

# WE KNOW HEAVY METAL

## METFAB

ATTLEBORO FALLS, MASS

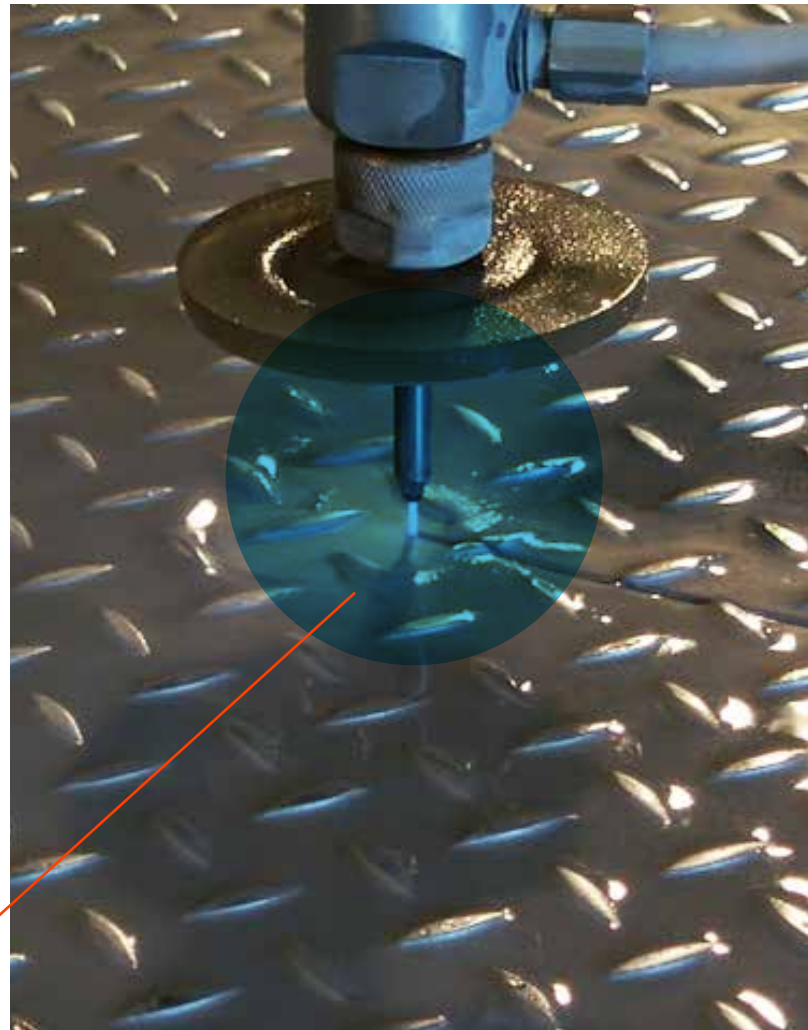
Located in Attleboro Falls, Massachusetts, Metfab Engineering is a large full-service job shop that provides metal fabrication and machining services to businesses around the world. Metfab's services include CAD engineering and layout, machining, waterjet and laser cutting, welding, assembly, painting, and finishing. The company's customers represent nearly every business sector, including semiconductor, energy, defense, security, medical, pharmaceutical, and chemical industries.

Metfab Engineering can trace its roots back to a simple three-car garage and owner Edward Urquhart's vision to build a business from the ground up. Thirty-five years after its humble beginning, the company occupies a 50,000 square foot manufacturing facility and employs 60 people.

The company's success is highly attributed to Urquhart's willingness to invest in his business. If he can buy a piece of equipment that makes the job easier and faster, then he buys it.

Seven years ago, Metfab did just that when they invested in a precision abrasive waterjet cutting system manufactured by Jet Edge of St. Michael, Minnesota. The company selected Jet Edge's 6'x10' High Rail Gantry System, which it powered with a 50-horsepower Jet Edge 55-50B intensifier pump rated for 60,000 psi. The system is controlled by Jet Edge's AquaVision motion controller, which produces finished surfaces and cuts with consistent quality.

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"We looked at all the major manufacturers, and I saw demos from each one," says Metfab Manufacturing Engineer Bruce Weeman. "I met some of Jet Edge's engineers and heard what they had to say, and it seemed like the construction and maintenance of the machine was exceptional."

Weeman says that his company originally bought its waterjet system to cut laminated panels, but they quickly discovered its usefulness for other projects. With the Jet Edge system, Metfab is able to cut parts from virtually any material, including materials considered "uncuttable" with conventional tools. Metfab cuts materials up to 6 inches thick and maintains a tolerance as close as  $\pm 0.005$ ".

**HE DIDN'T THINK WE COULD CUT IT.  
WE DID IT AND HANDED IT TO HIM...**

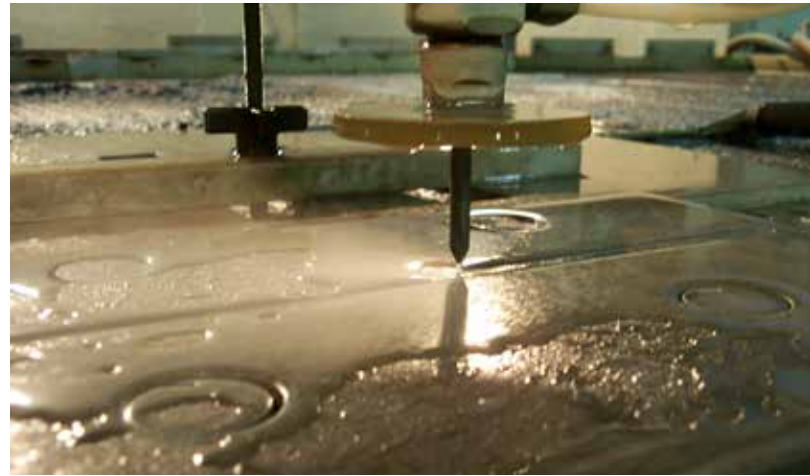
—BRUCE WEEMAN, MANUFACTURING ENGINEER, METFAB

The Jet Edge system's CAD/CAM software has helped Metfab reduce waste by enabling it to nest multiple parts in a single program. The company is also able to cut smaller parts out of material that once would have been considered scrap. In addition, the Jet Edge system has increased Metfab's productivity by allowing the company to cut parts on the waterjet that it once would have had to make in its machine shop. This has freed up the machine shop for other projects.

Metfab can now save customers months of fabrication time. A natural gas company needed to have a valve customized with a difficult-to-machine hole, and they needed it quickly. Metfab's waterjet operator manually raised and lowered the waterjet cutting head and was able to drill the hole into the contoured valve within minutes.

"They said if they had to buy the piece, it would have taken two months to get," Weeman says. "It took us half an hour between programming and cutting."

Metfab also used its Jet Edge system to cut fragile stained glass pieces for a local window company. "He didn't think we could cut it," explains Weeman. "We did it and handed it to him, and he said it would be almost impossible to cut by hand. He told us that if he were to cut it by hand, it would have taken him six months. We did it in four days."



"It's been great," Weeman continues. "It's simple to use. Jet Edge brings potential customers in here and we've recommended Jet Edge to everybody they've brought in. Jet Edge has always been there when we needed them. Downtime has been almost non-existent. Everyone from sales to service to parts has been excellent."

Structural frames, heavy weldments, sturdy machine bases, and more—chances are, with the help of Jet Edge, Metfab Engineering, Inc. can build it.

