



CAM Basics 1.3 - Tool Library and Tools

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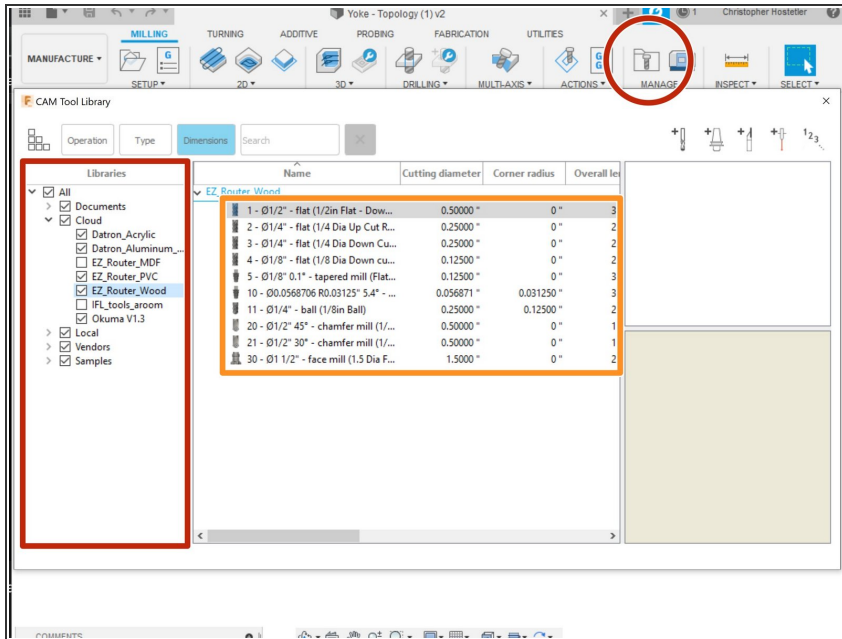
The screenshot shows the CAM software interface with the 'CAM Tool Library' window open. The 'MANAGE' button in the top toolbar is circled in red. The 'EZ_Router_Wood' library is selected in the left pane, and a list of tools is displayed in the right pane, highlighted with an orange border.

Name	Cutting diameter	Corner radius	Overall length
1 - Ø1/2" - flat (1/2in Flat - Dow...	0.50000 "	0 "	3 "
2 - Ø1/4" - flat (1/4 Dia Up Cut R...	0.25000 "	0 "	2 "
3 - Ø1/4" - flat (1/4 Dia Down Cu...	0.25000 "	0 "	2 "
4 - Ø1/8" - flat (1/8 Dia Down cu...	0.12500 "	0 "	2 "
5 - Ø1/8" 0.1° - tapered mill (Flat...	0.12500 "	0 "	3 "
10 - Ø0.0568706 R0.03125" 5.4° - ...	0.056871 "	0.031250 "	3 "
11 - Ø1/4" - ball (1/8in Ball)	0.25000 "	0.12500 "	2 "
20 - Ø1/2" 45° - chamfer mill (1/...	0.50000 "	0 "	1 "
21 - Ø1/2" 30° - chamfer mill (1/...	0.50000 "	0 "	1 "
30 - Ø1 1/2" - face mill (1.5 Dia F...	1.5000 "	0 "	2 "

Introduction

Intro to a Tool Library and Creating tools

Step 1 — Tool Library



i All Cloud libraries are apart of the IFL team in Fusion. (Contact David or the Lab Coordinator for access) Check the link below for instructions.

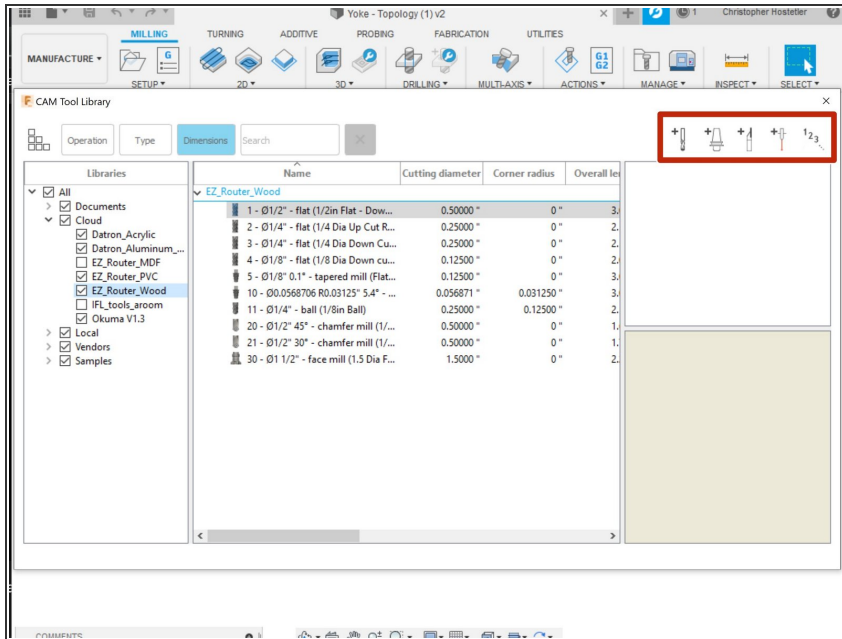
● <https://knowledge.autodesk.com/support/f...>

● Tool libraries available.

● All tools within the library. Feed rate and spindle speed based on library

★ Do **not** edit Feeds and Speeds in this area since it will change the tool library for everyone.

Step 2 — Adding a Tool - Location and Tips

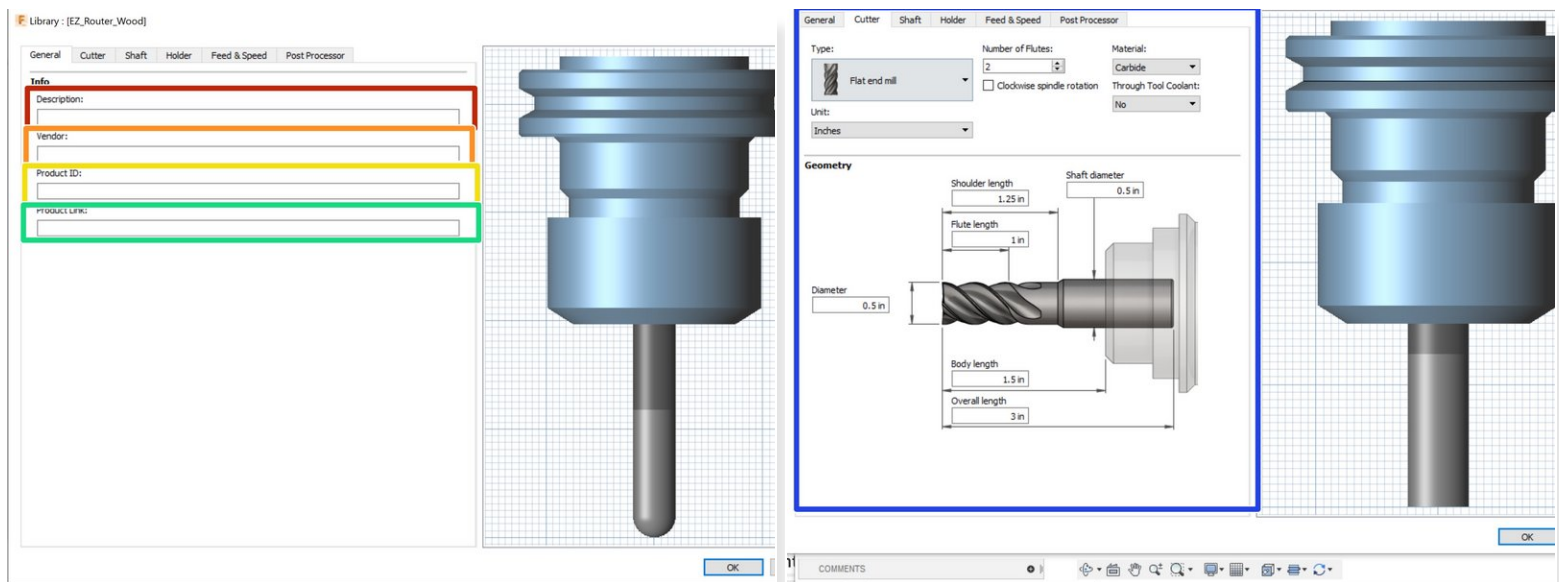


i Adding a new tool for a job can be very useful. It may be a customer supplied tool or it may need a custom feed/speed for the job. Add the tool to the job itself and not the tool library unless we will continue to use the tool

i The router room has a variety of tools not in the tool library as they are more specialized. Check to make sure we don't already have a tool before ordering a new one

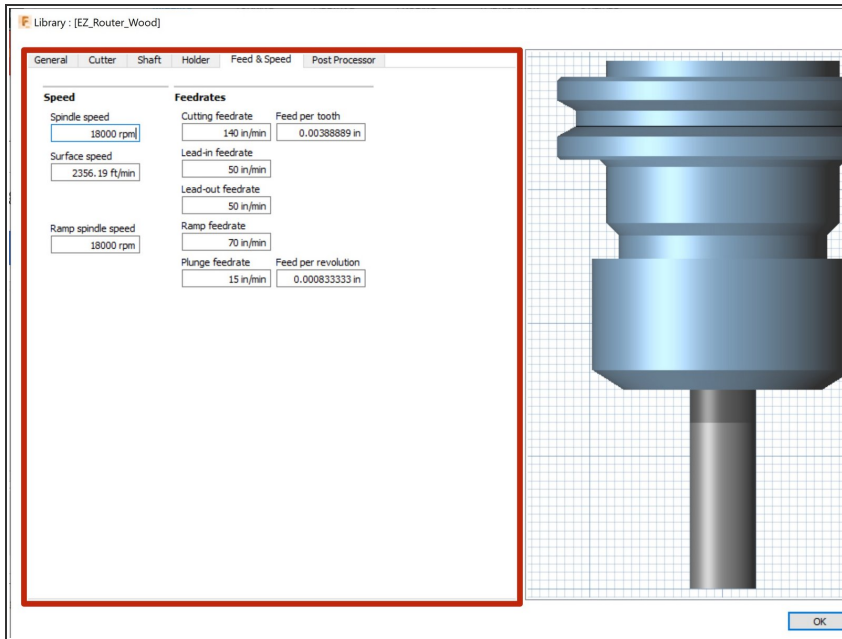
- Add a new tool

Step 3 — Adding a Tool - Info and Dimensions




- Tool description - ex. 1/2in Flat - Down Cut
- Vendor information - ex. Amana Tool
- Product ID - ex. 46182-k
- Link - ex. <https://www.toolstoday.com/v-5203-46102....>
- Tool dimensions - Be as accurate as possible


Step 4 — Adding a Tool - Feeds and Speeds



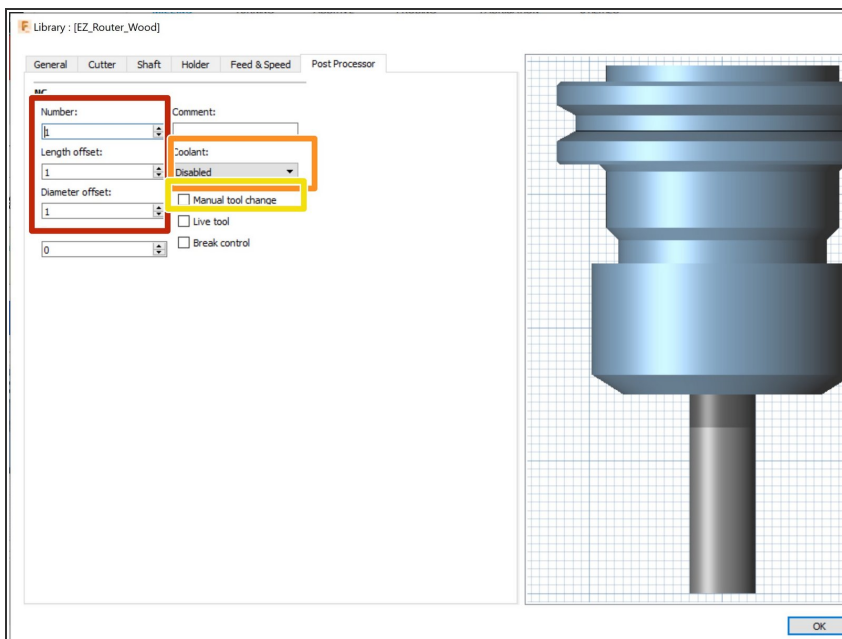
- Insert all tool feed rate and spindle speed information.

 <https://app.fswizard.com/>


-  Feed and speeds can usually be found from the manufacturer

 Feed rate and spindle speed **will change** depending on material

Step 5 — Adding a Tool - Post Processor



- Tool number for the library and machine reference

 Tool number should not be the same as one in the library. AND can not be greater than 500

- Coolant - Disabled (Not used on the router)
- Turn on Manual Tool change