



Customer Spotlight: Waterjet West, Inc.

Waterjet West's Versatile Service Applies Manufacturing Engineering Expertise

When you have a seasoned engineer with 30 years of manufacturing experience, imagine the advantage he has in helping his customers accomplish prototype and production-ready projects related to aerospace, medical, architectural, power utility, and other end-use applications. Waterjet West Inc., a waterjet-only job shop in San Diego's North County, runs two OMAX 55100 JetMachining® Centers to apply the benefits of waterjet technology and its high adaptability for making customized parts while offering customers quick turnaround cutting service, just-in-time manufacturing concepts, and reverse engineering solutions.

A consistent demand of work keeps Waterjet West busy, even during the economic challenges in the past years. The company's business plan to serve a wider range customer base prevailed when the owners Scott and Jan Cormany decided to stick with waterjet technology as their main means of cutting in their job shop.

"If I spent the same amount of money to purchase a laser instead of a waterjet, I would be cutting strictly sheet metal and thinner gauge material," said Scott.

"But with waterjet, there was obviously room to expand. With my engineering background and knowing about manufacturing processes, I'm able to talk with customers in-depth and understand what they want from the project outcome. I can advise them if a waterjet application is the best choice for making their parts."

In-house engineering expertise helped the company's ability to market their waterjet cutting service. From the owners' connections in the aerospace and manufacturing industries, they quickly picked up projects requiring blueprint analysis and reverse engineering.

When serving clients in the aerospace industry, Waterjet West will cut projects such as pre-blanking material or customized spare parts. Cormany works with the design in OMAX's Intelli-MAX® control software to nest the shapes before cutting the file pattern onto titanium to get the best yield from the expensive alloy material.

"With conventional machining techniques such as milling, a customer wouldn't get as much yield from the plate," Scott said. "It would take up their valuable machine time which basically translates into capacity for them. So by spending \$60 to get a part cut out by us, they save two hours on the mill, and those mill operation times are much more expensive than waterjet times."

As a result, his aerospace clients can increase their own shop capacity and reap material cost savings by sending the specific cutting work to Waterjet West. They developed a very copasetic business relationship by establishing this process, Scott said.

At times he is asked to recreate older-style aircraft spare components from traditional mylar drawings. He modernizes the file by scanning them into a digital file format for the Intelli-MAX Software Suite to create proportional dimensions, assign a new waterjet cutting tool path, and establish the best machining quality.

"With reverse engineering, we've essentially been able to take blueprints, sketches, and mylars, scan them and input them into the OMAX software," he said. "We're able to trace over the original blueprint and use the scaling features to cut a prototype."

The company is also familiar with the frantic nature of producing immediate turnaround for prototype requests. When Cormany collaborated with the orthopedic industry, he produced a yoke design for a knee brace support by cutting small quantity samples. The cutting flexibility of the OMAX waterjet allowed him to economically work through the trial and error process in developing a successful prototype for them. When you have customers who want to send their product to market quickly, waterjet cutting is the best approach, he said.

"If someone were to go the conventional route to develop the yoke, which is to build a punch die and spend a lot of money getting the product to the prototype stage, it may not work during the test phase, so their die isn't good anymore," Scott said.

"With our OMAX, they get the versatility of the waterjet. We are able to take the design and make product parts within hours instead of weeks. The customer is able to test their prototype and make modifications, and then we can re-cut based on those modifications."

Since their customers come to expect fast turnaround cutting service from Waterjet West, Scott and Jan Cormany run both of their OMAX machines at 80% to 85% capacity whenever they can. The accommodating job shop can respond to emergency cutting requests from the occasional time-crunched client. This operating mentality makes their business more marketable and competitive, Jan said. As they continue to recommend waterjet solutions for various industry projects for customers, Waterjet West continues to establish a more appreciative and captive audience.