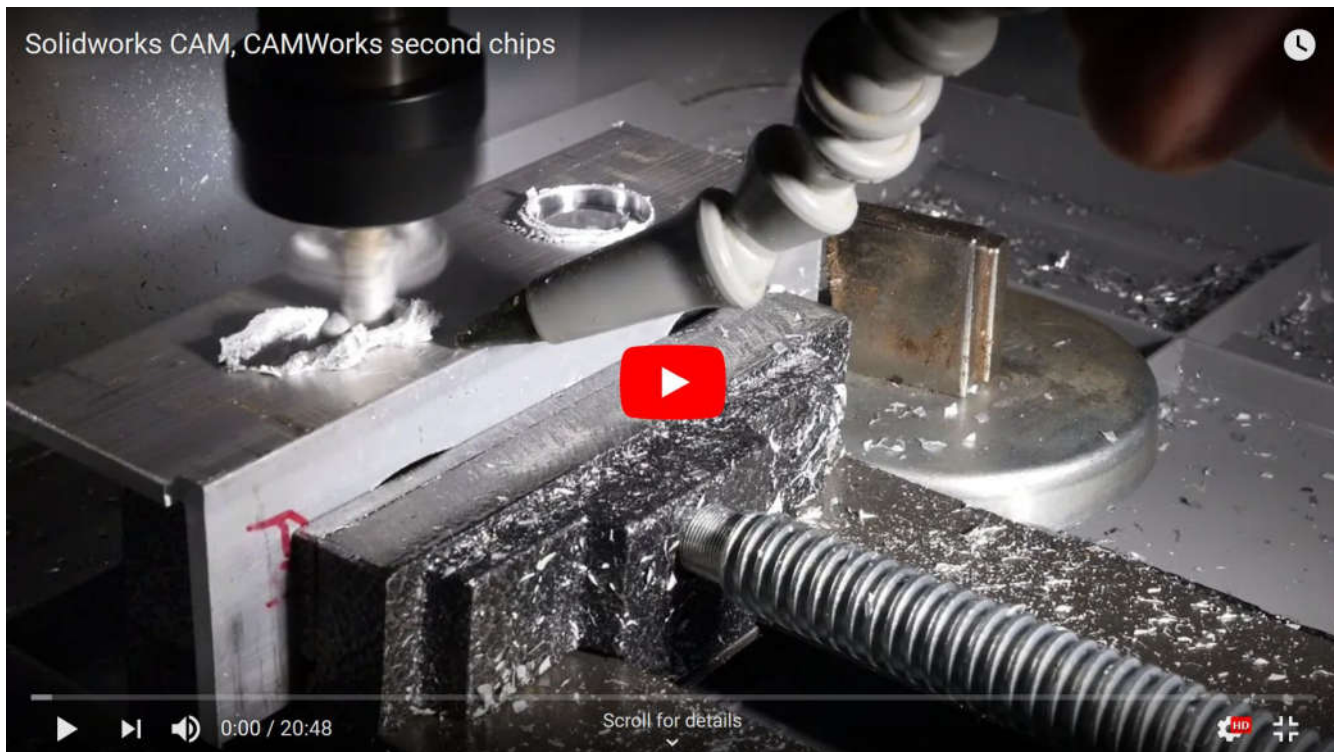




Rako Studios » Media » Suffering-with-software » Solidworks CAM, CAMWorks second chips (youtu.be/6Nf4FjvCXaU)

Solidworks CAM, CAMWorks second chips (youtu.be/6Nf4FjvCXaU)

I use SolidWorks CAM by CAMWorks to make more test cuts in aluminum angle, using my Avid Benchtop Pro milling machine.



SolidWorks part file here.
G-code file, (Mach3 no G54) post here.

I hope to save the end mill by soaking in in NaHCl, which will dissolve the aluminum.

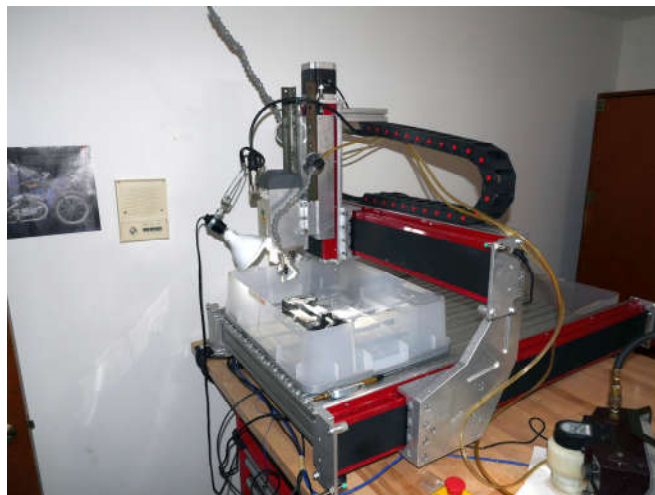
I push the speeds and feeds on the same test part from the last video. The first side of the aluminum angle went fine at 12,000 RPM spindle speeds. The second side of the angle loaded up the mill and I had to hit the emergency stop button. I forgot to turn on the Trico MD1200 micro-drop coolant system. The mill actually did OK on the first two cuts, testament to the performance of the MD-7 coolant. By the time the mill got to the second 3/4" hole, it was dry and loaded up.



I also noted some scratches on the part by the hole and ellipse on the first side.



I was afraid I had something wrong with the cuts, but it turned out that the small gouges were done by the cheap Home Depot vise I used. Time to buy a Kurt on Amazon.



My Avid Benchtop Pro has the larger NEMA 34 motors and I could sure tell as it tore up the aluminum. The larger motors is why I feel I can push the feed-rates faster.

Another improvement this run was fashioning a part stop out of a few magnets.



This uncovered the fact that I had a 0.100" error in the part zero origin in SolidWorks CAM. The two sides were exactly 0.1" off. I corrected this for the next run, and I plan on using the same speeds and feeds as in this run, only to remember to turn on the dang Micro-drop coolant, so the end mill does not load up. Thankfully, I received two square-nose end mills from avid when I ordered the mill.