



MachiningCloud Success Story

Don Lahr, CNC Programmer
Ultra Machining Company, Monticello, MN

Ultra Machining Company Enhances Simulation Process with MachiningCloud

In 1968, Terry Tomann started Ultra Machining Company in his family garage with aspirations of growing his business into a premiere manufacturing operation. Today, UMC is a 72,000 sq ft facility in Monticello, MN, just minutes from both Minneapolis and St. Paul. UMC serves customers across a number of industries including medical, aerospace, commercial, energy, industrial, amongst others.

We spent some time speaking to one of UMC's CNC Programmers, Don Lahr, about the challenges of verifying the part programs for their machines, and how he utilizes several different software packages to help simplify his daily work flow. In addition to using Mastercam and CGTech's Vericut software, he also uses MachiningCloud as an integral part of his programming and verification process.

The MachiningCloud Solution

Since UMC uses a variety of multi-axis machines, such as 5, 7, 9 and 11 Axis Machining, CNC Turning, EDM, Swiss, and Tool Grinding, they verify their part programs in Vericut to reduce the chances of mistakes and crashes on the shop floor. Defining the cutting tools one-by-one in Vericut can be time consuming, especially for a turning project, so a Vericut distributor recommended Don use MachiningCloud to simplify the process of defining his tooling. *"Now, we can easily find 3D CAD models of our cutting tools which are then easily used for part program simulation and verification inside Vericut."*

Since all the cutting tool product data in MachiningCloud come directly from the cutting tool manufacturers, the 3D CAD models are the most accurate available resulting in more accurate verification of his programs. MachiningCloud helps make UMC's machinists more confident in Don's setups and programs since they have been verified in Vericut using the cutting tool manufacturers 3D models. As they progress, Don wants to import the tools directly into Mastercam and use that information to make better programming choices.

"As we started implementing this 3D collision detection on some of our Mori Mill Turns, we needed to have accurate 3D CAD models of our cutting tools and MachiningCloud made them easy to find and use."

The Challenge and the Outcome

Before using MachiningCloud for 3D CAD models, UMC used typical methods such as Google, tool manufacturers' websites, and often had to manually reach out to them. *"We'd send emails, call and even then, there was no guarantee of receiving the file. With Vericut, I can import the tool directly from MachiningCloud. MachiningCloud made a huge difference saving us anywhere from 3 to 4 hours every week."*

Pearls of Wisdom

Don conveys that manually building the CAD files of his cutting tools is time-consuming, especially on turning projects, so having a "market simulation" is what inspired him to use MachiningCloud right away. New product and models are added on a monthly-basis as MachiningCloud receives new product data from their tool manufacturing partners. This ensures that there is continual up-to-date information, not just new product data, but also discontinued product.

"Instead of using a catalog or old model, we can always depend on MachiningCloud to have the most up to date 3D models from my cutting tool vendor."

ULTRA MACHINING COMPANY

PROBLEM Time consuming process of building tools CAD models

SOLUTION 3D models from tool manufacturers within MachiningCloud

RESULTS Various software sharing the same cutting tool product data



- Simple Steps
- Maximize Efficiency
- Increase Accuracy
- Better tooling decisions

- Select tools
- Build assemblies
- Verify availability
- Obtain speed & feed recommendations
- Download data
- Collaborate with team

