

FAQ #21: How do I EDM a simple 2 Axis Shape?

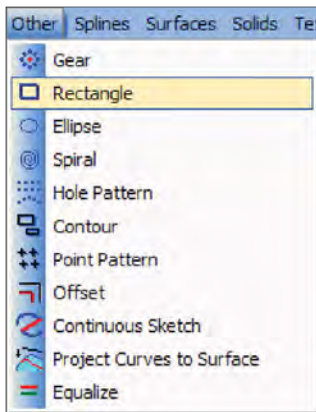
Q: How do I make a simple 2 Axis shape to get started?

A: Simple is the key word. Essentially there are only 3 real steps to it: 1. create a 2D shape in the **Workspace**, 2. add a feature of the desired type to the **CAM** tree and assign the shape to it, and 3. edit the parameters of the feature to be what is desired.

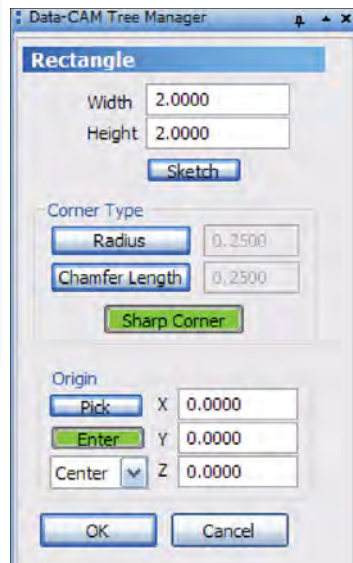
Without any further ado, a nice tutorial is warranted!

Example:

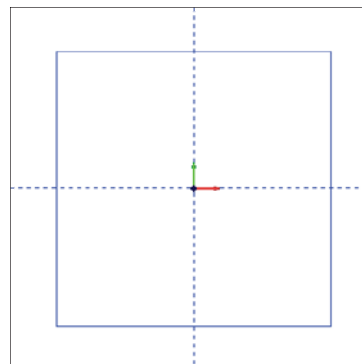
Step 1. Create a simple shape in the **Workspace**.



Click on the **Other** menu at the top of the screen, then choose **Rectangle**.

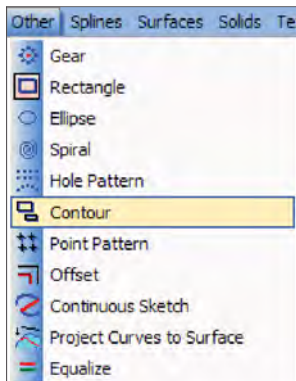


In the dialog at the left of the screen, leave the parameters at their defaults and just click **OK**.



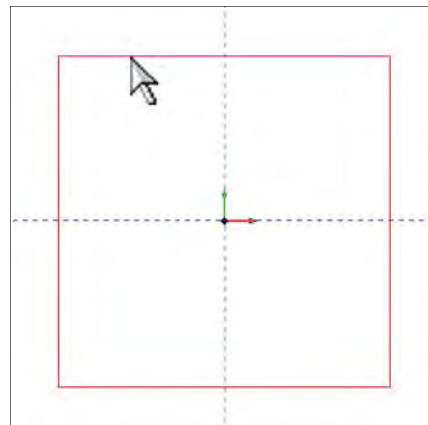
A rectangle will appear on the screen.

Click on **Other** again and pick **Contour**.

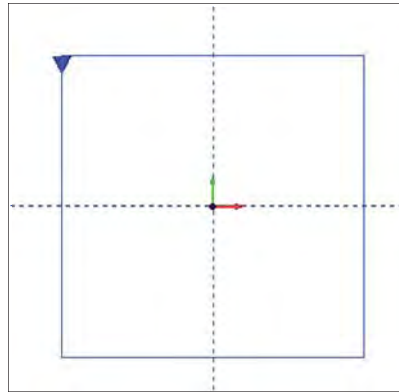
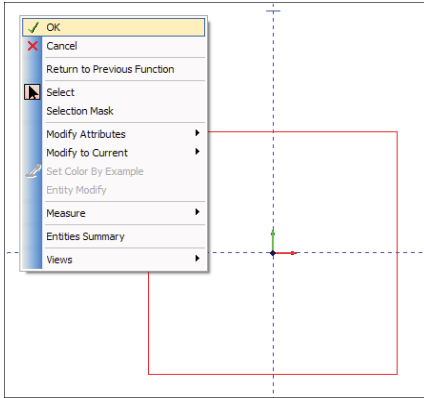


Hold the **SHIFT** key down on the keyboard and click on the left side of the top line of the new rectangle.

The whole shape should highlight.

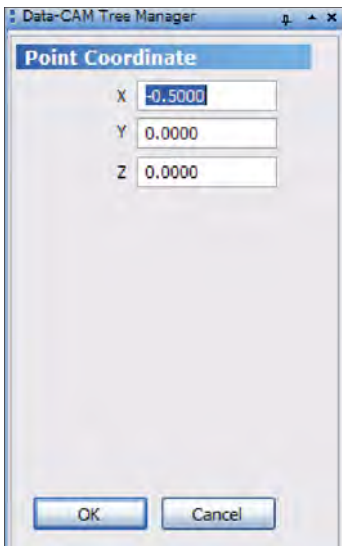


Right click anywhere in the **Workspace** and choose **OK**. The rectangle will appear to change with an arrow being added to it. In fact, the arrow is part of a new contour entity that lays on top of the shape.

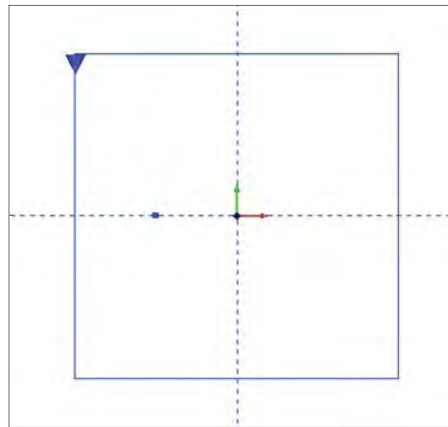


It is always a good idea to use contour entities in wire EDM because it is far easier to control the direction of the wire path with it than without it. That's what the arrow shows.

To add a start point, click on **Points** in the main menu at the top of the screen and choose **Coordinates**.

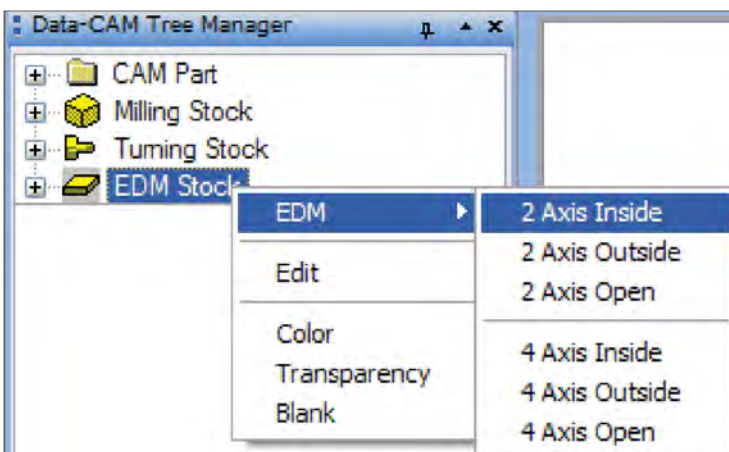


In the **X** field in the dialog to the left, type in **-0.5** and then click **OK**. A point will appear inside the rectangle. Click **Cancel** in the dialog and the drawing will be complete.



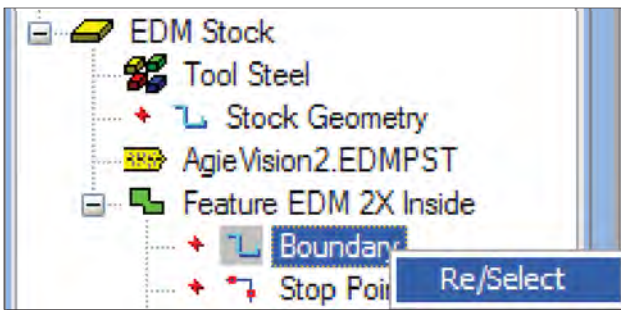
Step 2. Add the appropriate feature to the tree and assign the geometry to it.

The shape is intended as an inside die shape, that's why the point was drawn inside it. If the CAM tree is not visible on the left side where the dialogs were showing before, click on the **CAM Tree** tab at the bottom of the **Data-CAM Tree Manager** (the same part of the software that the dialogs appeared in). It is the 2nd tab.

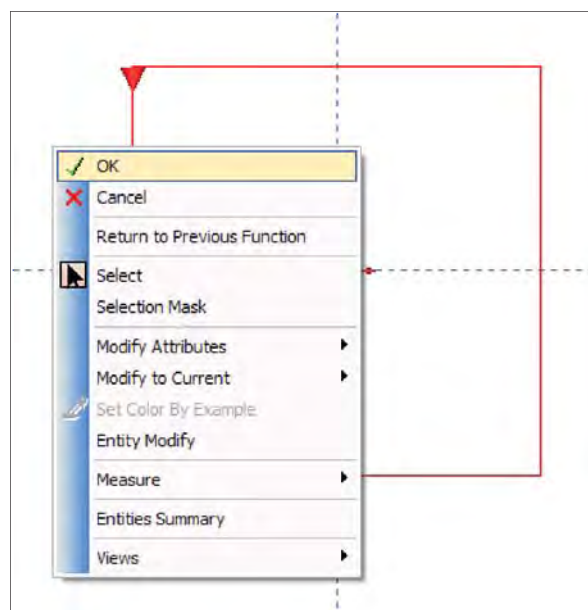
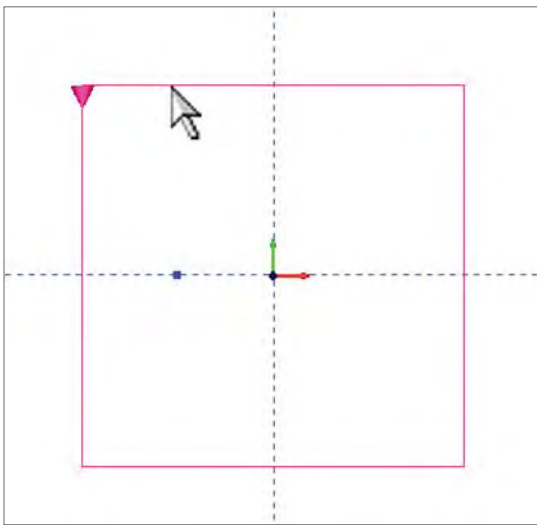


Right click on **EDM Stock** in the CAM tree then and hover the cursor over the **EDM** item in the menu that will pop up. From the fly-out submenu that will appear, choose **2 Axis Inside**. A new **Feature EDM 2X Inside** will be added to the tree.

Right click on the item marked **Boundary** under the new feature and choose **Re/Select** from the menu.

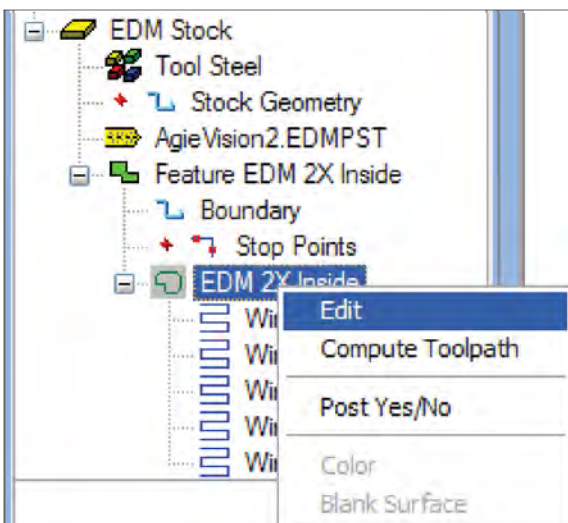


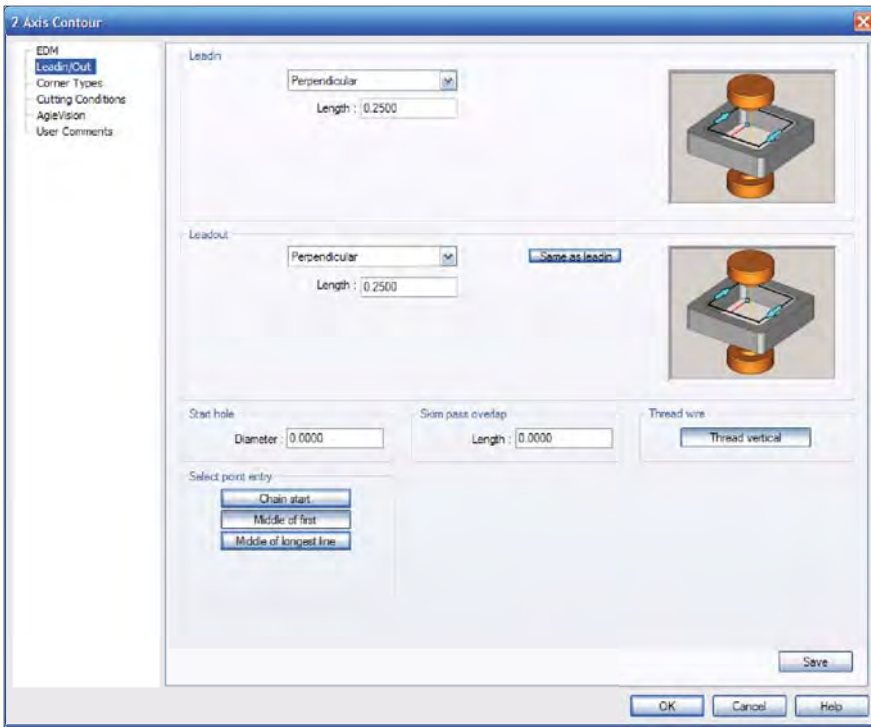
In the **Workspace**, click once anywhere on the contour entity on top of the rectangle, then right click anywhere in the **Workspace** and choose **OK**. The point is intended to be a wire start point, but that will be set in the next step and is not actually part of the boundary of a shape.



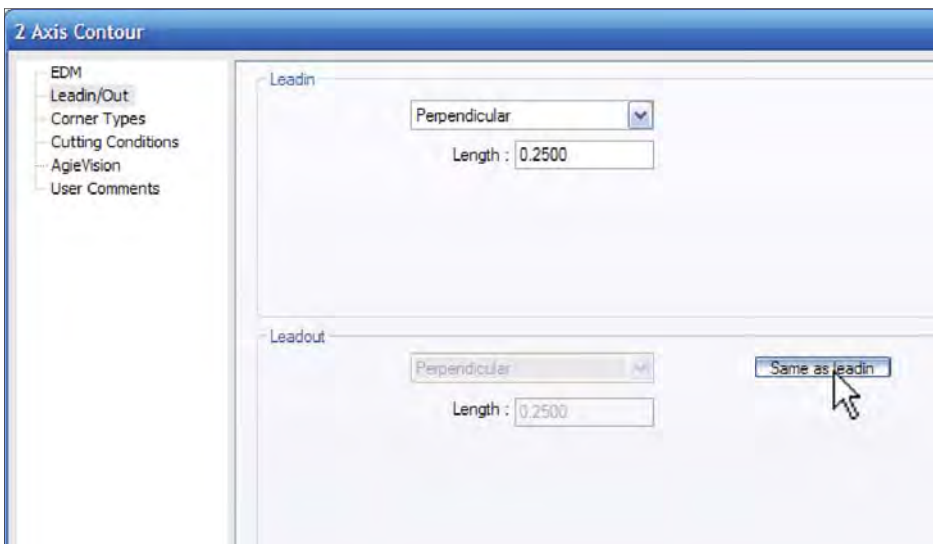
Step 3. Edit the feature to reflect what's desired to machine the shape.

Right click on **EDM 2X Inside** in the tree and choose **Edit**. The **2 Axis Contour** dialog will appear. In this box it is possible to set all of the parameters for the cut.

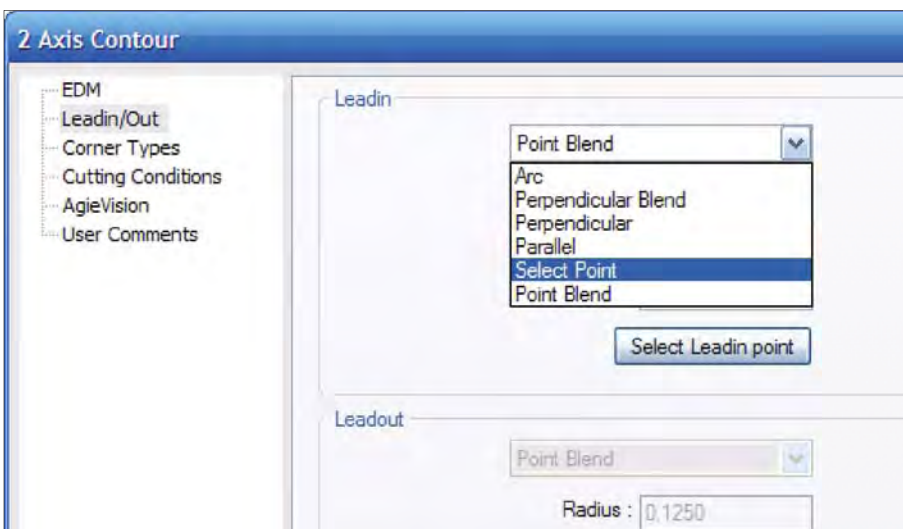




Leave most of the parameters for the cut at the defaults, but click on the **Leadin/Out** category to the left of the box.



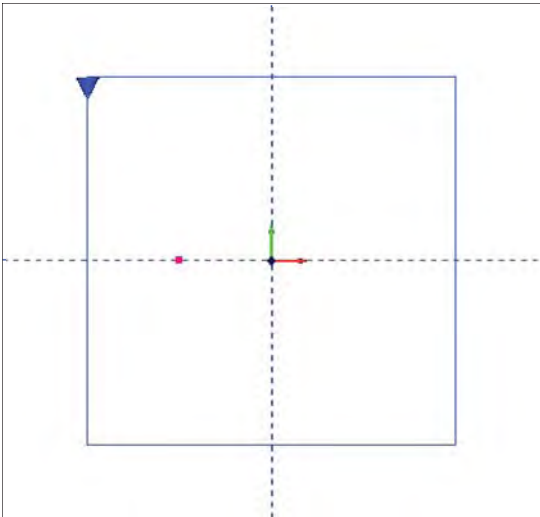
In the **Leadout** section, click on the **Same as leadin** button. This causes BobCAD-CAM to use the same settings for the **Leadout** section as in the **Leadin** without the need to reset them manually.



Then in the **Leadin** section, choose **Select Point** from the drop-down box.

A new button will appear labeled **Select Leadin point**. Click on it.

The edit dialog will disappear for a moment to allow the point in the drawing to be selected.



Click on the point in the **Workspace** to assign it as the leadin point for the shape. When that's done, the dialog will reappear. Click **OK** at the bottom of the box.

BobCAD-CAM will automatically compute the wire path and display it on the screen.

