

Guitar Process

Peter Schwarzel 15-10-2017

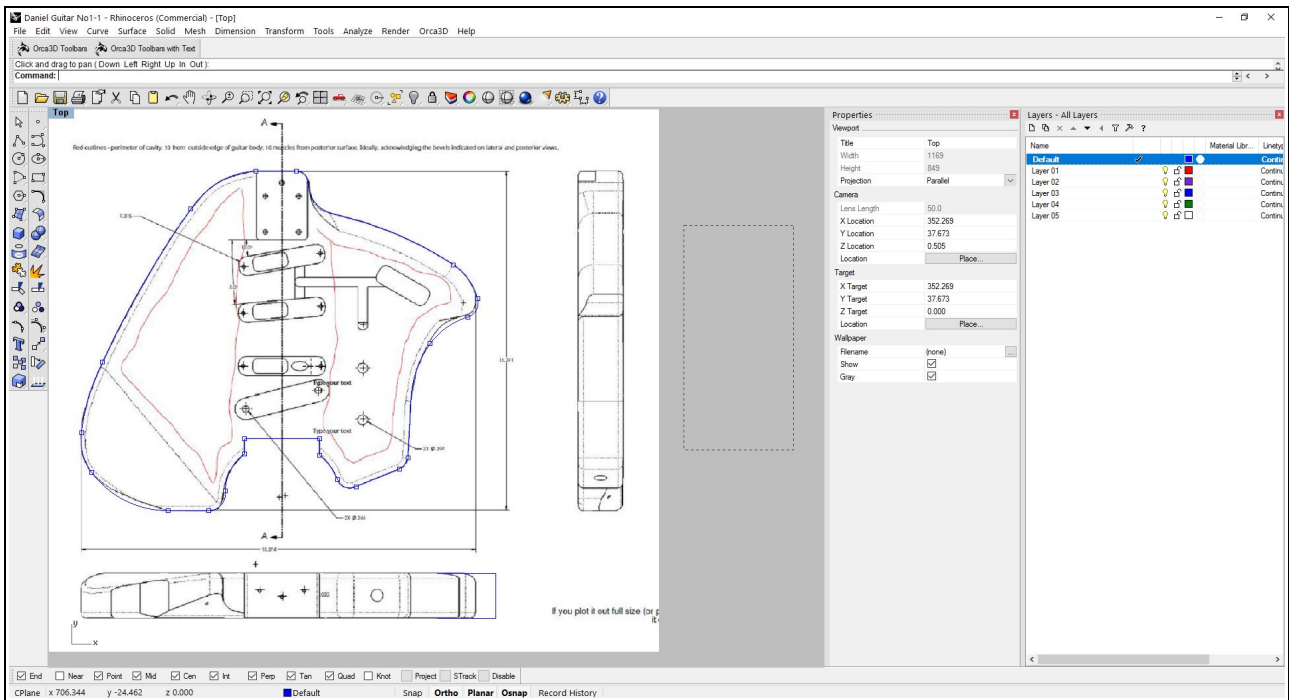


Image 1 – Tracing of guitar in Rhino

Firstly Daniel emailed me the guitar shape he wanted as a pdf. I then imported this as a background into Rhino3D and traced it. I used geometric entities such as lines and arcs so the shape could be controlled nicely. I could have done it as splines but offsetting splines and making features related to splines is more difficult. Plus the original is geometric so I stayed with that.

Rhino3D is a NURBS surface modeller. It can create geometric and free form surfaces. Alibre is a parametric solids modeller. It can create anything that is a solid. Has difficulty with some freeform shapes. But being parametric its models can be changed, updated and made relative to other models. It has powerful drawing and engineering capabilities.

I then created a part file in Alibre and looked at the Rhino entities one by one and built an equivalent Alibre model.

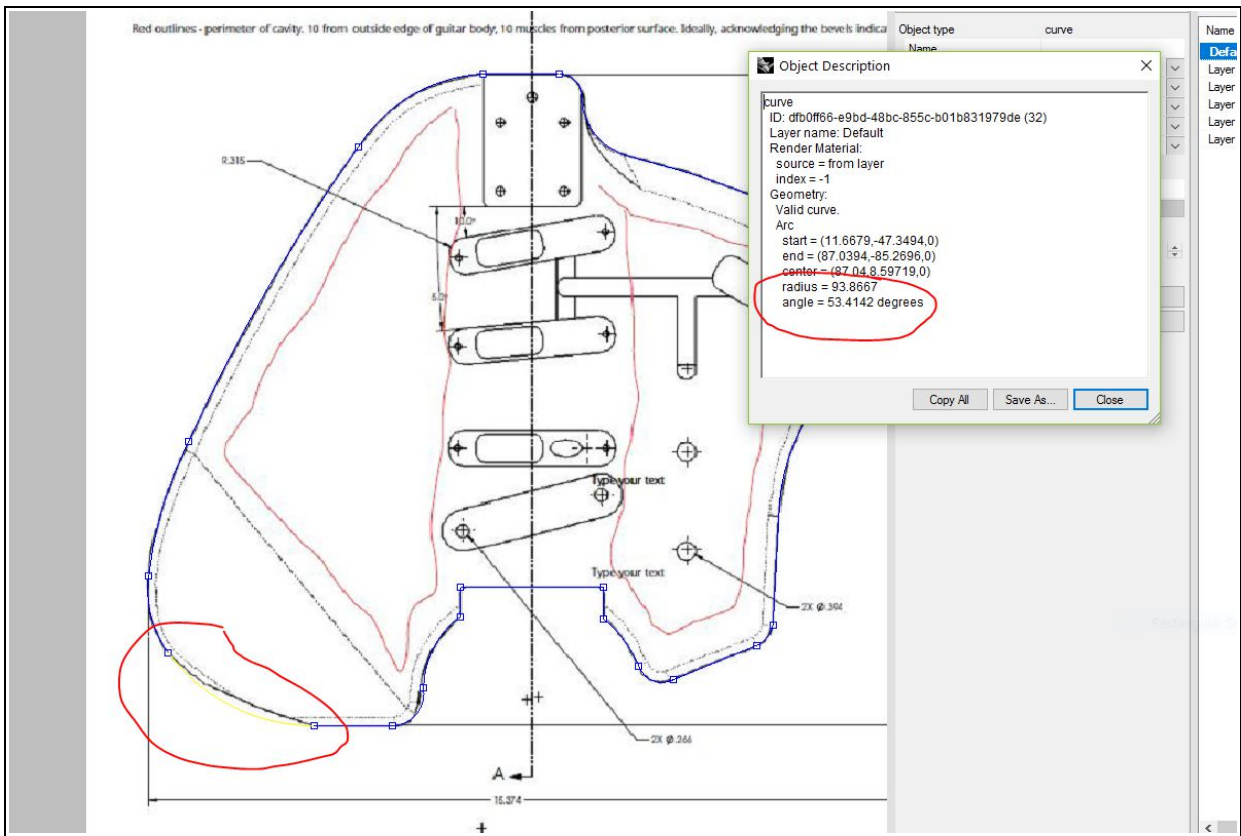


Image 2 – Details of arc from Rhino data. Use this to create the equivalent arc in Alibre

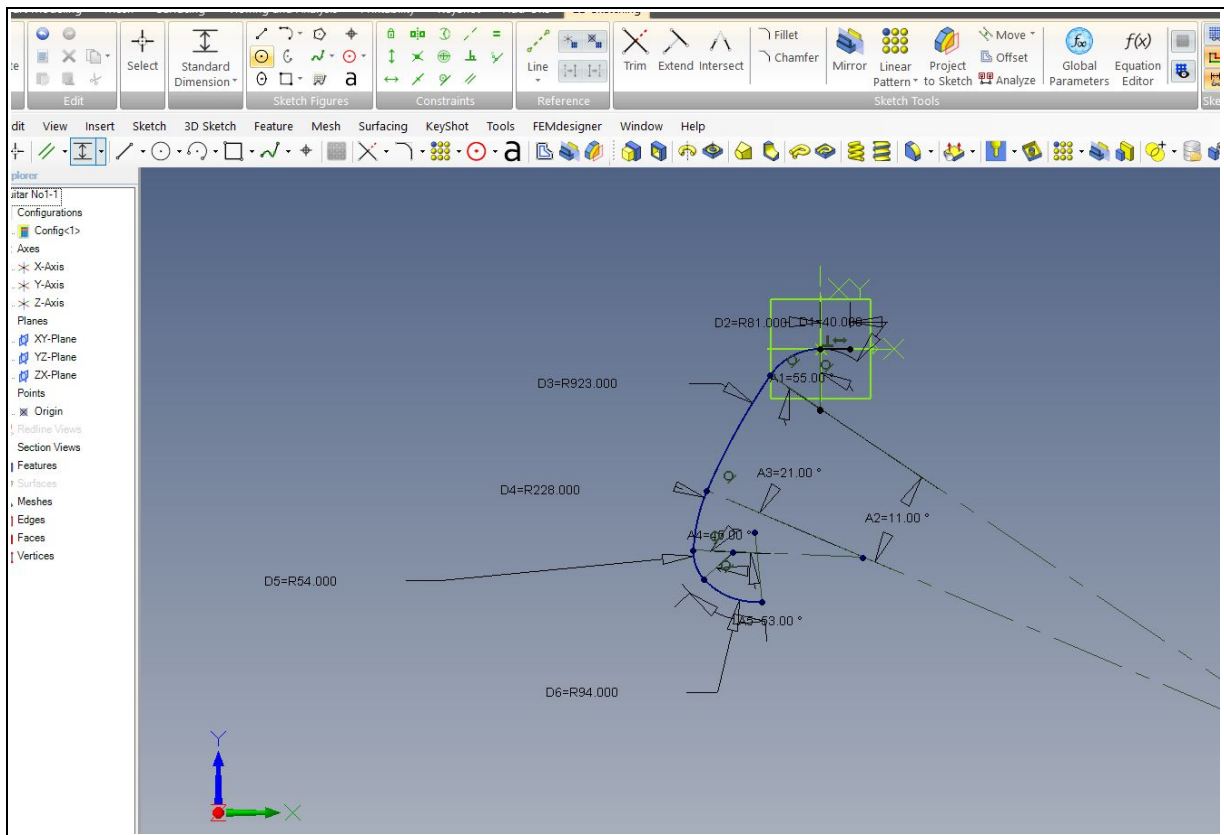


Image 3 – Rebuilding profile in Alibre

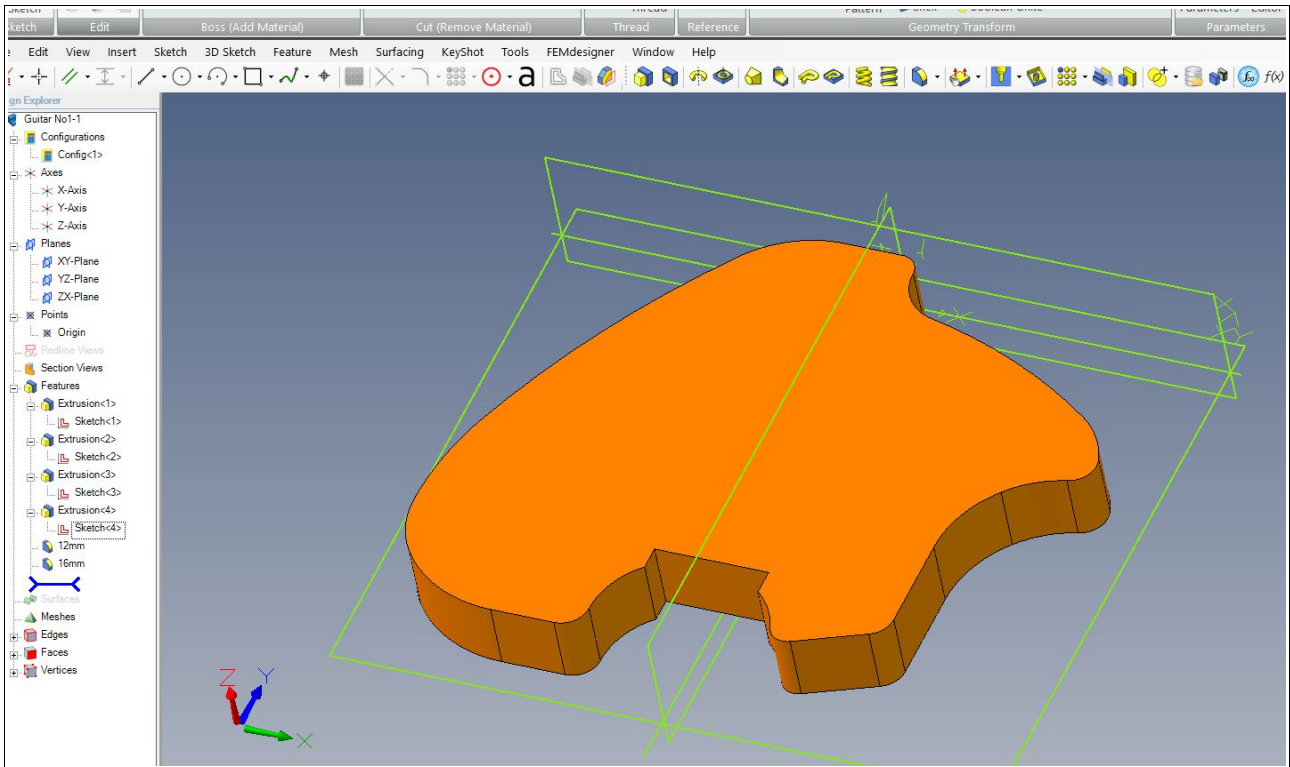


Image 4 – Profile in Alibre

Now we can add the blends, pockets and all the required details of the body.