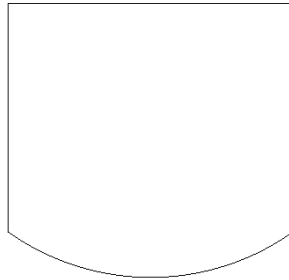


To show an example of how to program a Mitered segmented Arc using the saw on the Saber. All settings are examples and may not be the same for all applications.

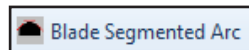
1. Create Geometry

- Draw the shape for the application.

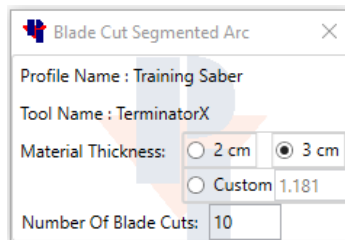


2. Blade Segmented Arc

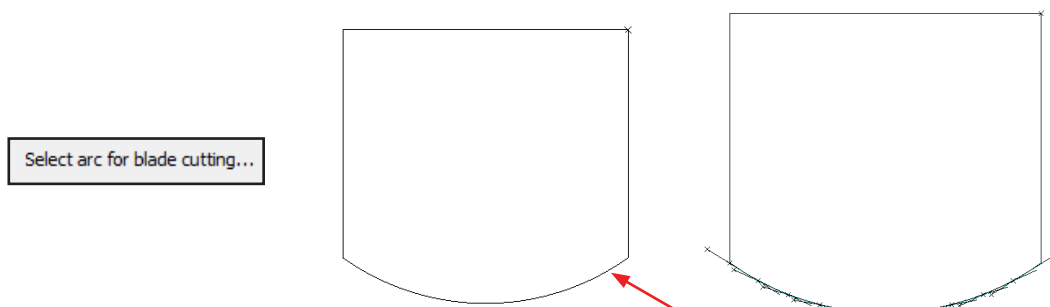
- The rules in Alphacam are that only straight-line segments can be used with the Undercut or Overcut commands to get the miter property. For this reason, we use the Blade Segmented Arc feature to get those straight lines around the arc.
- Under the **Saber** tab select **Blade Segmented Arc**.



- A Pop-up window will appear, Verify the tool name to be used and Material Thickness.



- Enter the amount of blade cuts to be used for the arc. The more blade cuts now, the less clean up later.
- On the bottom of the screen it will prompt us to “Select arc for blade cutting...” In the drawing click on the arc.

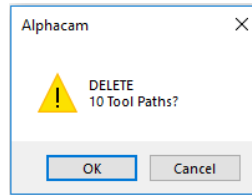
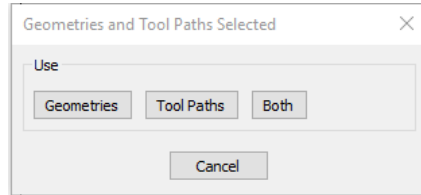


3. Delete Tool paths on the Segmented Arc

- Go to the **Edit** tab and select **Delete**.



- Window the tool paths created with the Blade Segmented Arc command and click “Finish”.
- A window will pop-up to Delete either Geometries, Tool paths, or Both. Select Tool paths and “OK”.



4. Explode the original geometry and delete the original Arc.

- Go to the **Edit** tab and select **Explode**. Select the original drawing from step 1 and click “Finish”.

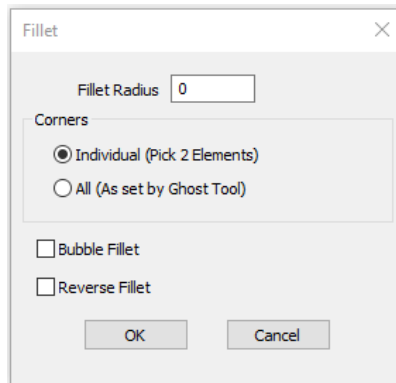


- Go to the **Edit** tab and select **Delete**. Select the original Arc and click “Finish”.



5. Connect the line segments left from the Blade Segmented Arc and do a Common Line Removal.

- Go to the **Edit** tab and select **Fillet**. Choose a Fillet radius of 0, and select individual. Click “OK”.

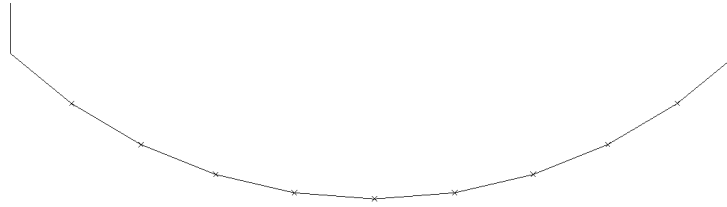


- Select all of the intersections of the segments to fillet, to create the arc.
- Go to the **Geometry** tab, select **Special Functions** and choose **Common Line Removal**.



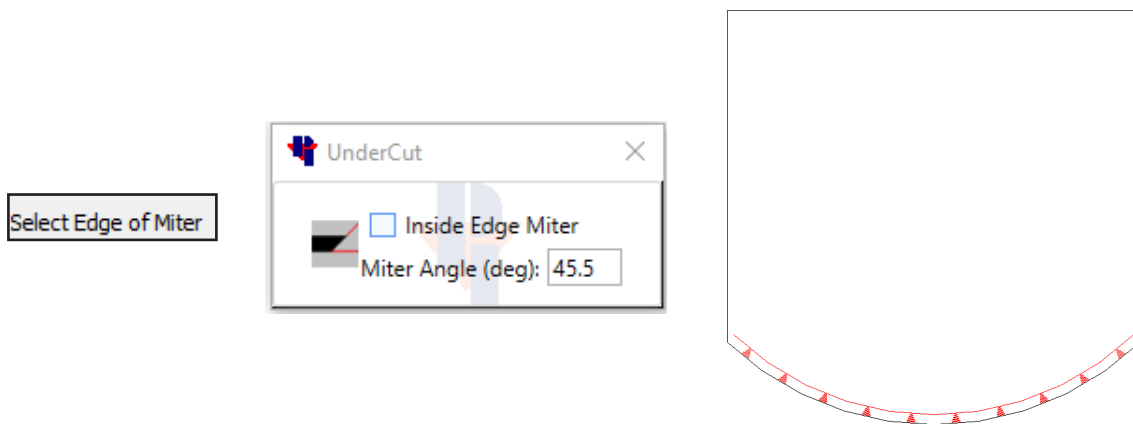
- Window over the entire geometry shape and click “Finish”.

- Depending on the drawing, other commands such as **Trim**, **Join**, and **Delete** may be needed, to finish cleaning up the drawing.
- In the end the geometry should have one white X, and should be joined.



6. Set the Miter property.

- In this example we used Undercut under the Saber tab and set the angle to 45.5 deg.
- On the bottom of the screen it will say, “Select Edge of Miter” Select each straight line segment on the arc.



7. Tool pathing.

- In Auto Tool Path be sure to uncheck “Simplify Wall Scans”, or keep the tolerance to a low decimal to avoid the shape of the arc being changed.

