

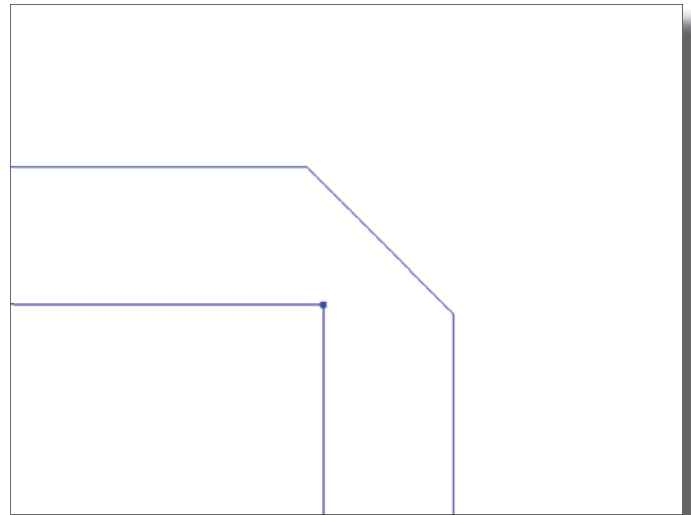
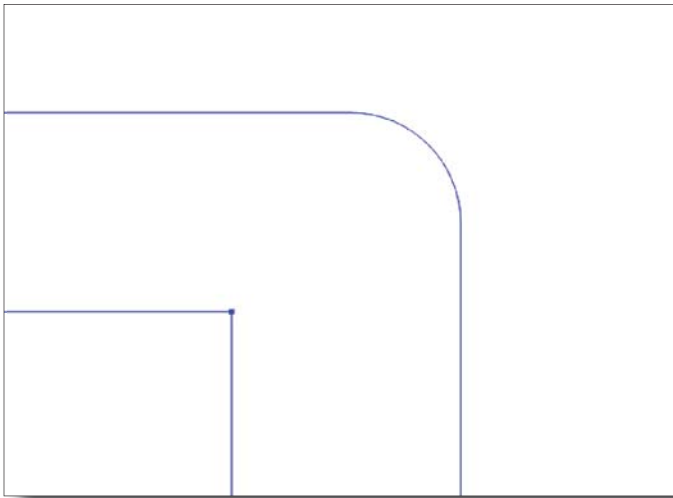
FAQ #25: When do I use Match Points?

Q: I'm a little unclear on when match points need to be used in my 4 Axis parts. When are they necessary, and when are they not?

A: Some might think of this topic as a judgment call, but there really are specific circumstances when match points are called for and when they are not. Generally speaking, match points are required not just when the top & bottom shapes don't match entities, but when they *can't* match them. A good example is the corner that is rounded on one shape but comes to a point on the other. Match points are *not* required when one shape has a straight line that essentially matches with a broken straight line on the other. In this type of case, it is better to make the profiles match either by breaking one line into two, or joining two lines into one, both ensuring the same number of entities on either shape through the same matching stretch. In this case the wire path *can* match and a match point will only complicate things unnecessarily.

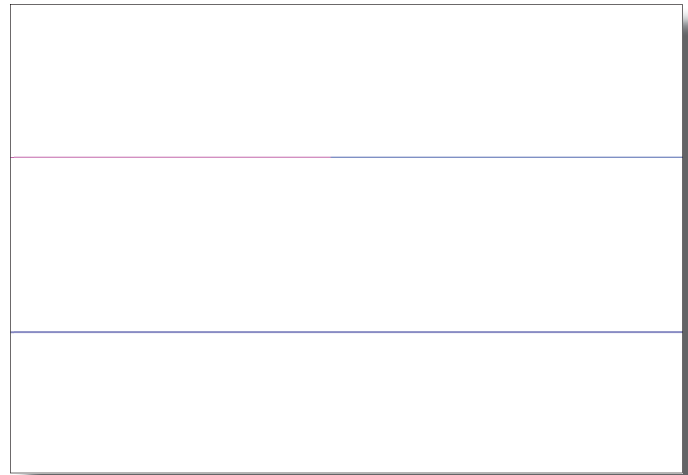
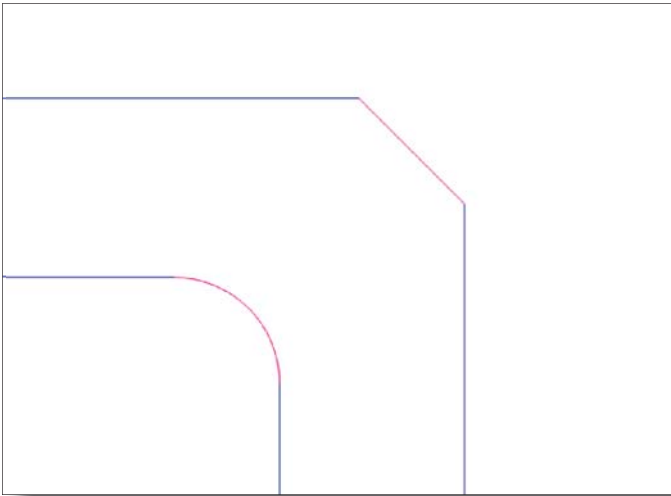
This FAQ won't contain a tutorial but instead illustrate examples of when they're needed and when they're not.

Times when a match point should be used:



In both of these examples, the match point is placed to stop the guide cutting the sharp corner in place while the other guide cuts the extra entity on the other shape. Both guides will approach the corner at the same time and depart the corner at the same time with this method.

In the next two examples, match points should *not* be used.



In the shape on the left, the two profiles do match, even though the corners are not the same shape. The key is the number of entities making up the shapes in any given location in the profiles.

In the shape on the right, there are two entities in the top line, but only one in the bottom. For this case either the top line should be joined or redrawn into only one line, or the bottom should be divided into two. Again, the key is the number of entities through this stretch of the shape.

There are many more possible examples of each, but the most important item to consider is if the mismatch will induce an unintentional twist in the shape. Sometimes this will only show after the wire path has been computed. If there is a twist and the wire paths drawn on the screen do not match evenly, then it will be time to consider either making the two shapes match more closely and / or using match points to force one guide to stop while the other catches up.