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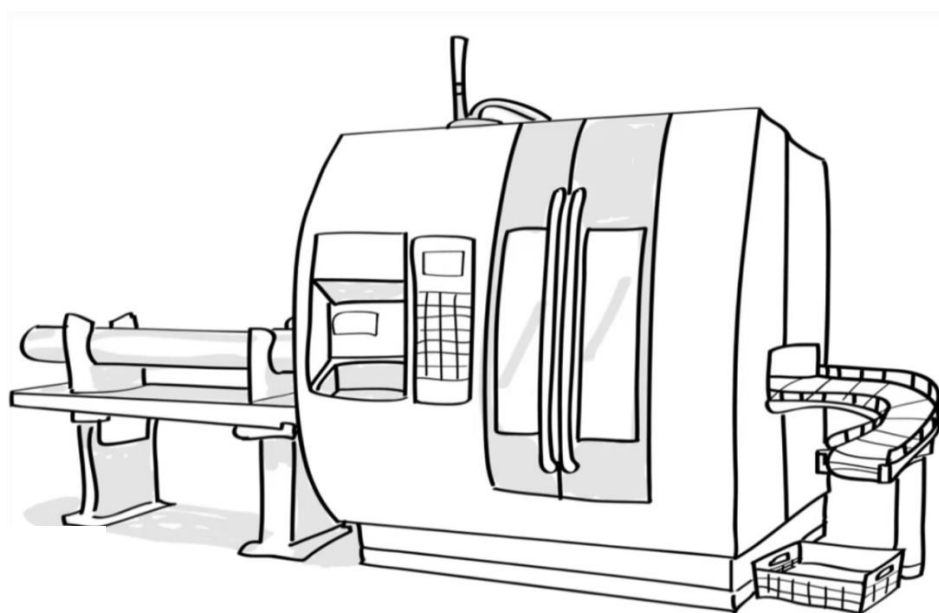
PRODUCTEC

LOGICIELS ET SERVICES DE PROGRAMMATION CNC

WinTool-GibbCAM Interface

User's manual

PPe – V0.11



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Index

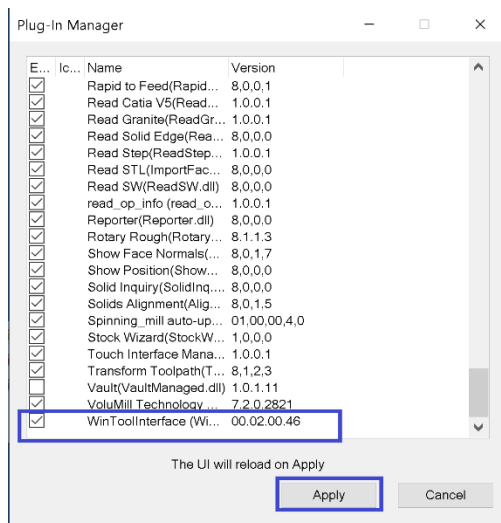
1	WinTool-GibbsCAM Interface	3
1.1	Configuration	3
1.1.1	Data paths	3
1.1.2	Solids preferences (tool holders)	3
1.2	Restrictions	4
1.3	Tool import - GET	4
1.4	Tool list Export - PUT	8
2	Installation	8

1 WinTool-GibbsCAM Interface

The WinTool-GibbsCAM Interface is a bridge to import tool definitions from WinTool into GibbsCAM and export tool lists back. There are no changes requested in the post.

1.1 Configuration

First activate the plugin using the Plug-In Manager in GibbsCAM:



The plugin uses a configuration file located at:

C:\Users\Public\Documents\WinTool-GibbsCAM-InterfaceApp\WinTool-GibbsCAM-InterfaceApp.cfg

1.1.1 Data paths

The paths OutputPath and UserModelsPath can be left empty, as the default values work well. The path User3DModelsPath should be set to the location WinTool is configured to save the user models (stl and step files). Warning! There are 2 different paths, watch out to configure the correct one.

For example:

```
5 [WinTool-GibbsCAM-InterfaceApp]
6 OutputPath=
7 # Default OutputPath is "Exchange" folder in local path
8
9 UserModelsPath=
10 # Default UserModelsPath is "UserModels" folder in local path
11
12 User3DModelsPath=C:\Users\Public\Documents\WinTool 2020.2\DE\UserData\3D\Tools
13
```

1.1.2 Solids preferences (tool holders)

The preferred type of solids to be imported from WinTool can be configured. The solid types available are step and stl. When nothing is specified, the plugin prefers stl over step. This is

because the step files have to be merged into a single solid and that not always works perfectly.

The configuration entry is `User3DPreferenceOrder=step,stl`

For example:

```
15 User3DPreferenceOrder=step,stl
16 # Order of preference of the 3d solid file formats
```

1.2 Restrictions

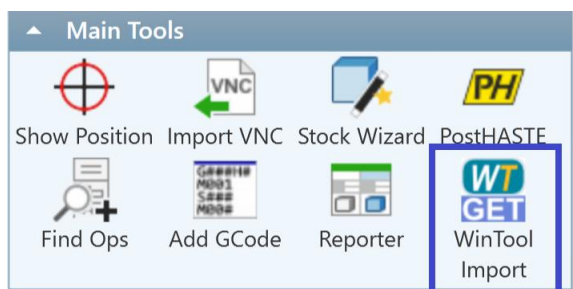
Some tools do not have an exact matching definition in GibbsCAM, so they are imported as 2D form tools. For example, a conic milling tool cannot be represented.

1.3 Tool import - GET

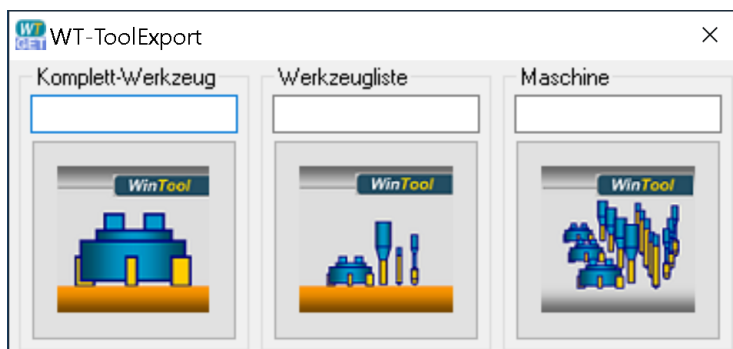
WinTool must be running when using the interface.

If an imported tool must be modified (for example the stickout length), the change must be made in WinTool and the tool must be imported again.

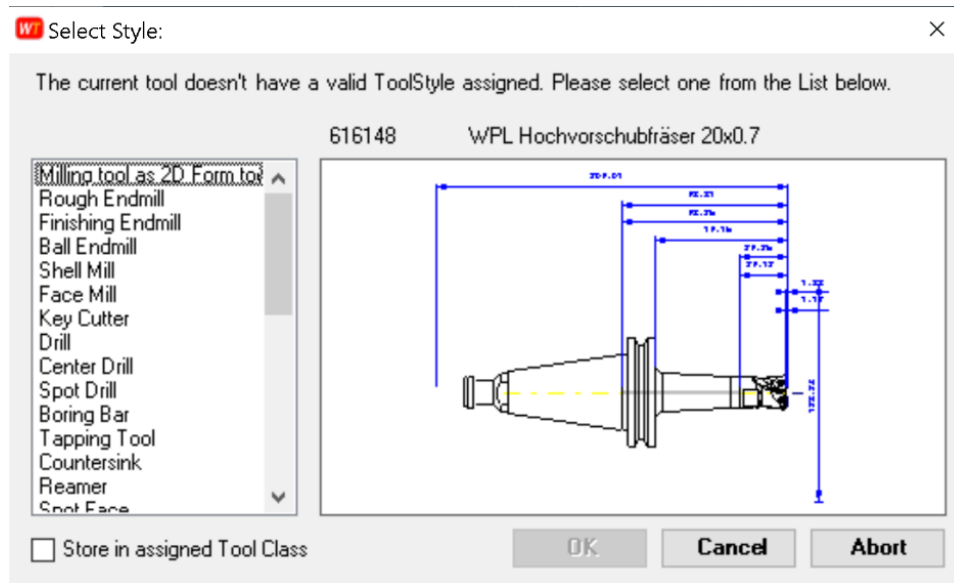
Start an import using the icon in the plugins menu:



The following WinTool window will open, to let you choose which tool or tool list you wish to import:



Each tool must be assigned a class in Gibbs, this is done in the following dialog.



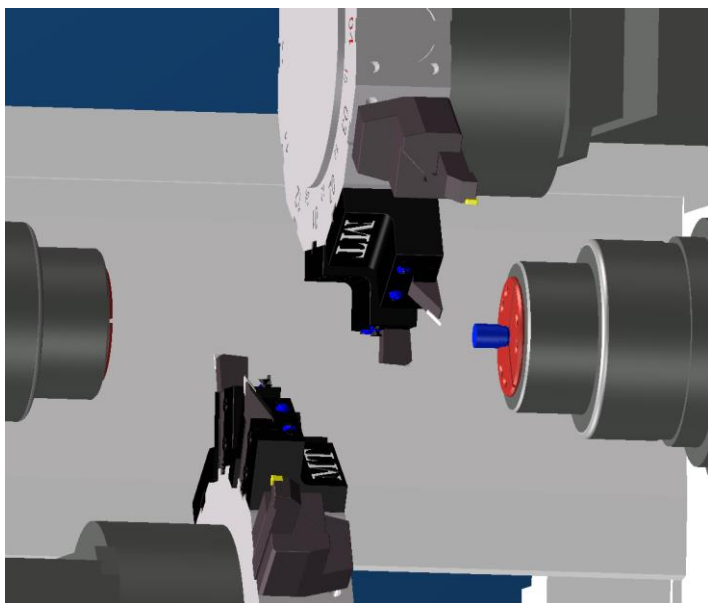
All the existing tool types in GibbsCAM are displayed in the list, except for the ISO inserts that are grouped together. The plugin will determine the actual kind of insert automatically (so a 35° insert should be classified as “ISO insert”). The checkbox in the lower left corner will tell WinTool to store the class for the specific tool. This can be changed later in WinTool in case of mistake : See the WinTool embedded help, chapter 4.8.2.

After choosing the tool(s) to import, depending on the machine configuration, the tools have to be assigned to their destination positions. The following window is displayed:

Tool positions					
Tool description	Toolgroup		Position		For WP
636111 - Drehwerkzeug SCLCL 2020 K09	Revolver 1 1-12	-	1	-	Hauptspindel
636106 - Drehwerkzeug SCLCR 2020 K09	Revolver 1 1-12	-	1	-	Hauptspindel
636107 - Drehwerkzeug SCLCL 2020 K09	Revolver 1 1-12	-	1	-	Hauptspindel
636105 - Stechhalter rechts 20x20	Revolver 1 1-12	-	1	-	Hauptspindel
636110 - Drehwerkzeug SVJCR 2020 K11	Revolver 1 1-12	-	1	-	Hauptspindel
636112 - Drehwerkzeug SVJCL 2020 K11	Revolver 1 1-12	-	1	-	Hauptspindel
636114 - Spiralbohrer HSS 6x57	Revolver 1 1-12	-	1	-	Hauptspindel
636113 - Drehwerkzeug SRDCN 2020 K08	Revolver 1 1-12	-	1	-	Hauptspindel
636109 - Bohrstange A20Q SDQCR 07	Revolver 1 1-12	-	1	-	Hauptspindel














The dialog lets you choose the tool position for each tool. The “For WP” column orients the tool (as defined in WinTool) for a preferred workpiece using the Coordinate System defined in the MDD.





















For example, in the following image, the two selected tools (yellow inserts) are the same tool from WinTool, but imported on different revolvers and for the two different spindles:



1.3.1 GibbsCAM Codes

The following CAM codes are used for the communication with WinTool.

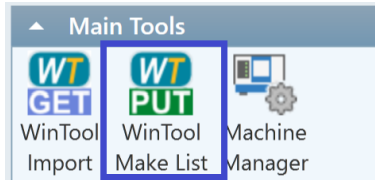
GibbsCAM tool type		WinTool tool type
Milling tool as 2D Form tool		/CI69
Rough Endmill		/CI50
Finishing Endmill		/CI51
Ball Endmill		/CI52
Shell Mill		/CI53
Face Mill		/CI54
Key Cutter		/CI55
Drill		/CI56
Center Drill		/CI57
Spot Drill		/CI58
Boring Bar		/CI59
Tapping Tool		/CI60
Countersink		/CI61

Reamer		/CI62
Spot Face		/CI63
Fly Cutter		/CI64
Single-point Thread Mill		/CI65
Back Boring Tool		/CI66
Rigid Tap		/CI67
RoundOver		/CI68
Full Profile Thread Mill		/CI71
Lollipop		/CI72
Convex Tip Endmill		/CI73
Barrel Mill		/CI74
Dovetail Mill		/CI75
Tangent Mill		/CI79
Tapered Barrel Mill		/CI80
ISO insert		/CI201
Grooving		/CI210
Cut Off		/CI211
Groove Style Thread		/CI212
Laydown Style Thread		/CI213
35° V Profile		/CI214

1.4 Tool list Export - PUT

A list of tools in the current part can be exported back to WinTool. WinTool must be running when using the interface.

To start exporting the tools imported from WinTool as a list, click the PUT icon:



WinTool will open a dialog to specify the needed options. After clicking OK, all the tools that were imported from WinTool will be referenced in the new list.

The cut times from the programmed operations are exported to WinTool for each tool, so to have these data correct in WinTool, the export of a tool list is best made after the programming of the part.

2 Installation

The installer provided by Productec will setup all the files as needed; It requires administrator rights.

There are 3 installation folders:

- C:\Program Files\Productec\WinTool-GibbsCAM-InterfaceApp : executable files for the WinTool integration
- C:\Program Files\Common Files\GibbsCAM Shared\Plugins\Productec : GibbsCAM plugin files
- C:\Users\Public\Documents\WinTool-GibbsCAM-InterfaceApp : configuration files and by default also exchange files