

64bit version

FFCAM 2021

Release Notes



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Introduction

This manual is described about the release note of Makino Milling Machine product FFCAM.

Please read it through before using FFCAM.

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1. FFCAM Release Notes

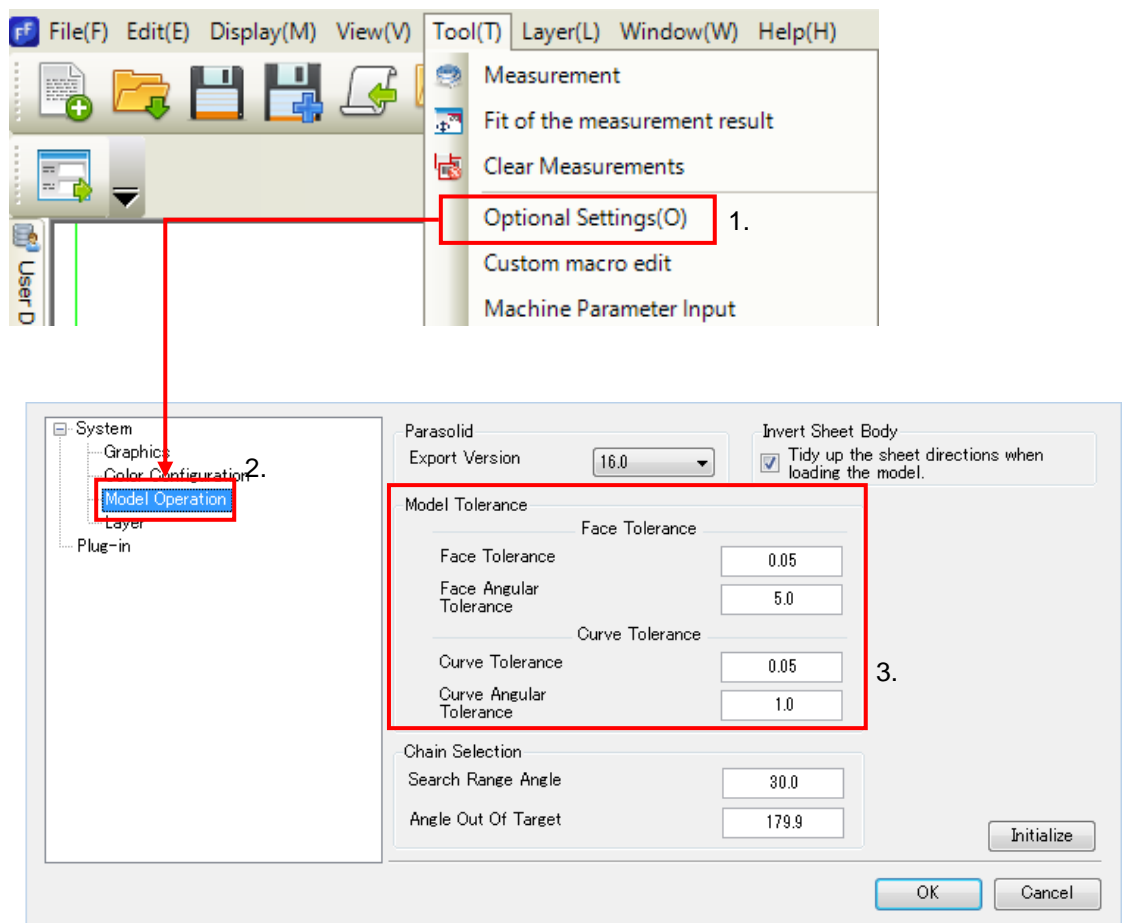
1.1 Restrictions on Functions

1.1.1 CAM function

(1) An error may occur during importing the model data by the graphic driver, and then the FFCAM operation is disabled. In such a case, increase the “Model Tolerance” value of the system parameters.

- The recommended tolerance value can be set by pressing the “Initialize” button.
- The recommended tolerance value for a Face and a Curve is 0.05 respectively. Depending on the model size and personal computer performance, and a bigger value may be input.

Setting Procedure:



- (2) When "Helical" is specified for Tilt Infeed Motion in machining with a round insert face mill, a toolpath may be generated with collision between the bottom of the face mill and the workpiece even if the function to "Avoid cutting by the bottom of Round Insert cutter" is selected.

For this reason, set "Along-route" at Tilt Infeed Motion when using a round insert face mill.

When "Helical" needs to be set for Tilt Infeed Motion, confirm that the following conditions are satisfied:

- Helical Radius > bottom diameter of the round insert face mill
- Helical Infeed Tilt < Max cut angle of the round insert face mill

- (3) When toolpath is calculated after moving or copying the machining model, the wrong toolpath will be calculated. The reason is that the previous intermediate data is used. After moving or copying the machining model, be sure to re-register the machining model before calculating toolpath.

- (4) The output file name, generated with batch and having many machining, is limited to 240 single byte characters.

If it exceeds the limit, the following message is displayed.



Please enter up to 240 one-byte characters for path of the output file.
(Currently specified path : 396 one-byte characters)

- (5) Over four machining definition files cannot be opened at the same time.

1.2 Function Revision (Addition/Change) History

FFCAM 2021.0.0

Machining functions

DUG No.	Description
2012-0759 2014-0983 2015-2670 2016-0776 2018-1531 2020-0752	With the Remained milling machining function in the flat face machining, outputting the cutting path only to the uncut section was set by the parameter.

Operation functions

DUG No.	Description
2015-0312 2019-1789	With the CL display function, it was set that the CL coordinate is displayed when the cursor is moved on the CL.
2015-2660 2016-0829 2019-1884 2020-0660	With the CL display function, display of the tool at a discretionary position on the CL was set.
2014-0893	With the color filter on the Element selection screen, specifying multiple colors became possible.
-	On the color filter of the Element selection screen, the pallet was added which indicates the colors used in the drawn model element in a list.
	On the Option set screen, the pallet was added to register colors which the user uses frequently. The registered colors can be used for the color filter on the Element selection screen.
-	With the cylinder setting of the machining work, automatic acquisition of the cylindrical shape became possible.
-	The lower limit value of "Max cut angle" of the Round insert FM parameter was changed to 0.1°.
2020-1414	The emphasized display of the operating tab became possible for the process and the tabs displayed on the Machining setting screen.
2019-0659	The color display function for the tilt of the model surface was added to the measuring

2019-0790	function.
-	"Fit of measuring result" was added to the tool bar of the Measuring function screen.
-	The machining parameter which corresponds to the macro definition was improved.
	The screen display when a macro is defined for "Relief height" of the avoidance operation was changed.
	"Open a designated folder" function was added to the simulation repost.
	Opening the Setting screen became possible by double clicking the corresponding item in the plug-in list on the Option set screen.
	"Taper blade length" and "Taper angle" were added to the Setting screen of the output function of the Excel Machining Information.
	The limitation on the number of letters was set for the sheet names to be specified on the Setting screen of the output function of the Excel Machining Information.
	The limitation on the number of letters was set for the file path of the Machining information to be output with the output function of the Excel Machining Information.
	English messages displayed with the output function of the Excel Machining Information were changed.
2016-0311 2020-1070	Changing the tool data order on the "Tool database" tab of the Tool DB maintenance screen became possible.
-	A tool to collect the FFCAM project data and their relevant information was added.

Installer

DUG No.	Description
-	The bk folder in the Template folder of FFCAM was deleted.

1.3 Correction of Problems

FFCAM 2021.0.0

Machining function

DUG No.	Description
2018-1664	In the Machining remain processing function, the error message output when the path is not output due to the stock file was inappropriate. This problem was corrected.
2020-0443	When the Thin rib machining and the Approach vector were used together, an

	inappropriate path was output. This problem was corrected.
-	An inappropriate path was output in the "Inward" follow-up operation in the flat face machining. This problem was corrected.
2020-0869	In the Contour machining, a part of the path was not output. This problem was corrected.

Operation functions

DUG No.	Description
2016-0347 2016-2832 2019-1139 2020-1431	After executing "Save as," the calculation result is not output in the corresponding folder. This problem was corrected.
-	After executing "Window position reset" on the menu bar, a screen in "Show/Hide Resource Windows" could not be displayed. This problem was corrected.
2020-0543	When the Rough offset function on the tool bar was executed, an exceptional error occurred. This problem was corrected.
-	When the Coordinate value acquisition setting is automatic in the Curve creating function, the center of circle could not be acquired. This problem was corrected.
-	"MachineSimulatorPlugin.dll" in the list on the Option setting screen was not inactive. This problem was corrected.
2020-0044	On the cross-section view on the Tool DB maintenance screen, an incorrect value was displayed for the diameter of the chamfer tool. This problem was corrected.
-	On the Tool DB maintenance screen, the holder data of the holder maker remained in the list of favorites even after the corresponding data was deleted from the list. This problem was corrected.
-	The error message displayed for the Z shift amount in the Thin rib machining was incorrect. This problem was corrected.
-	The limitation on the number of letters for the holder name was not cancelled on the Tool select screen. This problem was corrected.
-	The input items are displayed inappropriately on the Macro edit screen for "Relief, approach, infeed." This problem was corrected.
2020-1749 2021-0048	In the parameter check of the contour machining, a message for the parameter which is unusable on the screen was displayed. This problem was corrected.
2020-1178	On the Definition screen of the machining condition DB, inputting "0" for the feed rate was not possible. This problem was corrected.
2021-0005	The range of movement of B-axis was incorrect in the machine parameter of V22-5XB

	which is installed with FFCAM. This problem was corrected.
2020-1285	"The amount of the record of the history is limited." was functioning inappropriately on the Batch calculation schedule screen. This problem was corrected.
-	When the Excel Machining Information was tried to be output from the PC which Microsoft Office Excel was not installed, outputting failed. This problem was corrected.
-	The unit of cutting length in the output function of the Excel Machining Information was incorrect. This problem was corrected.
-	When the T number output in the output function of the Excel Machining Information was not set, the tool list was not output. This problem was corrected.
-	The tool list in the output function of the Excel Machining Information could not be output by each Excel sheet. This problem was corrected.

Post Processor

DUG No.	Description
-	When outputting the NC program with "Incremental output," an inappropriate Z value is output to the NC program. This problem was corrected.

Installer

DUG No.	Description
-	In the folder which FFCAM is installed, FFCAM with a different version could be installed. This problem was corrected.

Manual

DUG No.	Description
2020-1335	The explanation of "Path movement" in the drilling machining was incorrect in the Help of FFCAM. The explanation was corrected.