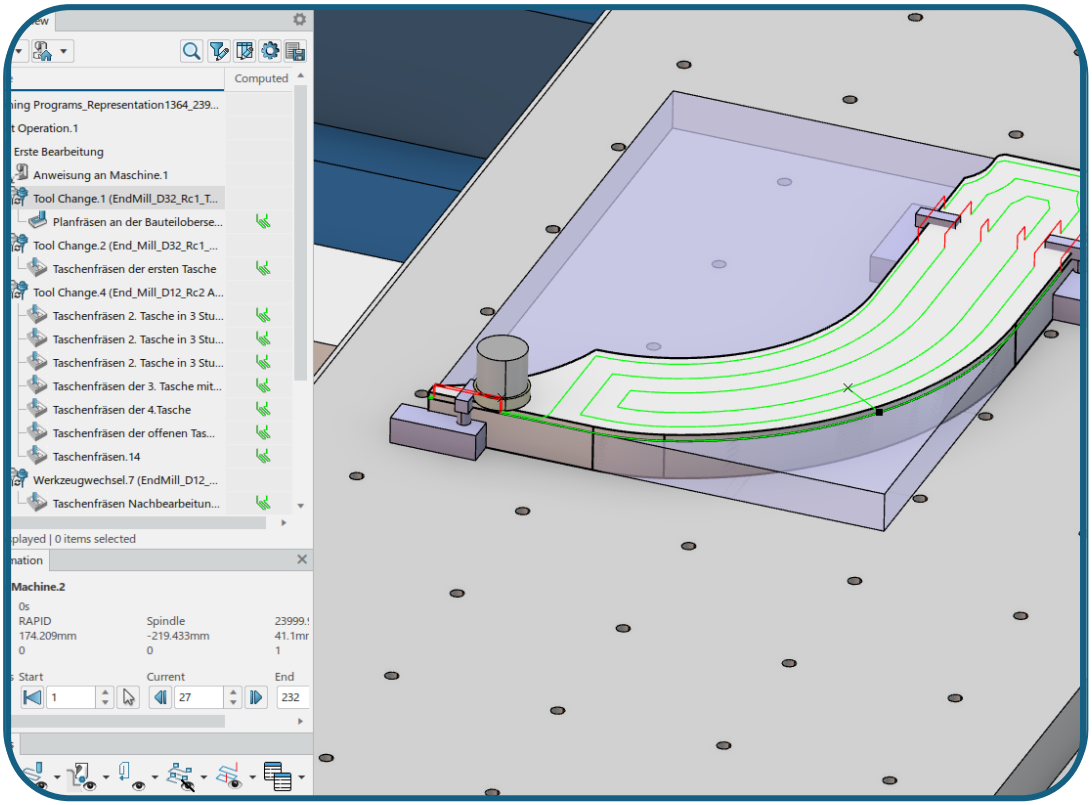
WT-3DEXPERIENCE Interface



Manual

WinTool Interface 1.0.0 for 3DEXPERIENCE

The WT-3DEXPERIENCE-Interface enables the user to select and transfer tool assemblies from the WinTool database to the 3DEXPERIENCE environment.

Requirements

- *WinTool* 2018 Professional or later
- 3DEXPERIENCE

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Summary

Purpose

The WT-3DEXPERIENCE-Interface enables the user to select and transfer tool assemblies from the *WinTool* database to the 3DEXPERIENCE environment. The cutting conditions are transferred from the *WinTool* technology library.

Requirements

This Interface requires *WinTool* Professional 2018 or newer and 3DEXPERIENCE.

Supported Tool Types

All milling tool parts except some tool types which are implemented parametrically. Transfer of turning tools are not supported.

Copyright

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Installation

Directory Structure

WT-3DEXPERIENCE-Interface has a clear separation of program files and user data.
All user data is centrally placed the [Public Documents]\WT-3DEXPERIENCE-Interface folder:

User data	New location
Default location of UserModels folder	[Public Documents]\WT-3DEXPERIENCE-Interface\UserModels
Default location of Exchange folder	[Public Documents]\WT-3DEXPERIENCE-Interface\Exchange
Configuration file: WT-3DEXPERIENCE-Interface.cfg WT-MakeList.cfg	[Public Documents]\WT-3DEXPERIENCE-Interface

Note: [Public Documents] on Windows 10/11 is located in C:\Users\Public\Documents\

Interface Installation

Before installing the WT-3DEXPERIENCE-Interface, please install *WinTool* Professional. Please run WinTool Professional once prior to continuing the installation (configuration data used by the interface will be published to the system registry during this operation).
Note: *After updating WinTool from an older version with a software patch, please make sure to have removed the write protection of the copied files.*
Make sure you have administrator rights to install the software on your PC.
Run setup.exe to install the WT-3DEXPERIENCE-Interface software.

3DEXPERIENCE Integration

To be able to customize 3DEXPERIENCE tabs make sure that an application is open, and tabs are visible.

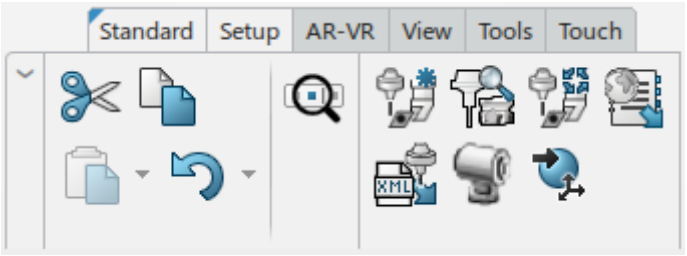


Figure 1 3DEXPERIENCE Tabs and Panels

Assign Macro into 3DEXPERIENCE

Click "Tools" then the unfold button and click on "Macros".

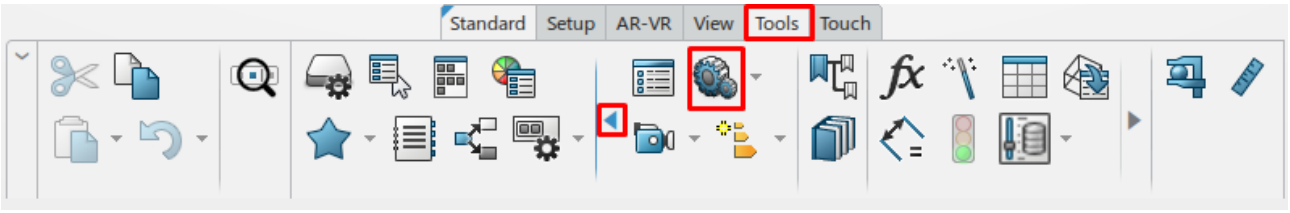


Figure 2 Tool tab and its panels

In Macros popped up window you must assign the Macro library. Click on "Macro libraries".

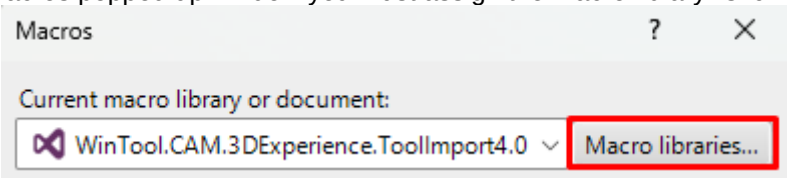


Figure 3 Macro libraries window

Make sure that Library type selection is: PLM VSTA projects and click on "Add existing library".

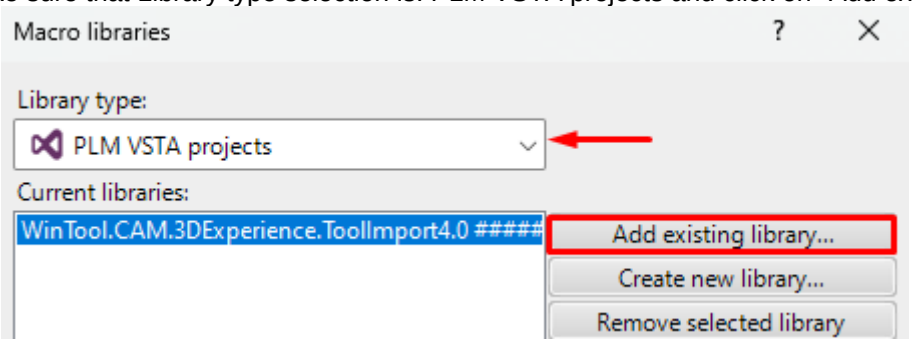


Figure 4 Libraries manage window

- Use the search bar on top by searching for Macro and click on the ToolImport4.0 Macro

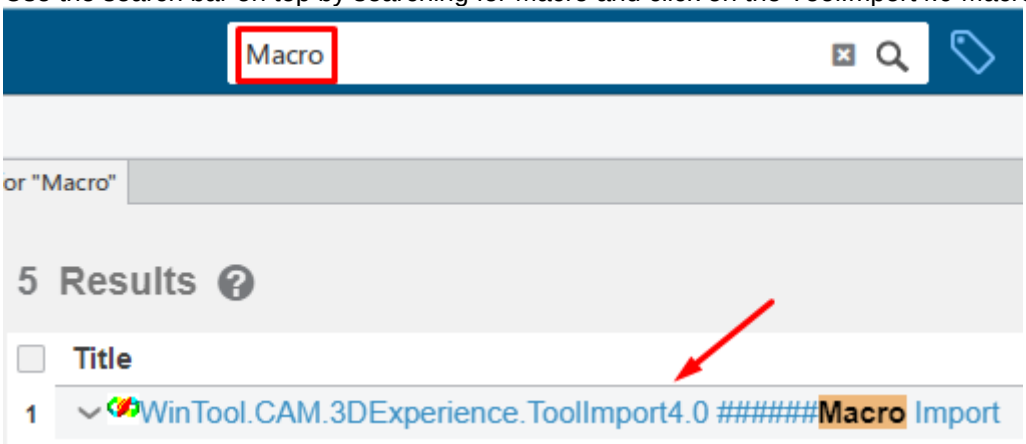


Figure 5 3DEXPERIENCE search feature

- Once it's done you will return to the Available macros window and you must see the macro: MacroImportTools. If so, close the window.

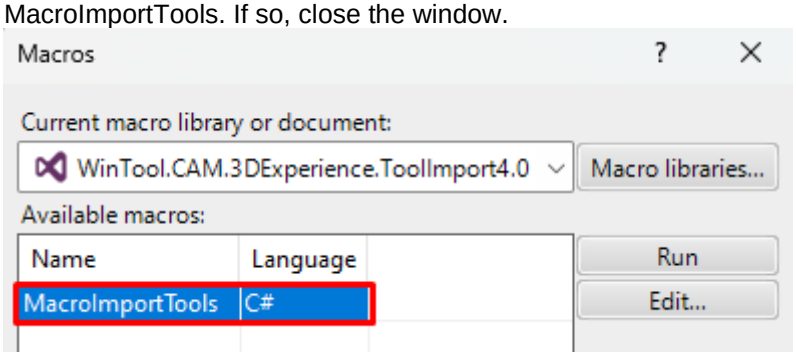


Figure 6 Macros window with available macro listed

Add Get Button

Right click in the grey space in panels and click "Customize Mode".

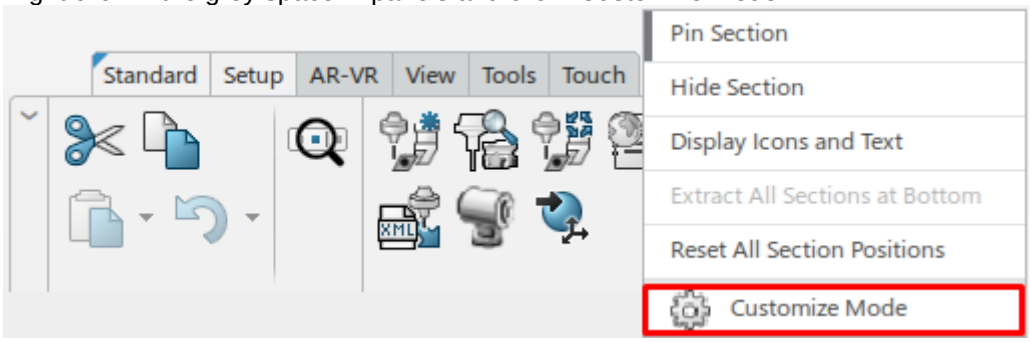


Figure 7 Tabs and Customize Mode option

Right click again and select "Add commands".

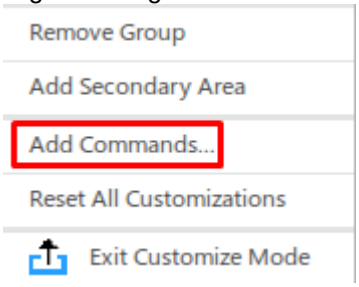


Figure 8 Add Commands option

- In the Customize window scroll down to "Macros" category and the "WT-Get-Tool" will appear in the list. Click on "Show Properties" to make sure the title is correct and assign the corresponding Icon. Assign the Icon "`I_WinToolToolImport.bmp`" to call the "`ToolImportMacro`".

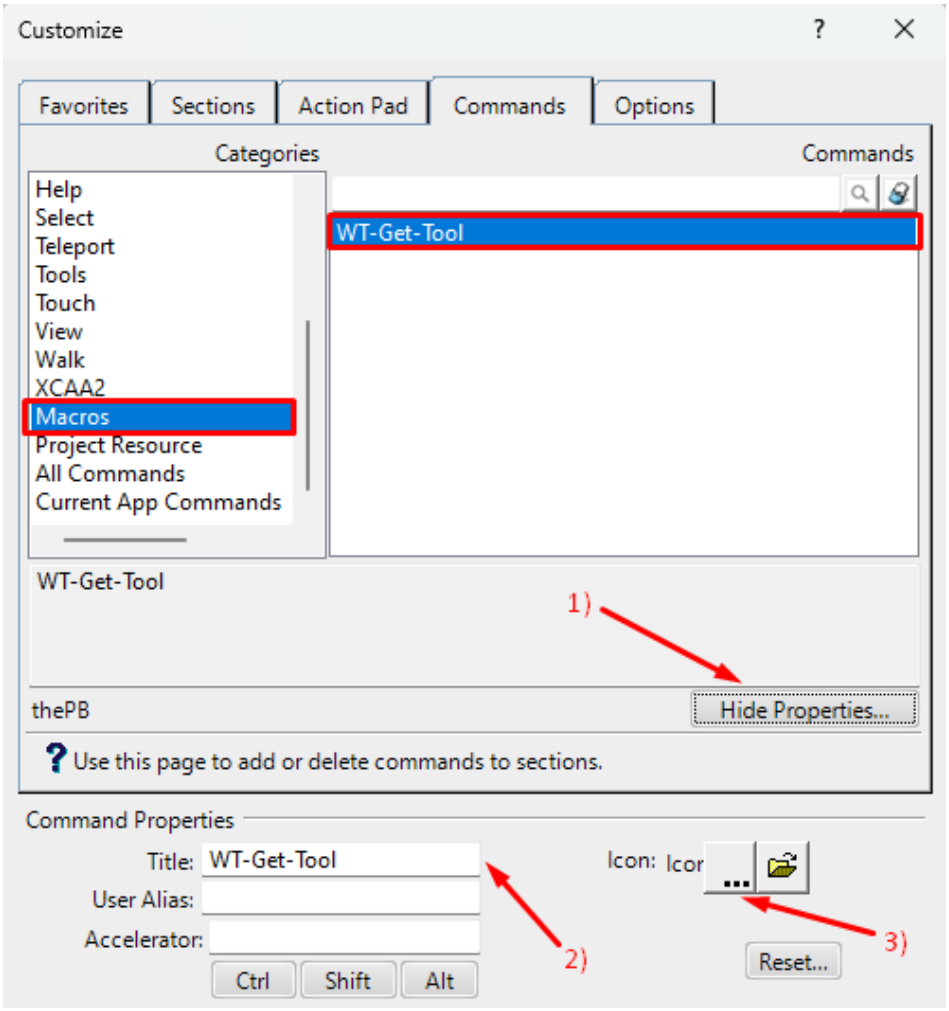


Figure 9 Customize commands window

Note: The icons are found in the subfolder "Icons" of the WT-3DEXPERIENCE-Interface installation folder.

- Drag and drop the available macro "WT-Get-Tool" from the window into the preferred place over panels in any tab.

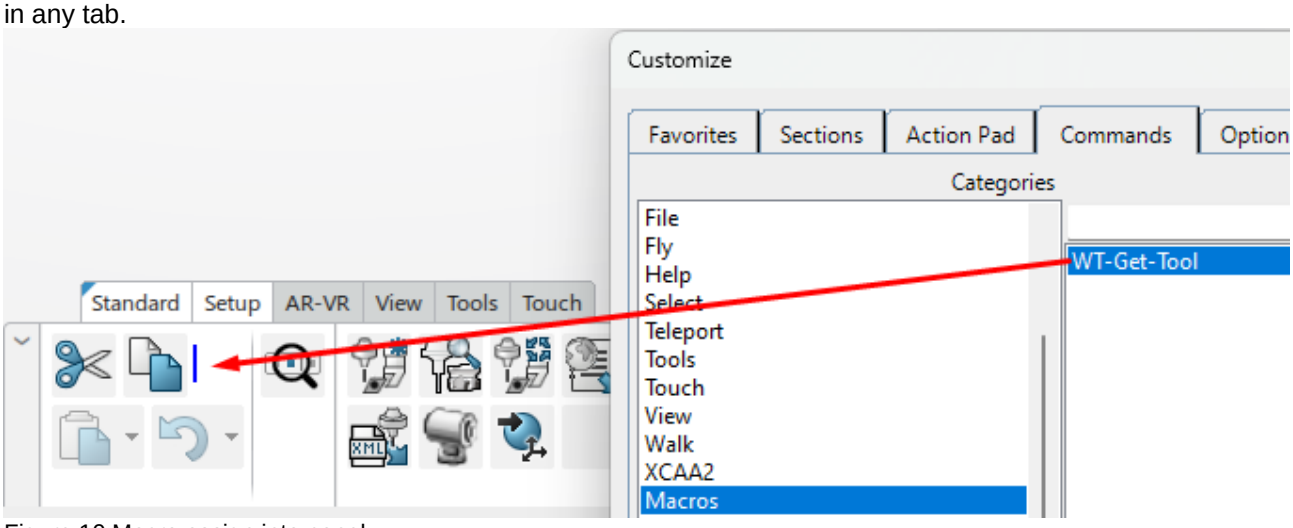


Figure 10 Macro assign into panel

Importing Tool Assemblies

Run macro "WT-Get-Tool" within 3DEXPRIENCE. The following WT-ToolExport menu will open. Use the appropriate functionality to get the tools needed. The interface will generate an XML file.

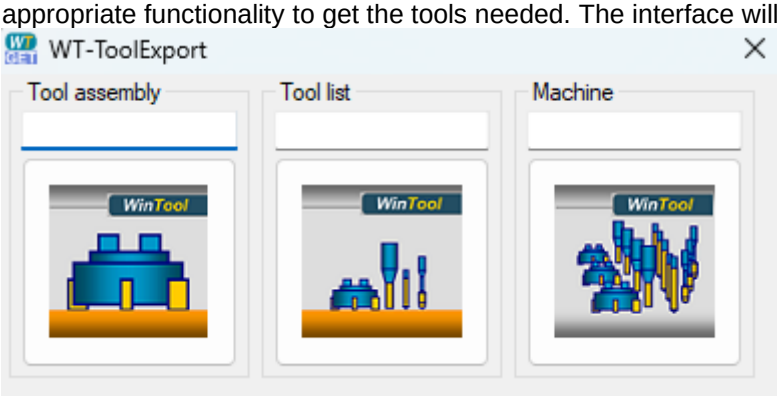


Figure 11 WT-ToolExport window

From the menu click on tab "Setup" and click to "Import Resources" to load the generated XML file. Finish the process by clicking the "Import" button.

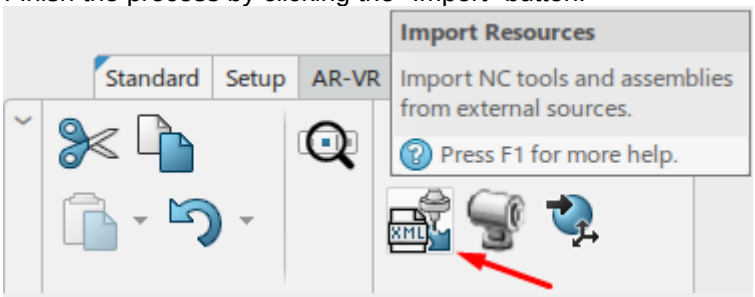


Figure 12 Import Resources button in menu

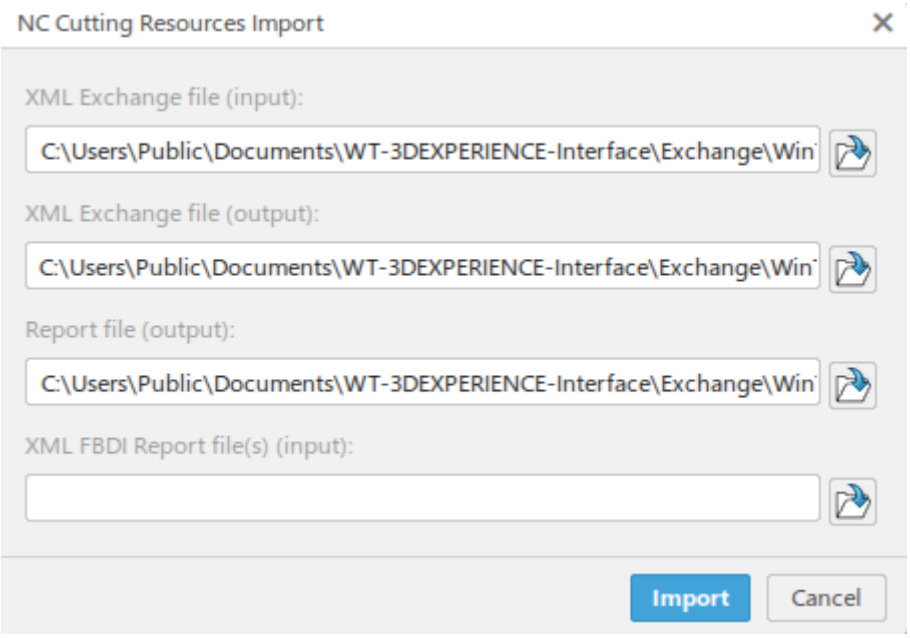


Figure 13 Import Resources window

Configuration

WT-SolidCAM interface settings can be managed in the configuration window. It is opened via START > Programs > WinTool > WT-3DEXPERIENCE-Interface > WT-3DEXPERIENCE-Interface Configuration:

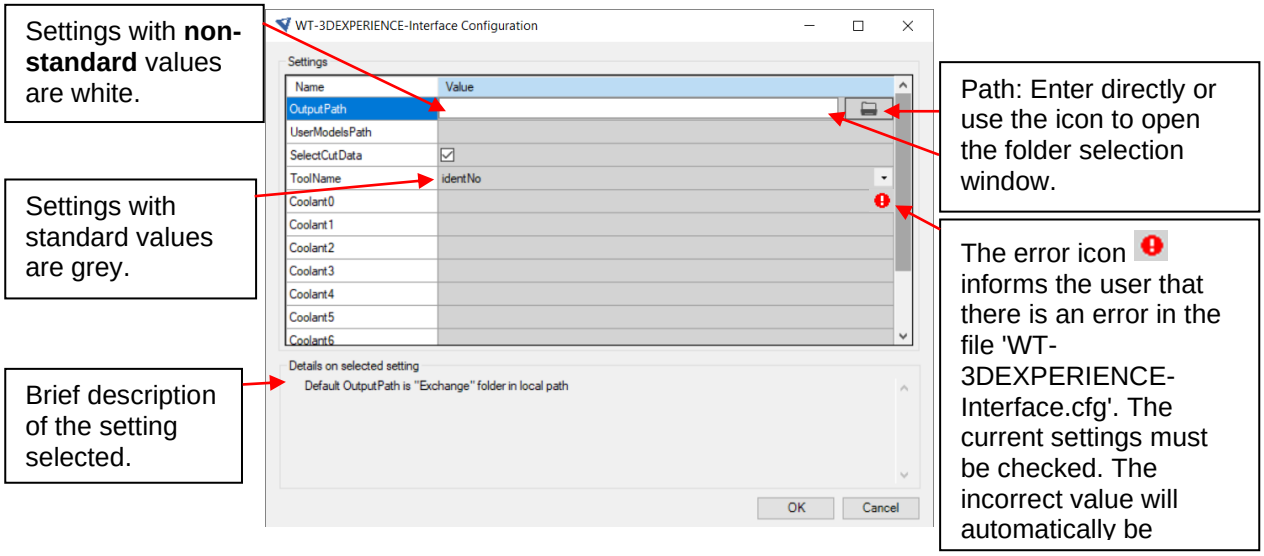


Figure 14 Instructions for the WT-3DEXPERIENCE-Interface Configuration Window

<OK> stores all settings. <Cancel> exits the configuration window without saving.

The configuration window reads and stores settings in the file "WT-3DEXPERIENCE-Interface.cfg" which is located in the `[Public Documents]\WT-3DEXPERIENCE-Interface`. This file can also be edited with a text editor.

OutputPath

Directory path in which the WT-3DEXPERIENCE-Interface stores exported tool data. Default setting for the OutputPath is the folder `"Exchange"` in the `[Public Documents]` directory.

UserModelsPath

The user models path contains tool contour graphics (DXF) and custom tool models. Default UserModelsPath is the folder `"UserModels"` in the `[Public Documents]` directory.

SelectCutData

If `SelectCutData` is active (`True` is default), cutting conditions for work materials for finishing and roughing are transferred. The cutting condition dialog appears only if there is at least one cutting condition and for the selection of roughing conditions at least two cutting conditions must exist. If `SelectCutData` is deactivated (`False`), the first cutting condition is transferred for finishing and the second for roughing.

ToolName

The setting `ToolName` controls the tool name in 3DEXPERIENCE. Possible values are `identNo` and `altCode`. `identNo` imports Ident No and Description as tool name (default). The Invalid characters for tool names like °, (,) will be automatically replaced or removed. `altCode` imports Alt. Code (see tab "AD" of tool assembly) as tool name if it is set, otherwise Ident No and Description.

Coolant

The 10 Coolant types in *WinTool* can be mapped to custom coolant types by setting `Coolant0` to `Coolant9`. The coolant is transferred into 3DEXPERIENCE with the tool.

Supported tool types (milling)

Name	Code	Remarks
Ignore (not in 3DEXPERIENCE)	`/3D00`	For clamping equipment etc.
MfgEndMillTool	`/3D01`	
MfgFaceMillTool	`/3D02`	
MfgDrillTool	`/3D03`	
MfgSpotDrillTool	`/3D04`	
MfgCenterDrillTool	`/3D05`	
MfgBoringBarTool	`/3D06`	
MfgMultiDiamDrillTool	`/3D07`	
MfgBoringAndChamferingTool	`/3D08`	
MfgCountersinkTool	`/3D09`	
MfgReamerTool	`/3D10`	
MfgTapTool	`/3D11`	
MfgTwoSideChamferingTool	`/3D12`	
MfgThreadMillTool	`/3D13`	
MfgCounterboreMillTool	`/3D14`	
MfgConicalMillTool	`/3D15`	
MfgTSlotterTool	`/3D16`	Also used for lollipop mills
MfgBarrelMillTool	`/3D17`	

Unsupported Tool types

- All turning tools types

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