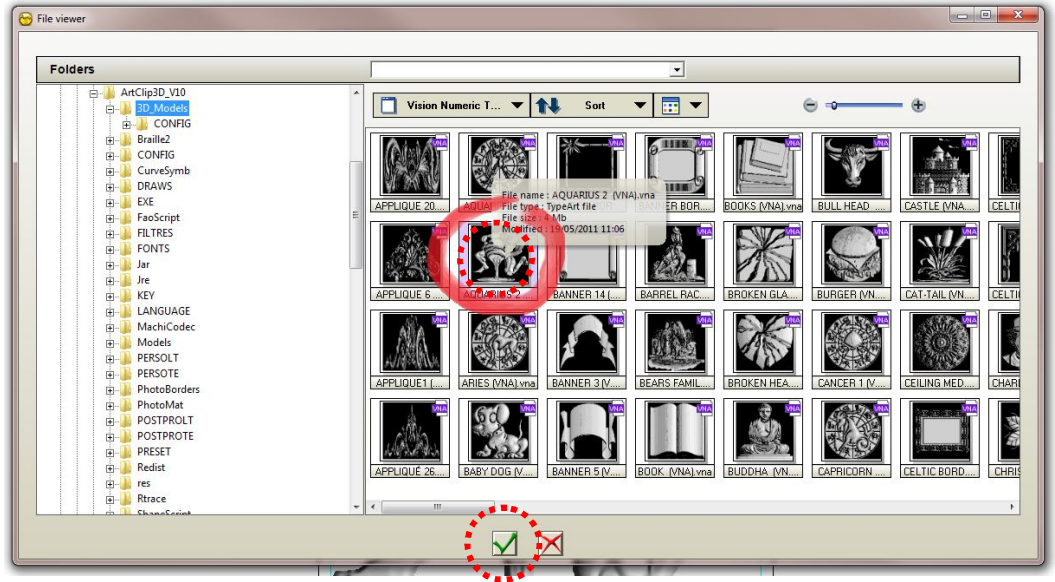
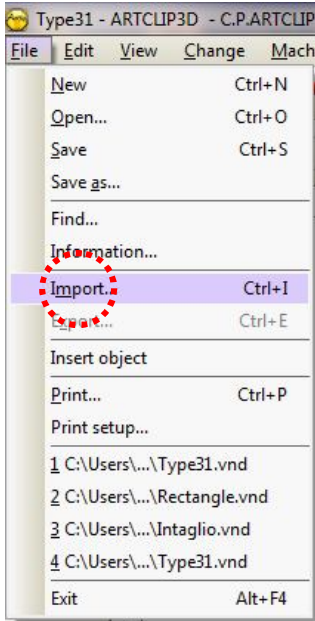


How to define a 3D Area to machine exclusively?

In ArtClip3D it may become strategic to set areas to cut independently from other sections of a 3D Scene. This tutorial shows how to set a 3D machining in a defined area.

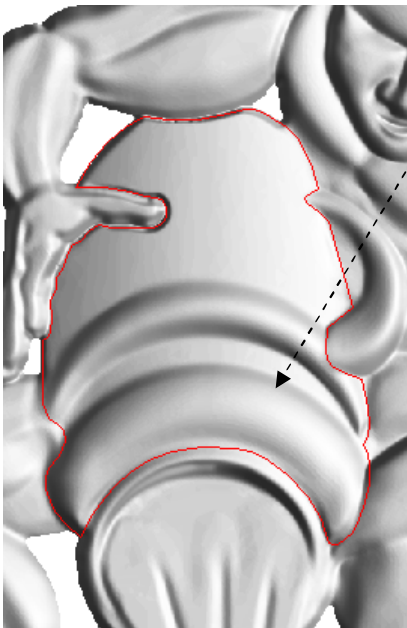
- **Importing a 3D model**

Click on the **File** menu and Select the **Import...** command (**CTRL+i**).



Select one of the 3D models you have available in ArtClip3D. You can choose the **Aquarius2.vna** which is the one we used in a previous tutorial and we will be reusing to demonstrate the topic of this one.

- **Outlining the area to cut**

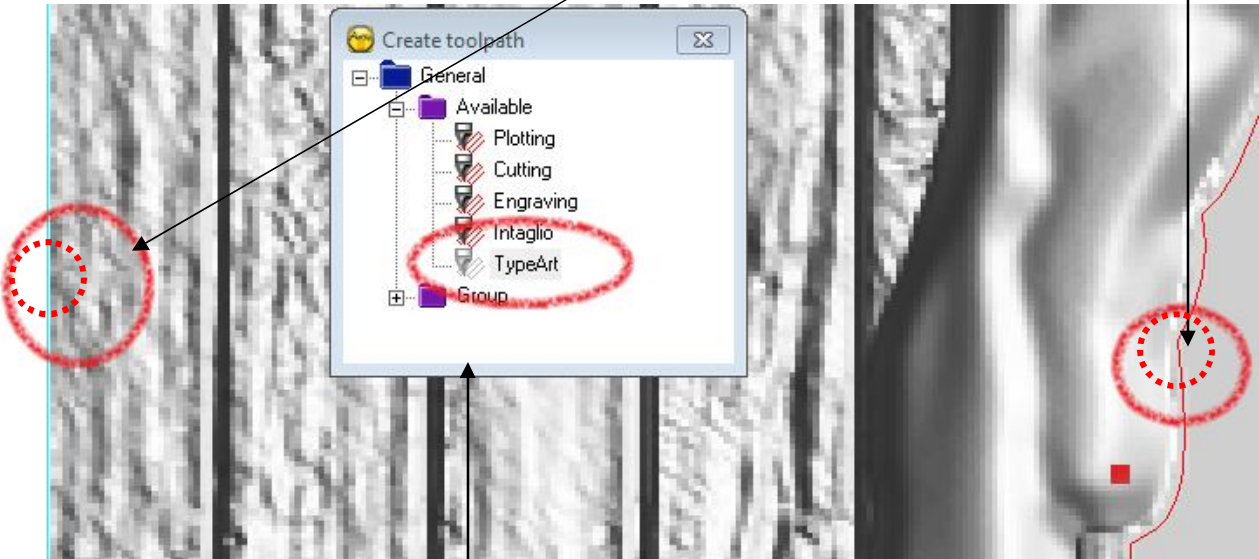


Using the Sketching tool from the Geometrical Tools, you can outline a zone precisely as shown on the left. That zone will be then an area to be used to apply any toolpath in it such as the 3D toolpath (TypeArt).

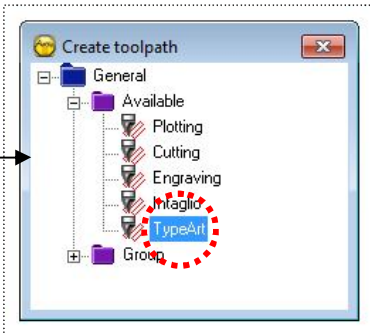
To do a precise machining in an area, once the outline has been perfectly drawn and you've made sure it is 100% closed (must be shown as either green or blue contour - if black it means it is still opened and you will have to close it manually with the AutoConnection tool or further edition in the Point mode), you can go to the CAM module.



Select the outline in red and then select the 3D object by holding the **CTRL** key.



You can see after selection in the **Create toolpath** window that the **TypeArt** and all the other toolpaths are active for selection. Double click the **TypeArt** toolpath and set your machining preferences. By validating the computation, **ArtClip3D** then will generate a toolpath within the outline area as shown below right.



This same setting can be applied for any area you want to cut. Either the full area of your 3D or any specific area you define with any closed outline drawn by the **Sketching tool** or other Geometrical shapes.



Frequently Asked Questions

- How come the area of my 3D machining is not following exactly its edges even though my 3D scene is defined within a circular shape?

The 3D machining generated on 3D object is covering a default bounding box area. If you have a 3D object which is rectangular or squared this is not an issue. The toolpath fits in an area which have the same boundary box has the 3D shape. No problem at all to cut out the 3D area nicely within its boundary box.



However, when the shapes are circular or within an ellipse, some areas are actually shown cut when we would not want to see them cut at all.

On the example on the left some areas highlighted with red arrows are shown cut within a squared area. This is the result of a 3D machining made directly on the 3D model only, without defining its real edges: circular edge.

By creating an outline such as a circle and then including it in the selection of the machining those corners will not show up because they won't be within the default bounding box, but outside the circular defined shape, guaranteeing a perfect cut in the right area.