Revolved Extrude Plugin
[Vers 4.0]

Purpose

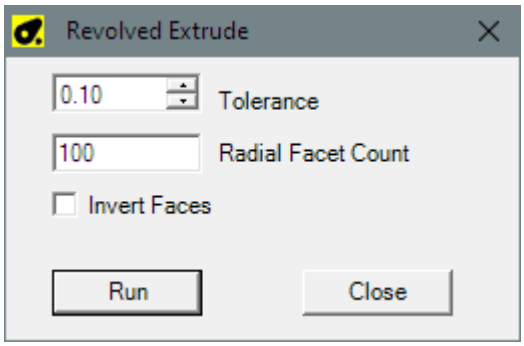
To take a user drawn line that represent the profile of a rotated shape, then produce a surface rotated and centered around the Y axis
3D Machining Operations (MOPs) can then be applied to produce the g-code.

Installation

The "Revolved_Extrude.dll" file should be placed into CamBam's Plugins folder. On re-start the plugin will be found in the CamBam top menu, Draw->Surface->'Revolved Extrude' and also in the mouse right click menu, Draw->Surface->'Revolved Extrude'

User Interface

This is the user interface:



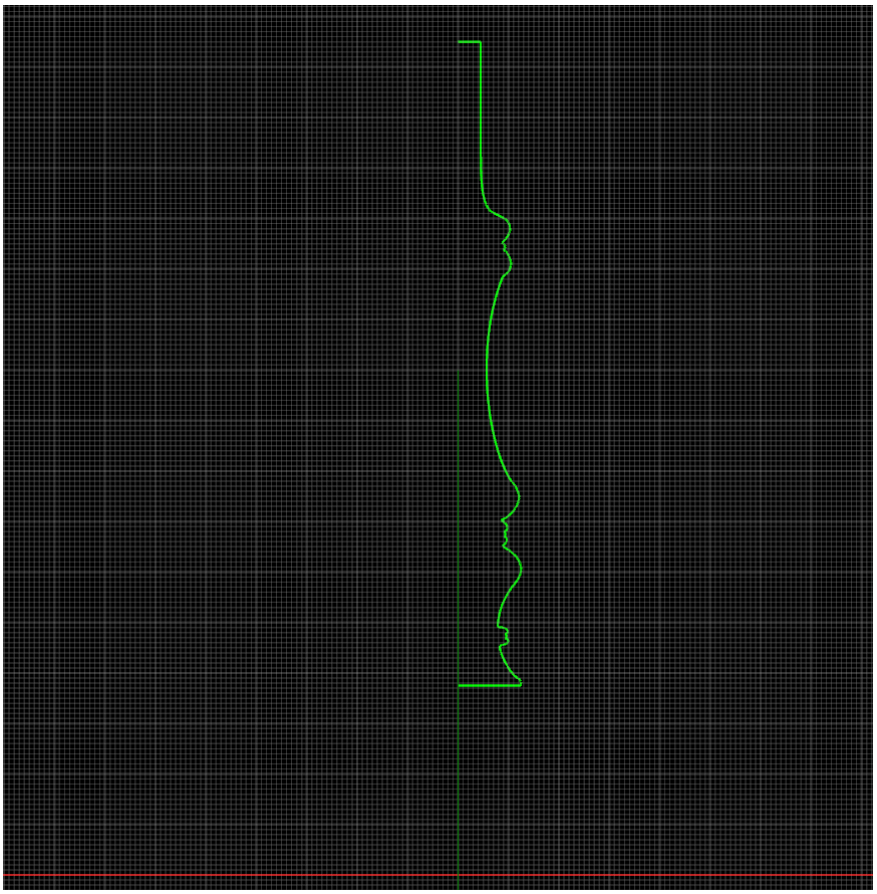
The fields are:

- *Tolerance* : Tolerance used when expanding curves to faces.
- *Radial Facet Count* : because this plugin produces rotated surfaces, facets are joined side by side to produce what looks like a circular body whereas in reality it is made up of short straight lines. As the number of facets increases so does the smooth appearance of the shape.
  This value should be kept as low as possible while still achieving satisfactory results.
  As an example, a value of 4 will produce a four sided figure.
- *Invert Faces* : If checked, reverses the mesh face orientation.
- *Run :* Once all fields of the Form have been completed, click this button to run the plugin and produce the surface or surfaces
- *Close :* Click this button to close the Form without running the plugin.

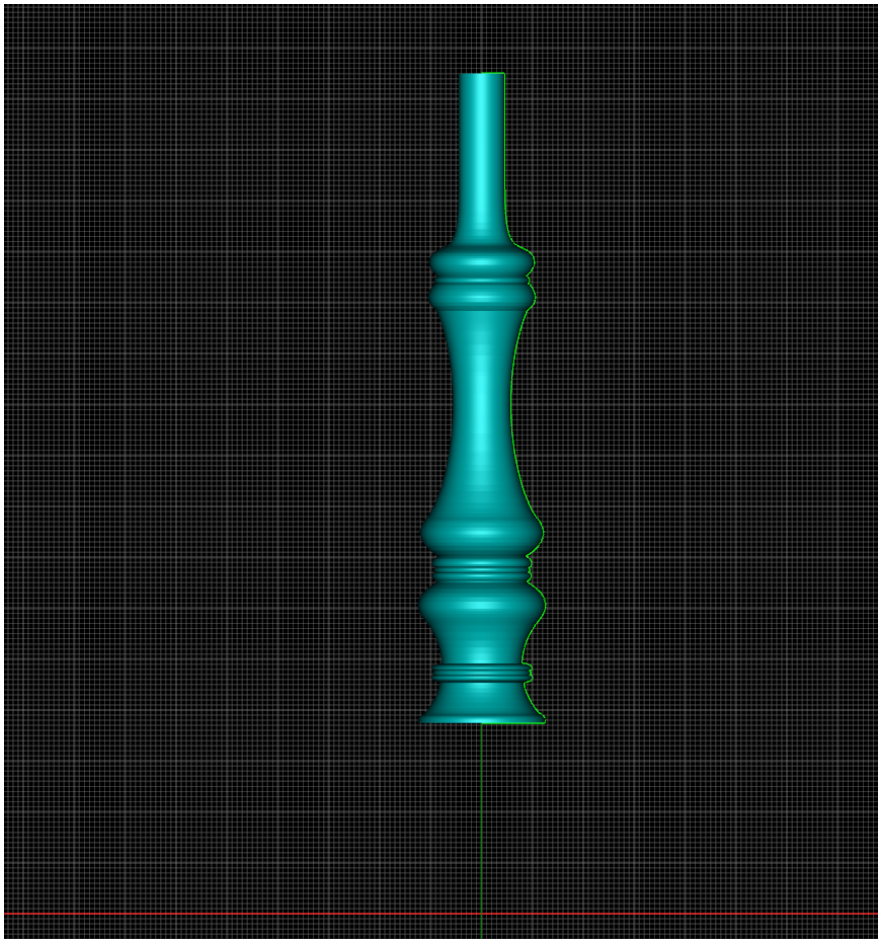
"Tolerance" and "Radial Facet Count" parameters are saved in Windows' Registry.

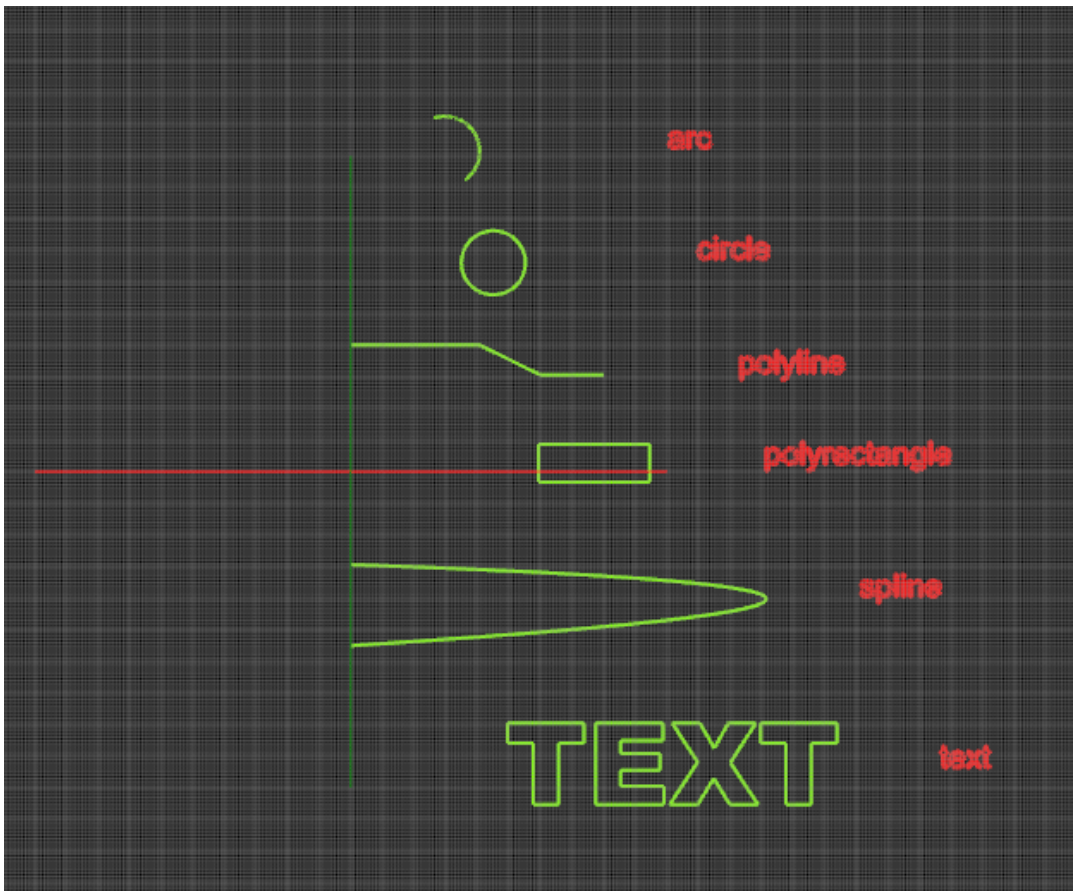
Profile lines

When the Run button is pressed, all selected polylines will be used to produce a surface or surfaces.
Profile lines can be drawn using the following objects;
Arc, Circle, Polyline, PolyRectangle, Spline, Text.



The polyline drawn above produced the surface below when the Run button was pressed.





The shapes drawn above using different types of objects were all selected at the same time and produced the surfaces below when the Run button was pressed.