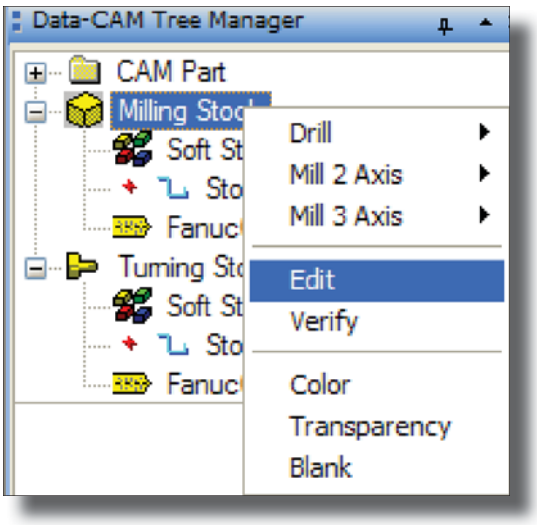
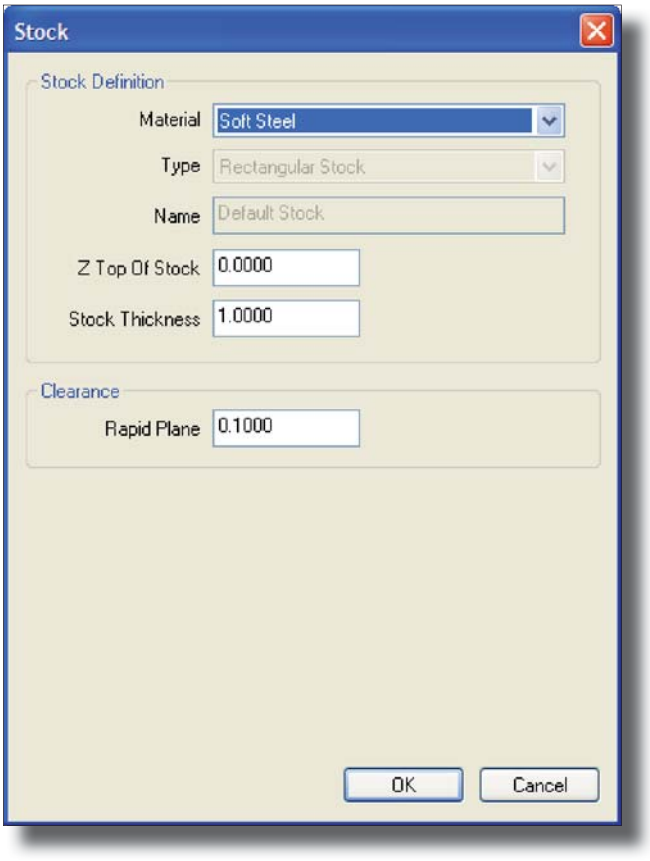
FAQ #7: How do I set my clearance planes for my mill?

Setting the clearances in BobCAD-CAM V22 can be confusing given that there are always at least two places to set them. However, once it has been shown that there are two different types of clearances it makes more sense. One of them is for the jump between different features in the program and the other is meant to clear the tool between passes in a single feature.

To set the clearance plane between features, right-click on **Milling Stock** and choose **Edit** from the menu.

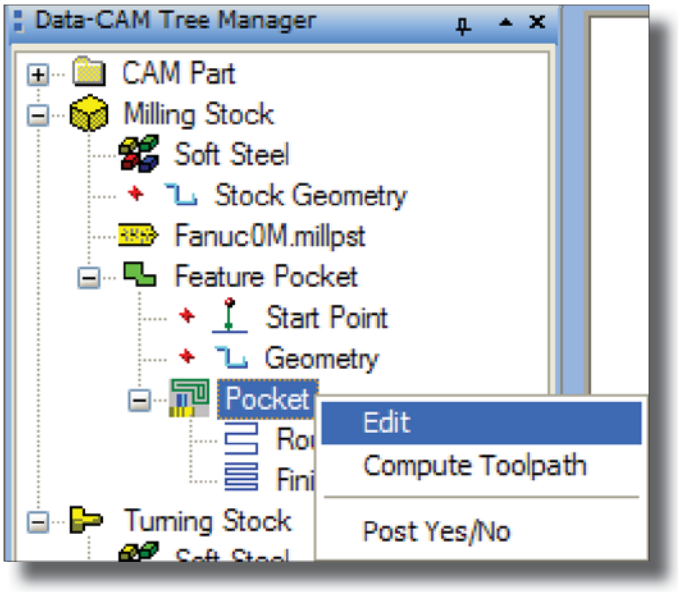


The **Stock** dialog will appear. In this box, the **Rapid Plane** (under **Clearance**) gives the “global” clearance plane. This is the height the tool will retract in between features.



If there are any clamps between features, this is also the height one must set to avoid them. For example, if there is a 1” high clamp between two pockets on a part, the **Rapid Plane** here will need to be higher than 1” in order to clear it.

The other clearance plane is within the parameters of the features themselves. The reeason for this is that some features will need more clerance than others, so using the global clearance as above can be wasteful of cycle time on a part. To set it, right-click on an existing feature in the trees and choose **Edit**, as below.



In this example, the **Pocket** dialog box will appear since it was a pocket feature that was inserted into the tree. The actual type of feature is irrelevant as the first item in the edit box tree is always **Approach and Entry**. The **Rapid Plane** listed below is the Z height that the tool will retract to in between the passes of the feature itself. Generally speaking, this should be high enough in a pocket (for example) to clear any islands that may exist in the path of the tool.