Material Tips

The complexity of a part, its size, and the material being cut will dictate how long it will take to cut on a machine. Here are some tips to keep in mind while setting up a part to cut on your machine.

- If your part is small, and your material thick, then this will add to the process time.
- You want to try and keep your material as close to the part size as possible.
SRP Player Tips

- **Cutting Speed vs. Quality**
  - The selection of your tool will also make a big difference in time. If you select faster cutting time...
  - ...it will select the largest tool you have and cut faster
SRP Player Tips

❖ Cutting Speed vs. Quality Cont.
  • If you select better surface finish, then it will select a much smaller tool.
  • When a smaller tool is selected, it will need more passes to remove the material. All the additional lines seen in the below picture translate to longer milling times.
SRP Player Tips

- **Cutting Speed vs. Quality Cont.**
  - The best thing to do is select as big a tool as you can. If you need more detail, then select a smaller tool on the finishing portion of the program.
  
  - To speed the process up even more, change the finishing tool path to “Scan Lines” instead of “Contour Lines”.

![Scan Lines vs Contour Lines](image.jpg)
SRP Player Tips

- **Small Features**
  - If you have small letters or small features in the part, cut the rest of the part with a larger tool and use a smaller tool just for the letters/features.
  - Start by adding a finishing tool path. Set the cut area only around the letters by dragging the red box around the details.
  - Next, select a tool that will fit in the letters/features.
Small Features Cont.

- To avoid the additional surface lines shown in the below image...
Small Features Cont.

...set the start height so that it is just below the surface of the part. Usually about 0.001” to 0.002” below the surface of the material works great.
Small Features Cont.

- This will allow you to cut only the letters/details required and not waste any additional time.