

Waterjet West is Making News!



San Marcos Water Jet Company Doing Business on the Cutting Edge

By: QUINN EASTMAN - Staff Writer (North County Times Business Section, Wednesday, September 19, 2007)

SAN MARCOS -- With supersonic liquid sandpaper, an engineer can cut precisely through almost any material, a startup business in San Marcos has found.

Aerospace engineer Scott Cormany and his wife Jan founded Water Jet West two years ago with the idea of bringing "abrasive water jet" cutting services to smaller businesses that might not be able to afford the equipment otherwise, they said. The variety of finished items in the company's workshop on Pacific Street illustrates the water jet's versatility.

Scott Cormany showed a reporter a range of cut products of different materials, in a variety of sizes, from a thin titanium piece a few millimeters wide used in dental implants to a pair of car-tire-sized arresting hooks that brake planes landing on an aircraft carrier. Rather than use a milling machine or an electrically charged wire to cut materials in complicated shapes, manufacturers are turning to water jets, he said. "It offers advantages not only in speed and precision but also avoiding waste," he said. "You don't have heat or as much mechanical stress on what you're working with, either."

Water comes out of the jet with a pressure of about 50,000 pounds per square inch, or 3,500 times atmospheric pressure, Cormany said. The water ---- traveling at twice the speed of sound ---- carries with it powdered garnet, a hard reddish stone. "It's essentially high speed erosion," he said. To withstand the abrasive effect of the garnet, the chamber where it mixes with the water and the nozzle must be made of either sapphire or diamond. About four feet of standing water under the target material absorbs the impact of the cutting stream.

Water jet technology is not exactly new: A forestry engineer first experimented with high pressure water jets to cut wood around 1970. More recently, computer software that controls the pace and trajectory of the water jet has made the technology easier to use, according to a 2003 article in *The Fabricator*, an industry journal. Water Jet West uses two truck-sized machines from Omax, a company based in Washington state that is a leading water jet equipment maker.

The Cormany's began their business in January of 2006 after one of them, Scott, had worked for 25 years in engineering for Northrop, GKN Aerospace and Nissan Performance Technologies. This gave him an advantage when the couple set out on their own. "I can speak the same language as the engineering department," he said. Still, Jan Cormany said building a customer base was hard work and took lots of cold calls. Their first year revenue was about \$225,000 and they've already tripled that this year, she said. With three full-time and two part-time employees, they're already talking about expanding with either a third machine or adding additional services such as welding.

A handful of other businesses in San Diego County also offer water jet services, such as CNC Dynamics in Vista, Aquajet Art in Escondido, Franklin's Industries in Poway and Thunderbird Waterjet in El Cajon.

-- Contact staff writer Quinn Eastman at (760) 740-5412 or qeastman@nctimes.com.



AT A GLANCE

Name: Waterjet West Inc.
Owners: Scott and Jan Cormany
Address: 330 S. Pacific St. Suite C, San Marcos
Phone: (760) 471-2600 Fax (866) 274-8752
Established: 2006
Web site: www.waterjetwest.com