

Adobe Illustrator (AI)

There are several graphic applications that can save or export files in DXF format. For AI Version 5.5, it appears that only straight lines are supported by Control Nesting, but arcs and circles can be converted to line segments. AI will export geometry as Release 13 and newer file formats.

AI supports layer concepts, so Outline, Centerline and the other required layers can be defined.

Arcs and Circles will not be interpreted without modifying either into straight lines. The resolution of the resulting lines may or may not be adequate for production quality. To convert an arc or circle into straight lines in AI,

1. Select the geometry
2. From the menu, select Object>Path>Add Anchor Points
 - a. The anchor points will be displayed for the selected geometry.
 - b. If the number of points is inadequate (note, straight line from point to point), then repeat the process of Add Anchor Points until the number of points is adequate to achieve the desired geometry without faceting the cut path.
3. From the menu, select Object>Path>Simplify Straight Lines
 - a. Turn on Preview.
 - b. Move the slider for Angle Threshold and observe the results. For best results, it appears that an Angle Threshold of 0 is required.

To save the file as in DXF or DWG format, select Export from the File menu.

Note: While it may not be the most efficient work flow, the dxf/dwg file can be opened by a CAD program, such as AutoCAD, so that it can be further refined by redrawing or modifying the entities, so that the resulting cut quality may be more predictable.

