As a violin maker, I do work almost every day with Rhino/RhinoCAM. It helps me prepare some of the pieces I then use in making music instruments (violins, violas, and cellos).

It’s a bit unusual in the violin making world. Most violin makers are very traditional, they don’t use machine tools. Personally, I’m respectful to tradition in the spirit, but I’m just using the best available tools of my time to help me building better instruments. This leads to more creativity and performance. Besides it’s very exciting!

I often change the shape of my instruments, but making a new model demands a lot of work, so I decided to consider another way of doing it and thought of using a CNC router. Building a new cello model took me more than two weeks of tedious work. Now I am able to make it within a couple of days with far more accuracy and fun. Rhinoceros and its complementary part, RhinoCAM, are quite easy to learn. They are also powerful software that enable you to create complex shapes!

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The example featured here is a part of the violin called the 'chin rest', a wooden piece where the violinist places his chin to hold the violin. The modeling process is done using Rhino 5. Since RhinoCAM is fully integrated within Rhino as a plug-in, I can directly create the tool paths.
When it is done, I first run the simulation in RhinoCAM and if everything looks fine I can post all and send it to the CNC router.

Because of its complex shape this part is made using two different stages: the top is performed first, then the piece is returned to mill the back. Three holes are bored to secure the repositioning with accuracy.
Machining of the chin-rest

Fine French violins
About me: Sam Peguiron

Trained at the Swiss violin making school and in different workshops across Europe. I opened my own workshop in Nancy (France) in 1983. Since then I have made over 80 instruments of different kinds, mainly violins and cellos, but also less usual ones.

More details on my website: www.peguiron.com