

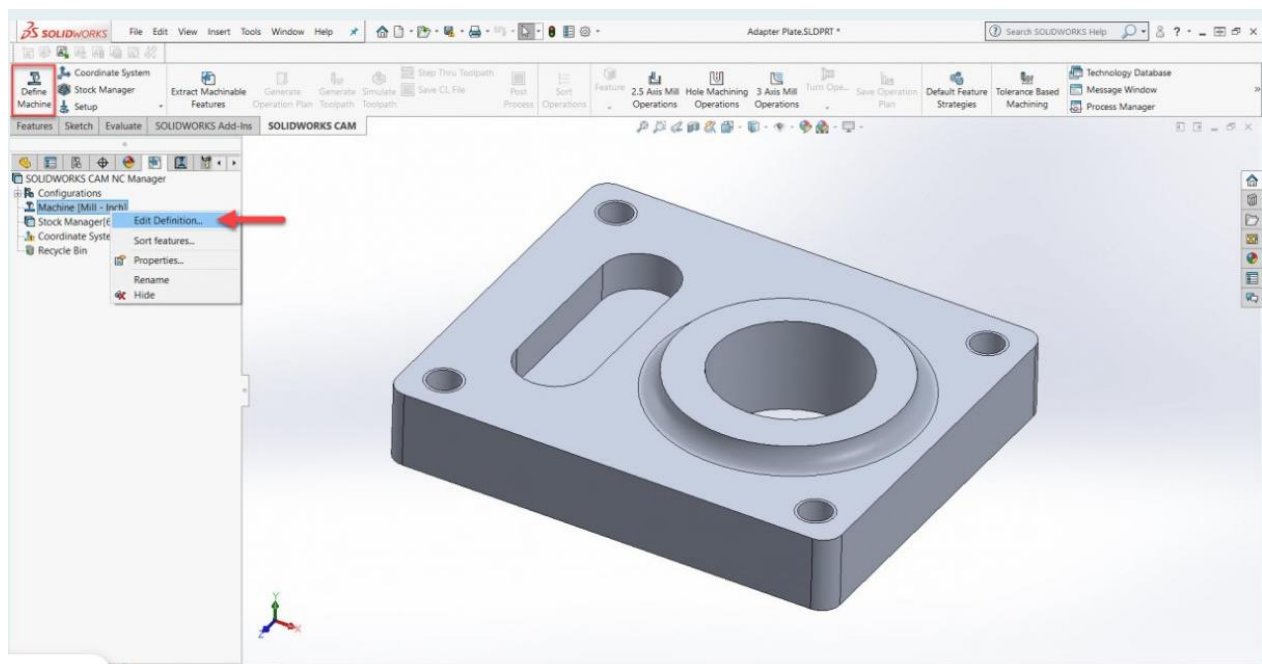
Module: Solidworks CAM Standard-Milling

Topic 2: Automatic Recognition Feature Setup 1-Defining Machine

2.0 Define CNC Machine for 2.5/3 axis milling.

In the Solidworks CAM Feature Tree define the Machine using any of the following methods:

1. Select the Define Machine Icon in the Command Manager
2. Select Machine in the CAM Feature Tree, pick your right-mouse button and select Edit Definition
3. Double-click on Machine in the CAM Feature Tree.

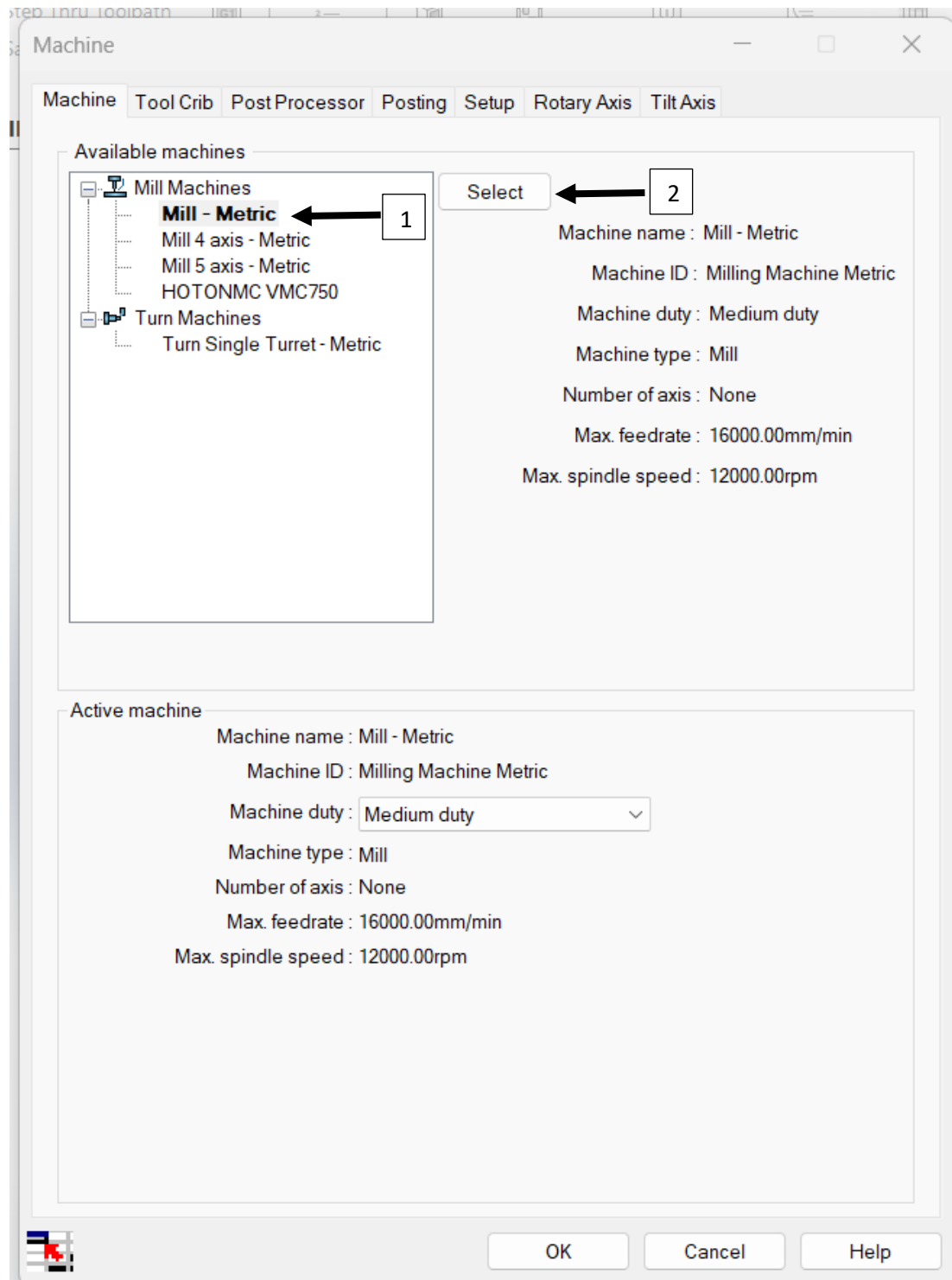


Define Machine

2.1 Machine Set-up

Once the Machine Set-up dialog is active, we can see the list of available machine types in the Machine tab.

- Select **Mill-Metric** and hit the **Select button**. This step is very important as the machine parameters will not be loaded unless the **Select button** is pressed.
- Now, we can see our parameters for our selected machine.



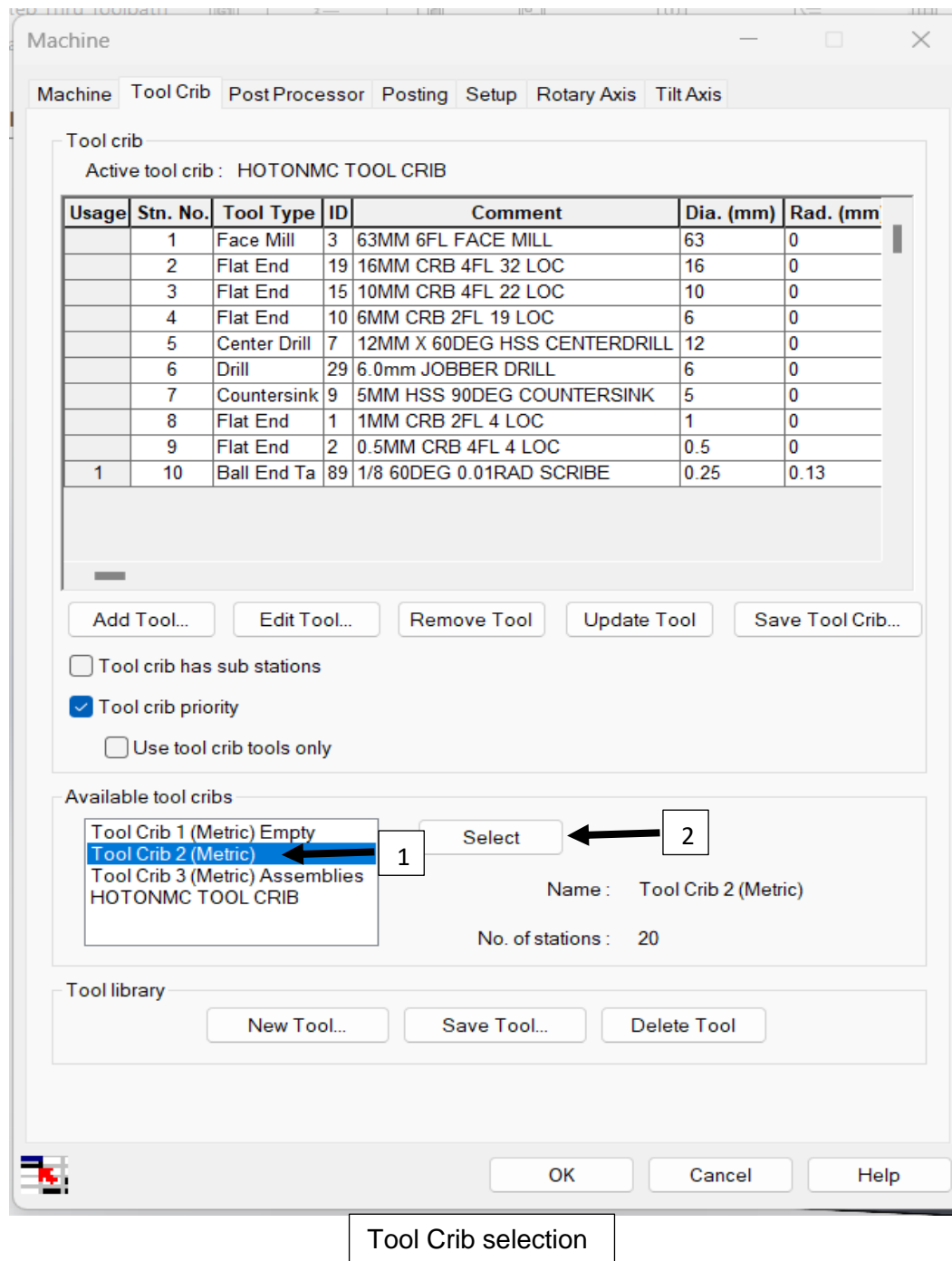
Machine Settings

2.2 Customize machine

Refer to addendum 1 for steps to customize your machine.

2.3 Tool Crib selection

In the Tool Crib selection tab, we may select a Tool Crib for our set-up. Here, we may also edit an existing Tool Crib or create new Tool Crib's for our Machine. By selecting a Tool in the list and clicking Edit Tool the parameters for that tool can be altered to match your existing tools and holders. Choose an available Tool Crib and hit the Select button.

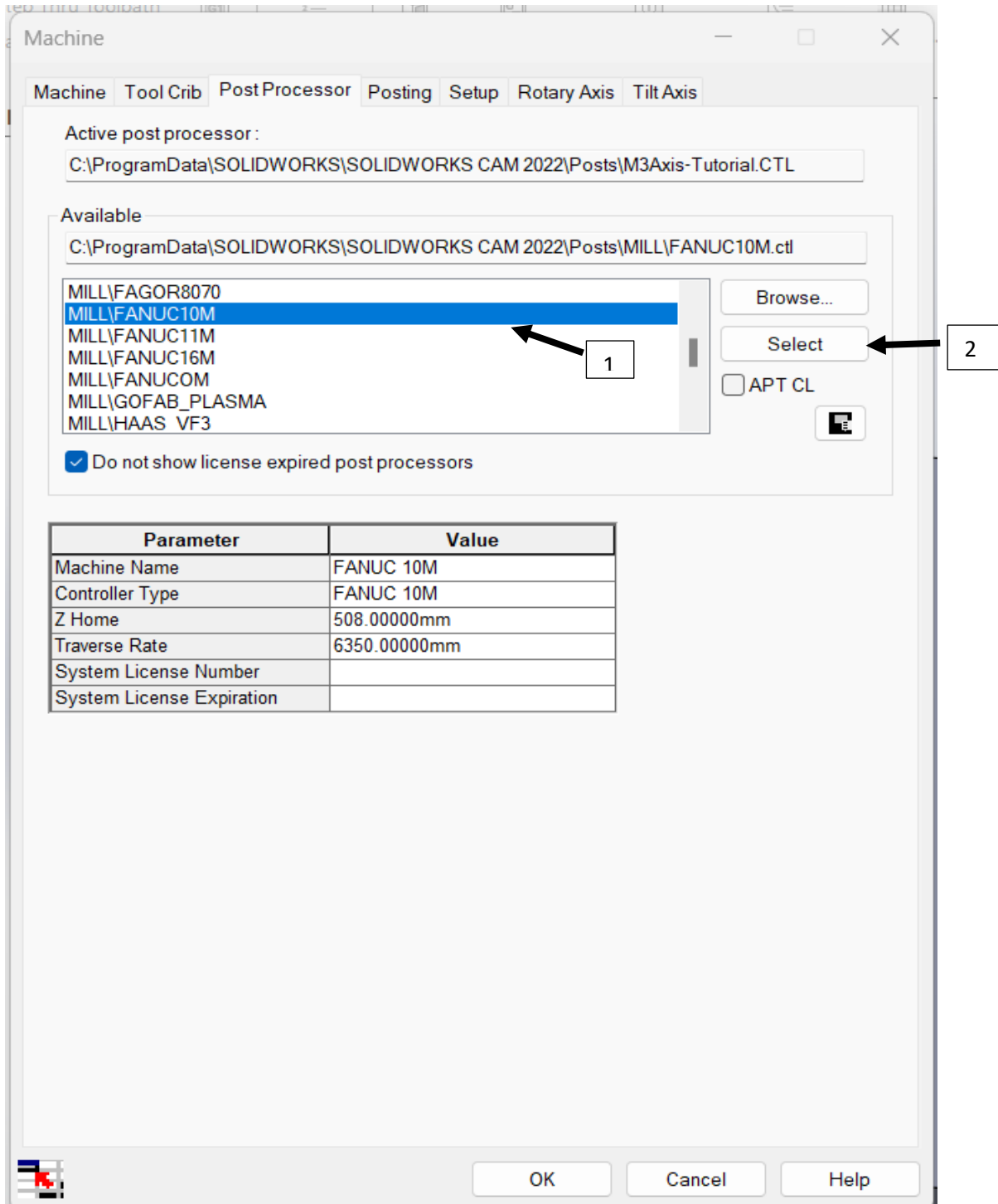


2.4 Customize tool crib

Refer to Addendum 2 for steps to customize your tool crib

2.5 Post Processor

In the Post Processor tab, we may choose the Post Processor for our machine in this case a MILL/FANUC 10M and hit Select. We can now see Our Machine Name and Controller Type.



Select a Post Processor

2.6 Posting

The Posting gives us additional options for Post Processing. The two options are for coolant control and tool diameter / length offsets. Switching to Tool will use the options set in that specific Tool set-up. Leaving this option as Post Processor will use settings programmed into the post processor file. Post Processor is the setting we will use for the majority of machining operations.

The screenshot shows the 'Machine' dialog box with the 'Posting' tab selected. The dialog has several tabs: Machine, Tool Crib, Post Processor, Posting, Setup, Rotary Axis, and Tilt Axis. The 'Posting' tab contains the following options:

- Define coolant from:** Two radio buttons, 'Tool' and 'Post processor'. 'Post processor' is selected.
- Define tool dia & length offsets from:** Two radio buttons, 'Tool' and 'Post processor'. 'Post processor' is selected.
- Subroutines:** A checkbox labeled 'Output subroutines for patterned features' is unchecked.

Below these options is a table with two columns: 'Parameter' and 'Value'.

Parameter	Value
Program number	1

At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'.

Posting definition