

Applications

The Expanded Application Range Offered by Waterjet Technology Pays Off for Midwest Precision

Midwest Precision, Inc., a 27 year-old Tulsa, Oklahoma-based contract cutting company, finally saw the light.

More accurately, they saw the water.

They saw the water in the form of an KMT Waterjet waterjet cutting system. Since purchasing the KMT Waterjet cutting system, Midwest has enjoyed 25% annual growth.

"Using waterjet technology opened a wide spectrum of avenues that we had never seen before," said Brian Miller, Director of Sales and Customer Administration. "The waterjet has the ability to cut so many different kinds of material at precise, unique angles. It really compliments our existing punch pressing, forming and welding applications."

Midwest Precision was well known for its work in electronics and aerospace industries, and on military contracts. But after being introduced to waterjet technology in 1992, company President Ron Miller saw the future.

"Waterjet is by far, the most flexible and desirable technology in the business and delivers results with amazing reliability," said President Miller. "Waterjet has a lot to do with the continued growth and success of Midwest Precision."

"Our first waterjet system, which we bought from KMT Waterjet in 1992, paid for itself in about six months," continued Miller. "KMT Waterjet provided a complete system, including an ultra high pressure intensifier, the 25-hp SL III, that is still running today."

The wide application range and reliable performance of this initial waterjet system lead Midwest Precision to add to its waterjet cutting operations in 1998. That year, Midwest purchased a second KMT Waterjet high-pressure intensifier, a 50-hp SL IV, along with several components and accessories including two abrasive metering devices, two Autoline™ abrasive cutting heads and two normally closed pneumatic valves.



Since then, it's been more 'business as usual' for Midwest Precision. The company maintains its competitive edge in the aerospace industry by utilizing waterjet technology to cut parts like aircraft bodies and wings because cuts made with a waterjet do not create heat affected zones, a critical manufacturing point.

"Our waterjet systems combine the best intensifier and abrasive cutting head in the business, which is especially important when cutting sophisticated jobs like aircraft components, as well as unique shapes such as pipes, steel doors and boxes," noted Tim Nite, Midwest Precision's Chief Engineer.



1-inch copper ring with intricate slots cut with an KMT Waterjet.

The customer reduced cost for this part by 93%. Nite continued, "Waterjet is our preferred method when cutting these types of jobs, as well as when cutting highly resistant materials like marble, bulletproof plastic, composite materials, laminates and fragile material, like glass. Cutting these materials with a laser does not produce the same high-quality and consistent results."

Waterjet technology also helps maximize Midwest Precision's investment in materials.

"The powerful yet efficient cutting stream delivered by the KMT Waterjet Autoline™ nozzle creates a very precise cut, turning what normally would be excess, wasted material into salvageable, reusable material, enhancing our overall fabrication process," said Verl Hoover, Midwest Precision's Senior Operator.

"And when we need service, the KMT Waterjet service guys respond fast and get our waterjet back on line again fast," noted Hoover. "But they always make sure that our guys know what happened to the machine to help minimize downtime in the future."

The partnership forged by Midwest Precision and KMT Waterjet continues to be a successful one, and waterjet continues to play a big role.

So I guess it is true what people say - there IS something in the water in Oklahoma...