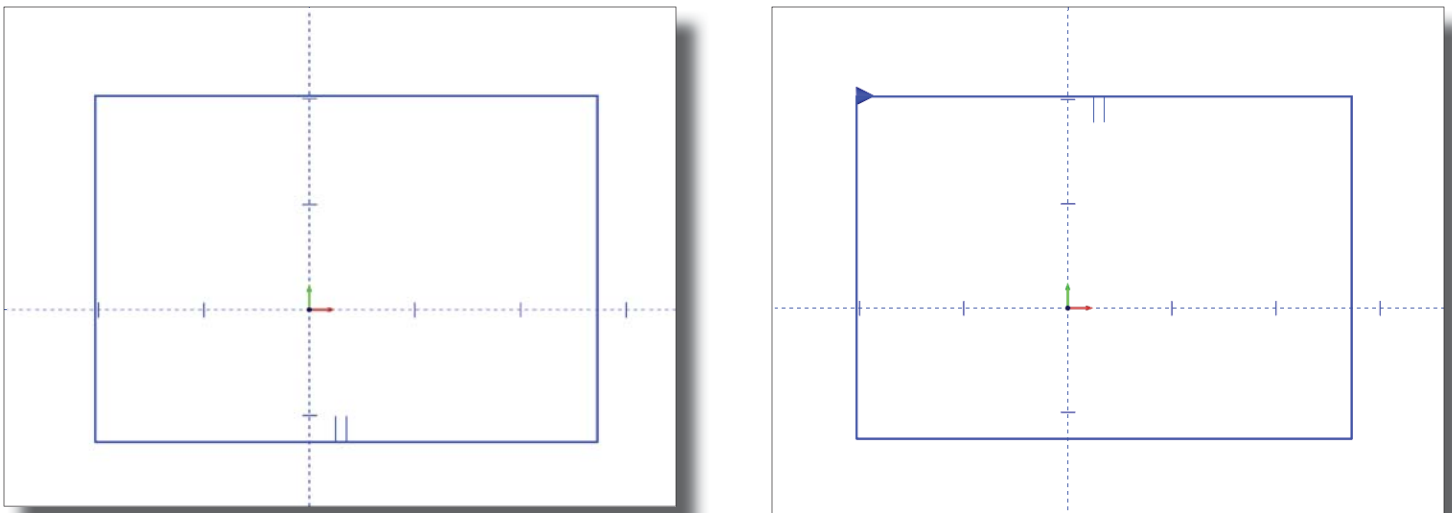


FAQ #26: Are contour entities really that important in Wire EDM?

Q: I've heard that it's important to always use contour entities in the boundaries of wire EDM shapes. Is it really important?

A: In a word, yes. BobCAD-CAM reorganizes shapes when they get passed to the wire path routines internal to the software. If contour entities are not used, there is no guarantee that the paths will begin in the same place as they were selected. With contour entities, it's as if they have already been "pre-organized" so that they don't have to be checked and rearranged. This is most evident when the user selects different leadin points on the profiles. With contour entities the leadins and leadouts work as shown in the dialog pictures, but without them the first entity in the chain may not end up where it's expected after the reorganization.

Here is an example of just that with a simple rectangle in a 2 Axis Inside feature:



The boundary on the right has a contour entity applied and the one on the left does not. Both were selected for the feature from the same location on the shape, shown by the arrow in the shape on the right.

Both shapes were created with the leadin start location set to "Middle of first." Upon reorganization, the shape on the left had its first entity shifted to the long line on the bottom rather than at the top as selected. The shape with the contour entity applied has it in the selected location.

That, in a nutshell, is why it is important to use contour entities when selecting boundaries for wire paths!