

Two Omax waterjets redefine what one job machine shop can do



Double up

Life is full of outsourcing. We hire cleaning personnel to vacuum our carpets, babysitters to look after our children and accountants to sort through our taxes.

In the metal fabrication business, sending fabrication and cutting work to other companies can be costly and time-consuming. The waterjet, however, could be considered the ultimate “insourcing” machine, as it allows a com-

pany to cut countless types of material in all sorts of ways.

For Machintek Corp., Fairfield, Ohio, a contract manufacturer and job machine shop with a focus on steel, stainless steel and aluminum, the integration of waterjet cutting into its operations became an increasingly logical option, and a year and a half ago, the company purchased its first waterjet.

“For the last few years, we outsourced our contour cutting of sheet metal to heavy-gauge structural metals,” says Roger Hasler, owner of Machintek. “We have a machine that will do CNC punching, but it didn’t

fit all of our applications. So we farmed that segment of work out to other shops that had a waterjet or a laser machine. And, of course, I kept track of the amount of dollars farmed out, and when I felt we could justify doing it ourselves, I started looking into a machine to do just that.”

That machine was an 80160 JetMachining center from Omax Corp., Kent, Wash. Featuring Intelli-Max software for fast cutting speeds and enhanced precision, a programmable and motorized Z-axis, a 40-hp pump and a Tilt-A-Jet taper-compensating abrasivejet cutting head, the 6-ft.-by-12-ft. waterjet was able

Waterjet Cutting

to handle Machintek's previously outsourced cutting.

"We wanted a good-sized machine," says Hasler. "And the 80160 gives you more accuracy in the bigger equipment. At that time, I looked at a couple of different models of waterjet, and quite frankly, I liked the information that I gathered from Omax. They were very service-oriented."

Enter the 80X

As the Omax 80160 waterjet began to fill up with work, Hasler decided to add a second waterjet of similar capacity.

In September 2009, Machintek added a 6-ft.-by-12-ft. Omax 80X JetMachining center with a Tilt-A-Jet cutting head, a rotary axis and a 40-hp pump.

Similar to an 80160, the 80X features Intelli-Max cutting software, a programmable and motorized Z-axis, pumps ranging from 30 hp to 80 hp with pressures up to 55,000 psi and a bulk abrasive feed assembly. However, the 80X also features four axes of cutting and an articulating jet, as well as an Intelli-Trax traction drive inside the X-axis for higher accuracy. Positioning accuracy is ensured by the use of linear magnetic scales with a fully closed loop feedback system.

"We're showing [the 80X] to some of our customers to see the potential of it," says Hasler. "Plus, the rotary table was a feature that really excited me about our new machine. It also has scale feedback, and I think in the long run, that's going to be a real nice feature to have."

Machintek can run its two Omax machines with a single operator, saving costs and increasing output. Plus, having the flexibility inherent to a waterjet has allowed not just for the company to retain work it normally would've outsourced, it's also aided in streamlining in-house work.

"It certainly has made our whole operation look differently at how we manufacture," says Hasler. "We now have put parts on our waterjet that we would've cut with metal cutting tools or more conventional machining. Components that we used to do on drills or mills we've moved to the waterjet because it cuts features

more efficiently."

In fact, the presence of the waterjets has inspired shop floor employees to rethink Machintek's manufacturing processes and suggest improvements via using one of the Omax machines.

"One thing that I noticed after we started our [80160] was that the folks in the shop saw the potential that the machine could do," says Hasler.

"Our key personnel have played a huge role in suggestions to move operations to the waterjet rather than run parts on chip-making machines. That benefit has been a big timesaver. A lot of people here have been proactive in that way. That's something that's kind of an intangible if you don't have [a waterjet]. That's been the biggest surprise and, of course, a good surprise."

Jet support

For Omax, just as important as the quality of the machines it engineers are the service and support provided after the sale. This begins with ensuring the waterjet purchased is the closest fit to a customer's manufacturing needs.

"You go over the customer's applications, you discuss with them what they're looking to do now and what they might be looking to do in the future, which is a big part of recommended equipment," says Brian Damm, regional sales manager for Omax. "If they want to expand and have the versatility to cut thicker materials, no matter what it might be, as well as reflective, non-conductive and conductive materials, then the waterjet is probably up their alley."

"[Omax] has certainly responded to anything I've asked about," says Hasler. "When we had our original machine installed, like any new machine, there are little things that come up. When I requested a service call, had an issue I didn't understand or something I didn't think was right, Omax seemed to be on it quickly and were



very friendly about it too. I've never had an issue having to coax them into doing something for me that I felt was necessary. I believe they stand behind what they claim in their sales literature, and they've certainly proven that to me."

Damm will readily speak to Omax's extensive customer focus and large customer support staff, but he ultimately feels that companies purchasing new equipment, be they waterjets or any other machine tool, need to take into consideration the quality of the company, as well as the quality of the products and solutions it provides.

In other words, Machintek's purchase of an 80160 and 80X was also a purchase of Omax's trust and support.

"You're buying the machine to do the work and make you money, but secondary and close to that is [that] you're buying the company and the service and support that's going to help you run that machine and keep it running for you," says Damm. "That's what we do better than anybody out there." **FFJ**



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