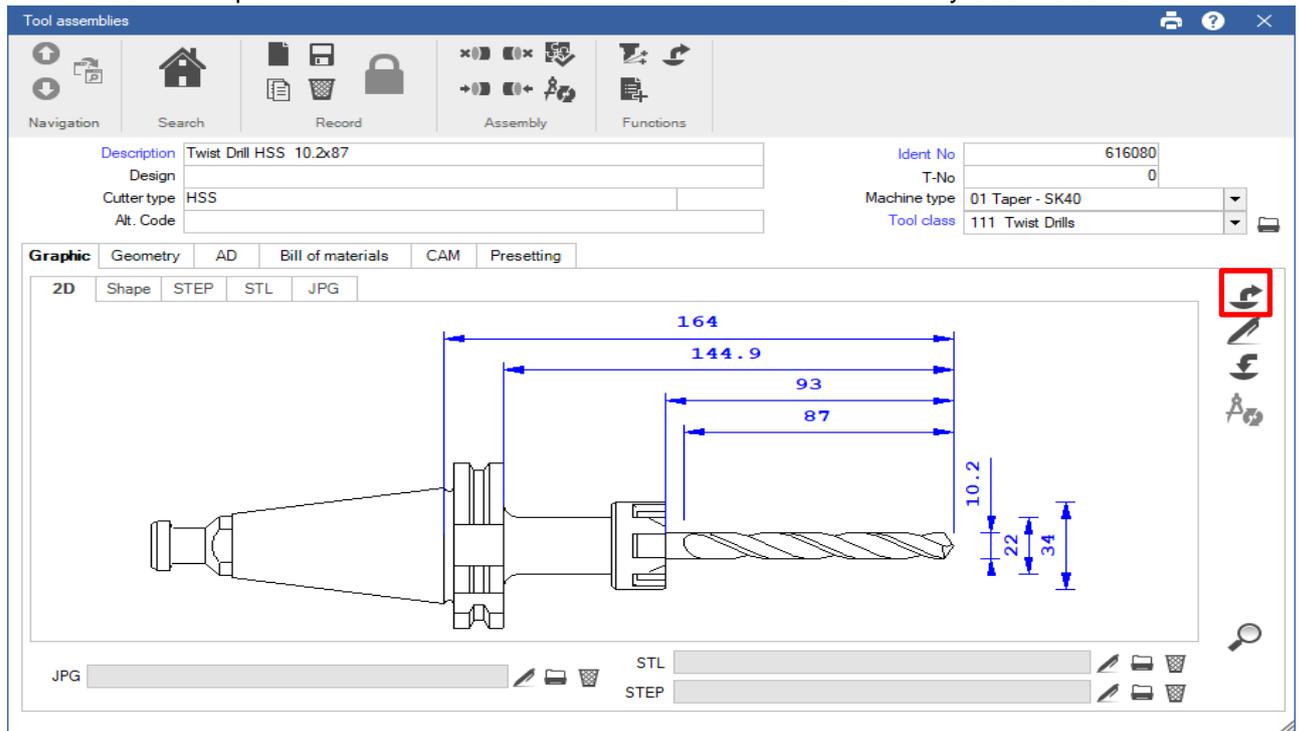
### Important

When you want to use the DXF of WinTool, you have to:

- Import the tool in SolidCAM before enabling the «User Model» setting

Or

- Use the Export button in WinTool and then save the DXF in the directory [UserModelsPath](#):



### Note

Tool assemblies of the SolidCAM tool type "measuring probe" ("PROBE") will not be imported as custom tools.

## Custom Tool Assembly Contour

For each tool assembly, a DXF contour which will be transferred in SolidCAM can be created manually.

Create a DXF contour of the tool assembly with the Shape module. It serves as a template. Modify this contour in "Vector" until it matches the tool assembly. Only the layers CUT, NOCUT and SHANK may be used:

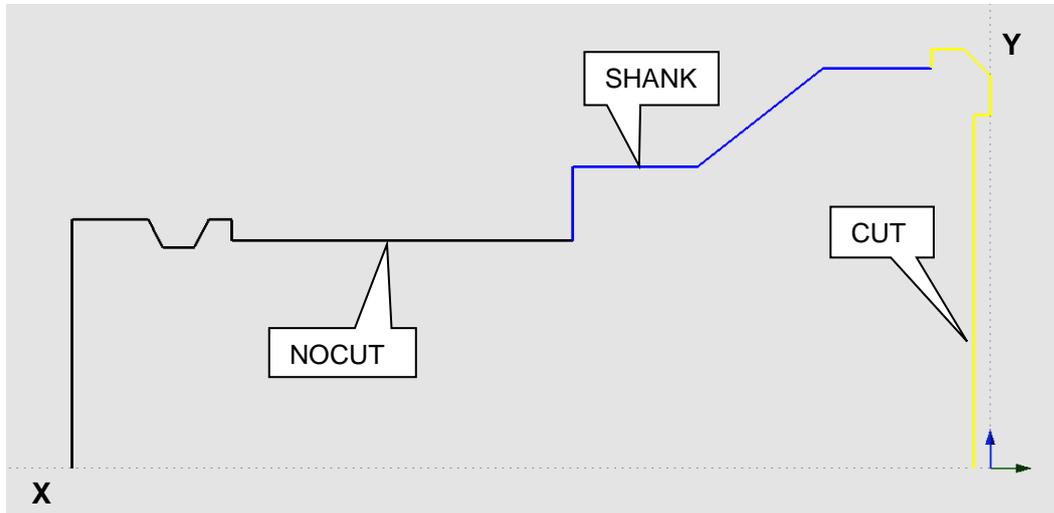


Figure 18 Manual Tool Contour DXF

The contour must form a closed line and must only line up with the X-axis at the beginning and at the end.

**Note:**

- If the contour has an undercut on the front side, it will be automatically removed by the interface. When creating the special contour, make sure not to draw an undercut.
- From **SolidCAM 2014 SP3**, DXF contours starting with a curve on the front side can be processed correctly. In older versions, such contours will be imported incompletely. That concerns lollipop cutters, for example.

When the contour is complete, it has to be saved in [UserModelsPath](#) under the name "Tool assembly ID no".dxf (e.g. 616089.dxf). If the tool assembly was already imported with the WT-SolidCAM interface before, there is already a DXF file. It has to be overwritten.

Now the contour has to be enabled in *WinTool* for the tool assembly in the tab "CAM" in the line "SolidCAM" with the "User Model" box.

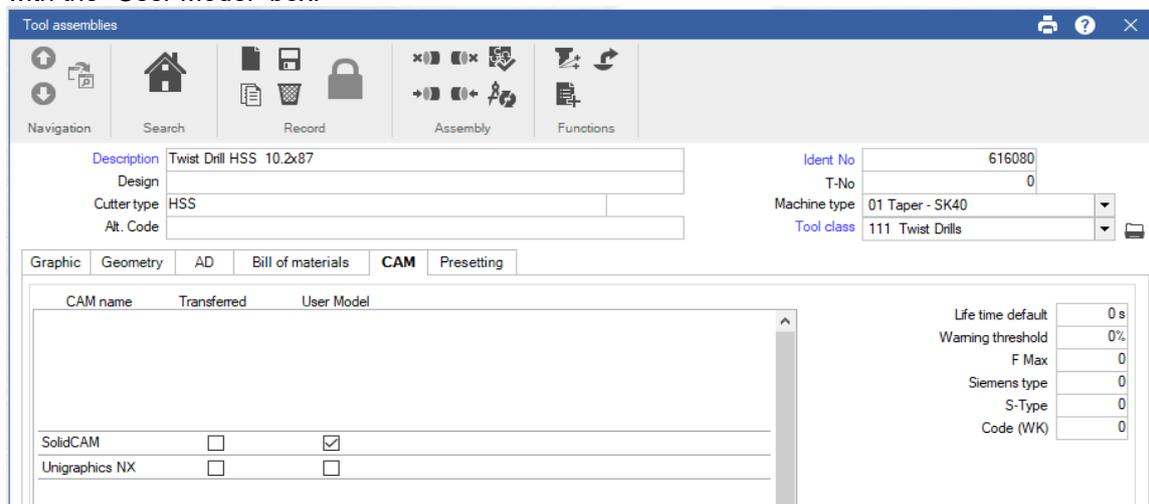


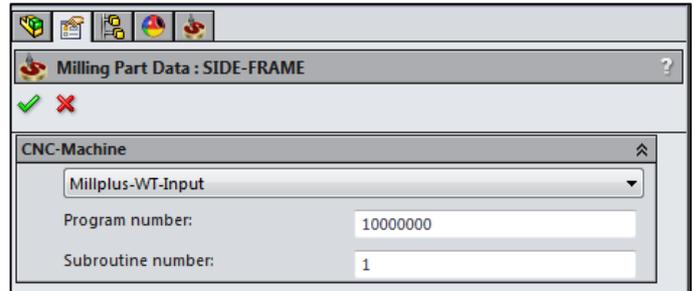
Figure 19 Enable the Contour in SolidCAM

Then save the change. If the line "SolidCAM" is missing, SolidCAM first has to be enabled in the *WinTool* settings > "CAM Settings".

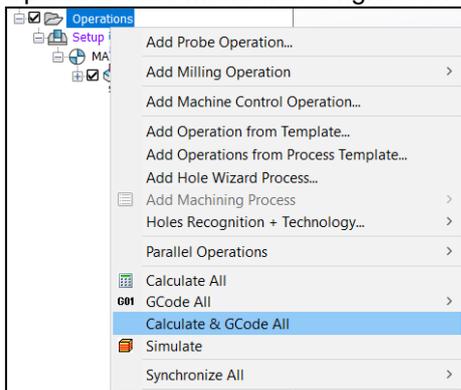
## Export Tool List

You can automatically save all *WinTool* tool assemblies used in the SolidCAM jobs in a *WinTool* tool list if the post-processor selected was configured accordingly (see chapter [Adjustments in the Post-processors](#) **Error! Bookmark not defined.**).

In the sample data, the post-processor "Millplus-WT-Input.gpp" is supplied. Open the part data window with a double click and then select it. Save the change.



Open the Jobs menu with a right click and select "Calculate & GCode All" to generate the exchange file.



Close the exchange file and start WTMakeList.exe via the link in the menu START > Programs > WinTool > WT-SolidCAM Interface > WT-MakeList (or via the task bar if you followed the installation recommendations in chapter [Adjustments in the Post-processors / Documentation \(DPP\)](#))

Select the exchange file "WT-INPUT.tls" saved in the **OutputPath** (see paragraph "OutputPath" on page 6)

**Note:** If it is missing, create a system variable "WTMakeListPath" and set the **OutputPath** as value. Then the file "WT-INPUT.tls" can be selected directly.

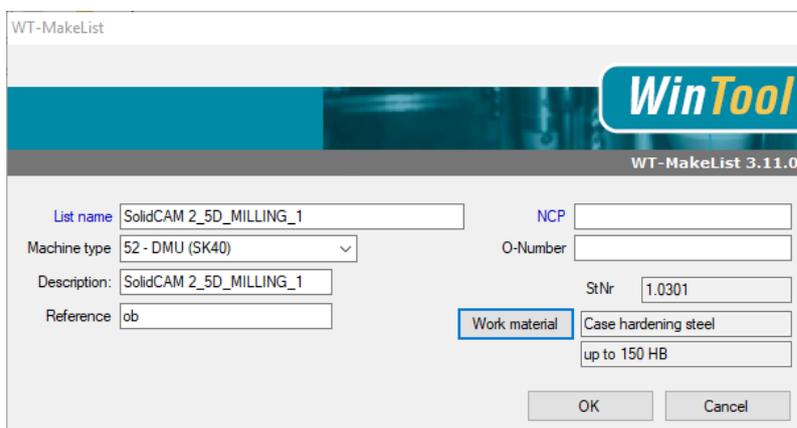


Figure 20 Entry of a List Name for the Tool List

Enter a list name, add the remaining data as required and click on OK to create the tool list in *WinTool*. Then you can open the new tool list in *WinTool*.

## Troubleshooting

### **WinTool is not displayed in the tool table**

Check the following items and test after each item whether the entry is shown:



- The *WinTool* license has to be enabled in the SolidCAM dongle (see SolidCAM > License info). If that is not the case: Contact the interface supplier and request a new license file.
- All users require a write permission for the directory `<SolidCAM installation directory>\PlugIns\ToolTable\`. Contact the system administrator, if required, to have it set up. Restart SolidCAM to validate the new settings. If it still fails to work after that, SolidCAM has to be started as administrator.
- The setting `OutputPath` has to be blank.  
If that is not the case:  
Correct that by deleting the path via START > Programs > WinTool > WT-SolidCAM Interface > WT SolidCAM Configuration.  
Then start START > Programs > WinTool > WT-SolidCAM Interface > WT-ToolExport and select a tool assembly to update the path in the registry.  
Close SolidCAM. Delete the file `wintool.cfg` in the directory `<SolidCAM installation directory>\PlugIns\ToolTable\`.  
Restart SolidCAM.

### **Tool Shape Still Incomplete or Wrong**

From **SolidCAM 2014 SP3**, DXF contours which start with a curve on the front end (CUT layer) can be processed correctly. In older versions, such contours will be imported incompletely. That concerns lollipop cutters, for example.

From **SolidCAM 2016**: If the contour has an undercut on the front side, it will not be displayed. This is why the interface removes it automatically.

If it is a special contour, you have to check whether it fulfils the requirements. For more information, see chapter [Special Contour for Tool Assembly](#) on page 16.

## Turning in SolidCAM

### **Axis**

Turning tool import into SolidCAM and alignment within SolidCAM currently has some limitations. Therefore the interface currently natively only supports straight turning tools and turning tools with +90° or -90° angles, but the user may align the holder / cutting edge within SolidCAM after import.

### **Inserts**

Inserts within SolidCAM are currently limited to very specific normed types. Inserts with special dimensions or special geometry might not be imported correctly.

## Software Structure

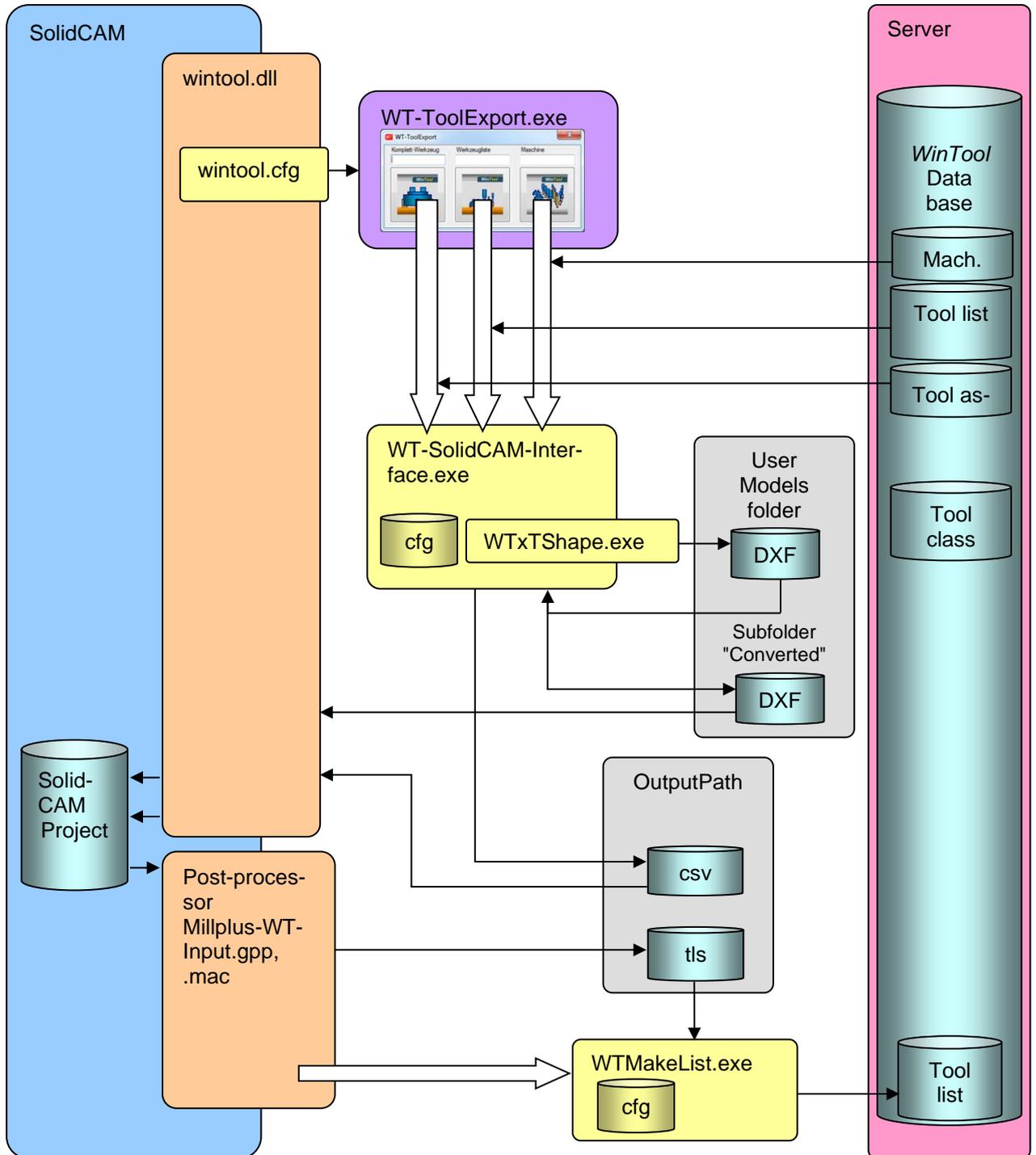


Figure 21 WinTool Software Structure

## History

### **Version 2.1.1**

- ✓ Compatible with WinTool 2020.3.1
- ✓ Cutting Conditions Import optimization when selecting a Single Cutting Condition

### **Version 2.1**

- ✓ Compatible with WinTool 2020.3
- ✓ General Tool Import optimization
- ✓ Cutting Conditions Import optimization

### **Version 2.0**

- ✓ Compatible with WinTool 2019.1
- ✓ Compatible with SolidCAM 2020.1.
- ✓ Inch Tools are now correctly imported
- ✓ Conical transition from mill to the shank is now correctly displayed
- ✓ New configuration option "Description"
- ✓ Improvement on the Import of Cutting Conditions
- ✓ Improvement on Coolant support:
  - ✓ New configuration option "Coolant0-Coolant9"
- ✓ New flexible License system
- ✓ Support of Turning Tools:
  - Tool type "Internal turning/InternalGeneral" (/SC30) added
  - Tool type "External turning/ExternalGeneral" (/SC31) added
  - Tool type "Internal grooving/InternalGrooving" (/SC32) added
  - Tool type "External grooving/ExternalGrooving" (/SC33) added
  - Tool type "Internal threading/InternalThreading" (/SC34) added
  - Tool type "External threading/ExternalThreading" (/SC35) added

### **Version 1.12**

- ✓ Additionally compatible with SolidCAM 2018.
- ✓ MakeList 3.11.0 added
  - MakeList now supports file versions 2.3
  - Optional support of several D and H values
- ✓ WinTool Tool export changes:
  - Shows the assembly state of the tools in the selection list
  - Display of available tool duplicates in the CAM tool selection

### **Version 1.11**

- ✓ Additionally compatible with SolidCAM 2016.

### **Version 1.10**

- ✓ Additionally compatible with SolidCAM 2015.
- ✓ Adjustment on the face mill import
- ✓ Corrections on the post-processor for list export
- ✓ Correction during import of thread mills: number of teeth and gradient

### **Version 1.9**

- ✓ Additionally compatible with SolidCAM 2014
- ✓ Tool type "Probe/measuring probe" (/SC19) added
- ✓ Correction during import of tool assembly holders

## Version 1.8

- ✓ Compatible with *WinTool* 2011-2014
- ✓ Import as custom tool when User model enabled or contour DXF defined
- ✓ Corrections during import of the shoulder length during milling
- ✓ Correction during import of the taper mill angle with the face mill type
- ✓ Latest version of WT-MakeList version integrated, for details, see WT-MakeList Manual
- ✓ Latest version of WT-ToolExport integrated:
  - ✓ Selection of the filter "Preferred only" is saved
  - ✓ Better readability with high DPI settings
  - ✓ Compatible with *WinTool* 2014
- ✓ Individual tool import: ID no. is imported as NC number if "T-No=Ident No" is enabled in the machine assigned and T-number = 0.

## Version 1.7

- ✓ Compatible with *WinTool* 2013, 2012 and 2011
- ✓ Compatible with SolidCAM 2013, 2012, 2011 and InventorCAM 2013
- ✓ Option for defining a special contour for each tool assembly (page 19)
- ✓ Latest version of WT-MakeList integrated. For details, see WT-MakeList-Manual

## Version 1.6

- ✓ Compatible with *WinTool* 2012 and SolidCAM 2012
- ✓ Corrections during import of taper mill, slot mill, dove tail mill, chamfer drill
- ✓ Adjustment during import of the tool parameter "shaft diameter"
- ✓ Support of the tool parameters "shoulder diameter" and "start shoulder length"
- ✓ Latest version of WT-ToolExport integrated:
  - ✓ Height of search window adjustable
  - ✓ Compatible with *WinTool* 2012

## Version 1.5

- ✓ Compatible with *WinTool* 2011 and SolidCAM 2011
- ✓ Latest versions of WT-ToolExport and WTMakeList integrated
- ✓ New tool type "Ignore" (/SC00) added
- ✓ Improved troubleshooting

## Version 1.4.3

- ✓ Installation of the interface via set-up programme
- ✓ New: WinTool 2010 must have been started when interface is used
- ✓ New WT-ToolExport module integrated
- ✓ WT-MakeList version 3.7 integrated
- ✓ Interface settings can now be configured via window
- ✓ Support of CAPTO recordings
- ✓ Type taper mill (/SC06) is imported correctly
- ✓ Holder component of a tool assembly is determined automatically if not available
- ✓ New cutting condition import process (if setting SelectCutData is enabled)
- ✓ Improved processing of class configuration

## Version 1.4.2

- ✓ New field "UseDxfShapeCutting" added to csv. The value is fixed to "1".
- ✓ SolidCAM integration added

## Version 1.4.1

- ✓ Compatible with *WinTool* 2009 and *WinTool* 2010

## Version 1.4

- ✓ Fields "Description" and "Message1-5" in the csv are filled with WinTool fields Descript, Design, Old-Name, MSign, ReplacedBy and MDate.
- ✓ Splitpoint is generally set to 0.
- ✓ "FType" is set to "F". Base value for "Feed" fields is F from the cutting condition. For the types CENTER DRILL, SPOT DRILL, DRILL, CHAMFER\_DRILL, TAP, REAMER, BORE, "FeedZ" and "FeedZPenetration" will not be divided in half.
- ✓ The *WinTool* tool assembly number in the format "#KWZNR" is appended to "ToolName" und "Holder-Name".
- ✓ "ToolUserType" is filled with the class name of the tool assembly.

## Version 1.3.1

- ✓ Correct handling of "Splittpoint"
- ✓ Cutting condition data selectable

## Version 1.3

- ✓ #2140: Change ToolTypes according to Spec of SC (Schumacher, RK, 07/09/09) (SC09: ENGRAVING TOOL is not the right tool type (Illig, RK, 24/07/09))
- ✓ #2141: Parameter "/M 1" generates a .csv with a line that is there twice. (OB, 01/09/09)

## Version 1.2

- ✓ #2038: SC15: Calculate ShoulderLength (Illig, 17/07/09)
- ✓ #2039, #2040, #2041, #2042: Change of the tool types:  
BALL-NOSED → BALL NOSE MILL, BULL MILL → BULL NOSE MILL,  
TAPER → TAPER MILL, SLOT → SLOT MILL, LOLLIPOP → LOLLIPOP MILL,  
ENGRAVING → ENGRAVING TOOL, CHAMFER\_DRILL → CHAMFER\_DRILL

## Version 1.1

- ✓ #2021: Name correction of the interface
- ✓ #2022: Use neck diameter of the name-giving component as ArborDiameter, if available (Illig, 09/07/09)
- ✓ #2023: SC05: "Angle" = 180° - E1 (Illig, 09/07/09)
- ✓ #2024: SC09: "TipDiameter" has to be greater than 0 (Illig, 09/07/09)
- ✓ #2025: SC10: "Angle" = E1 (Illig, 09/07/09)
- ✓ #2026: SC10: "TaperAngle" = E2 (Illig, 09/07/09)
- ✓ #2027: SC17: "Diameter" and "CuttingLength" added (Illig, 09/07/09)

## Version 1.0.0

- ✓ First version

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