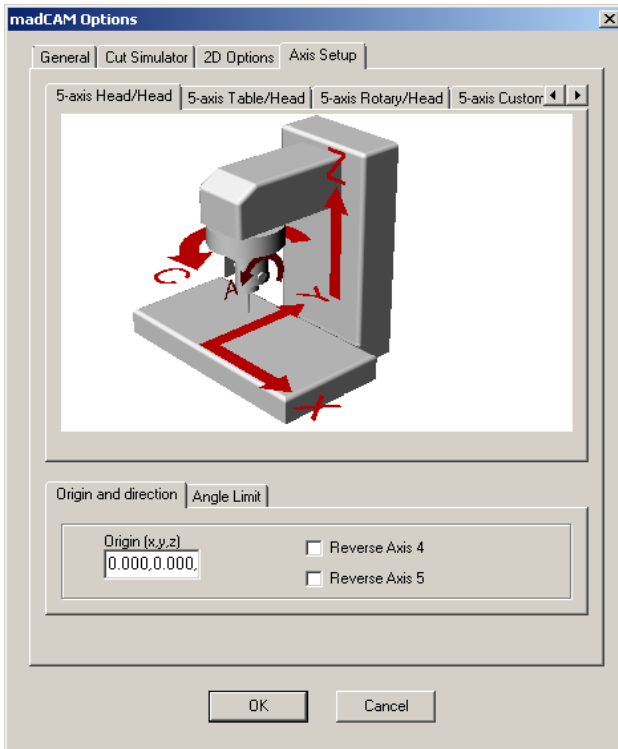


## madCAM 5-axis custom settings for a head/head machine.



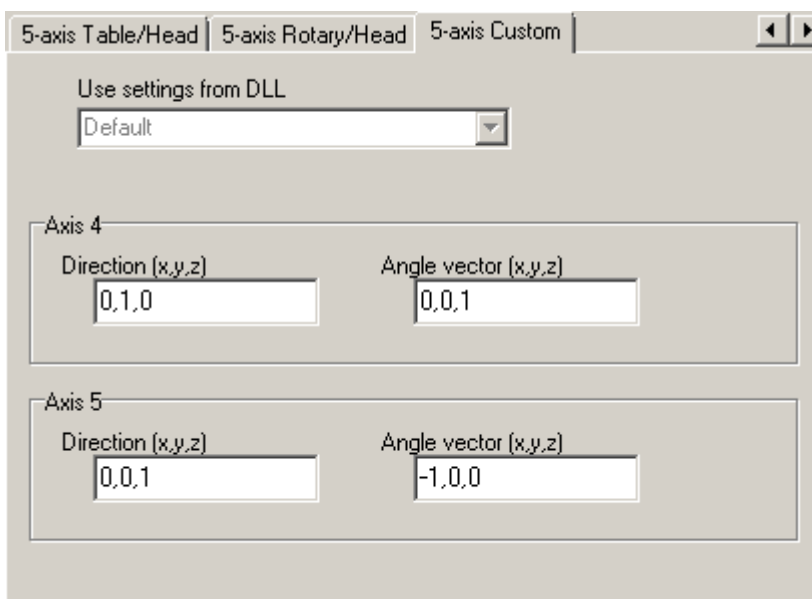
Click on madCAM options from the madCAM toolbar.



Select a 5-axis machine from madCAM options and click OK for saving the alternative of machine kind.



Go to madCAM options again and select the custom machine option and fill in the 4th and 5th axis vectors (x,y,z) as below.



If the 4th axis is set to  $(0,1,0)$ , it will rotate around the Y-axis which will be the B-axis. The angle vector  $(0,0,1)$  tells madCAM to calculate the B-angle from the Z-axis.

The 5th axis is rotating around  $(0,0,1)$  which will be the C-axis and the angle vector  $(1,0,0)$  will calculate the C-angle from the X-axis.

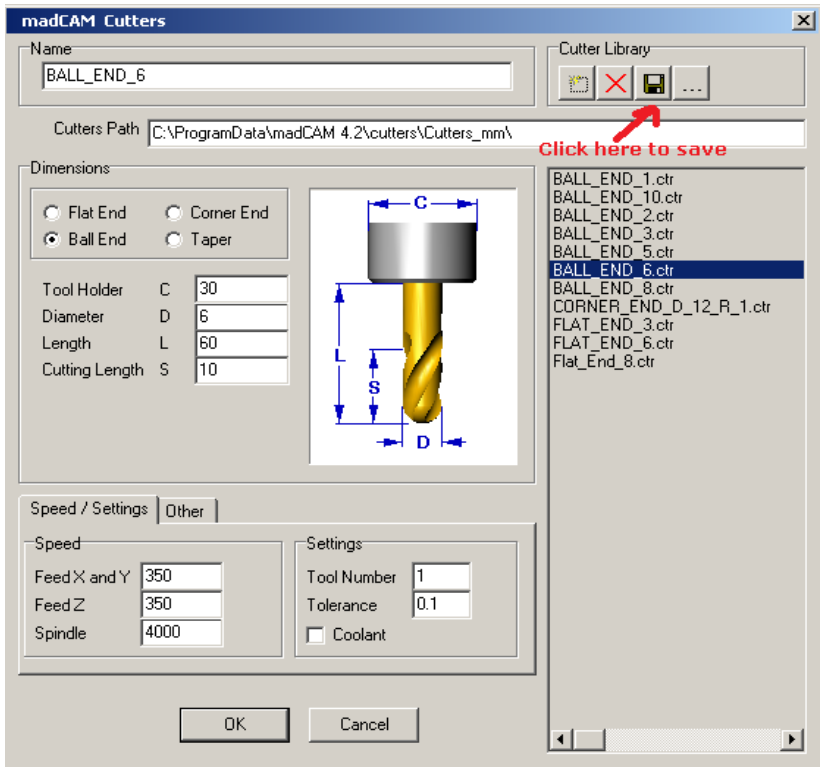
Click OK and this setup will be saved until you select a new machine.

The next thing is to setup the post processor. Below is an example of how to set the output characters and the **axis offset** and tool length option for using the **tool length from the saved cutter**.

```

:
:
*AXIS_1_CHAR*
X
*AXIS_2_CHAR*
Y
*AXIS_3_CHAR*
Z
*AXIS_4_CHAR*
B <== Set the output character of the 4th axis here.
*AXIS_5_CHAR*
C <== Set the output character of the 5th axis here.
*CUTTER_REFERENCE*
TIP
*TOOLPATH_OUTPUT*
TRANSFORM
*AXIS_OFFSET*
42 <== Set the distance from the chuck to the center of rotation for your machine here.
*TOOL_LENGTH_OFFSET*
YES <== Tell madCAM to add the tool length from the saved cutter to the axis offset.
*RAPID*
G00"x"y"z"a"b"
*END_SECTION*
:
:

```



It's important to save the tool if you change settings. The tool length is used from each saved cutter.