As seen in the March 2014 issue of FFJournal®

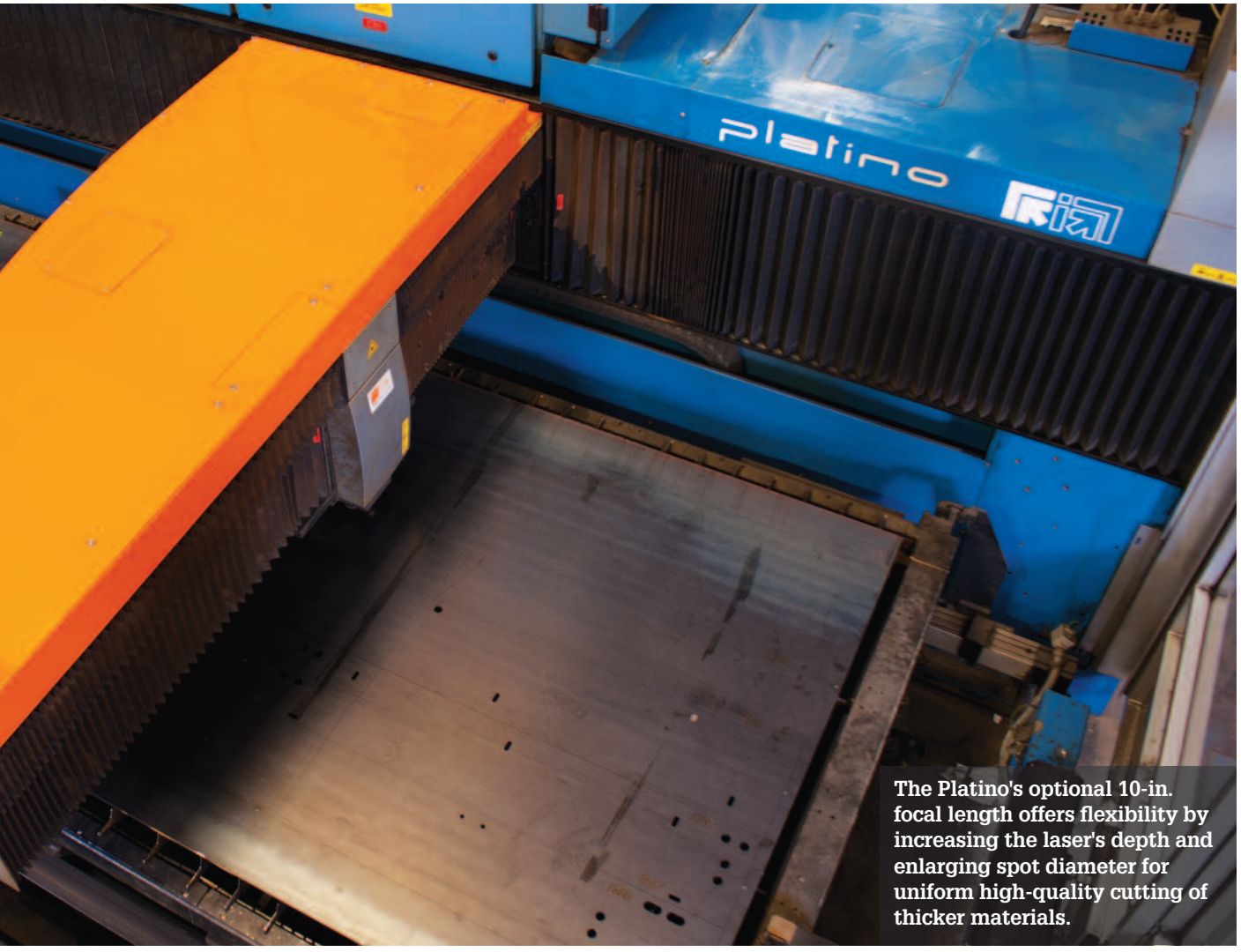
BRING ON THE LASERS

Adding two **Platino** lasers increases radiator manufacturer's accuracy and product line

In 1926, Borger, Texas, was an oil boomtown sitting on top one of the largest oil fields in the world. That same year, Fuzzy Whitlock founded Fuzzy's Radiator to service the radiators on the many machines in the oil fields. Through the years—and various owners—the company mostly remained a mom-and-pop radiator repair shop while retaining its original name. However, the company's focus began to change in 1985 when Alan Jones, son of the then current owner Kenneth Jones, purchased the company from his father. Today, Fuzzy's Radiator has evolved into a respected producer of industrial radiators and heat exchangers serving the oil and gas, mining and logging, agricultural and power plant industries.

"In 1991, we were experiencing quality issues with our suppliers on radiator cores," explains Alan Jones, owner and partner. "We decided that we needed to begin manufacturing our own cores and built a factory. In 1995, we added on to that building, doubling its size, and added more equipment because our share of the market was growing. Today, manufactur-

Since 1926 Fuzzy's Radiator has evolved from a small family-run repair shop into a respected producer of industrial radiators and heat exchangers.



The Platino's optional 10-in. focal length offers flexibility by increasing the laser's depth and enlarging spot diameter for uniform high-quality cutting of thicker materials.

ing radiators and heat exchangers comprises 90 percent of our business, while service and repair now accounts for only about 8 percent to 10 percent."

Fuzzy's Radiator began manufacturing the radiator cores in 1992 with a punch press. In 1999 the company added another punch press to fabricate component parts for complete radiators. "We perfected that to a degree but we experienced accuracy problems," says Jones. "The accuracy problem was created because we had to shear to size … and there is no way we could get within ½ in. tolerance. When you a have a piece of metal that is going to be bent four times and you are off ½ in., on the last bend you will be off ⅛ in. As a result, in 2009 we bought our first laser."

Jones purchased the Prima Power Platino 5,000 W laser with a 10-shelf tower, and soon added a 4,000 W Platino with a three-shelf tower.

Running with 2-D lasers

The Prima Power Platino is equipped with lasers developed and produced at Prima Electro in laser powers ranging from 3,000 W to 5,000 W. The laser cuts a broad range of materials and thicknesses with speed and precision without the need for manual adjustments. Platino's laser cutting head gives users a choice of a 10-in. focal length in addition to the standard 5-in. and 7.5-in. lenses. The 10-in. lens enhances the application flexibility by increasing the depth of focus and enlarging the spot diameter for high and uniform cut quality of thick stainless up to ⅜ in. thick, aluminum up to ½ in. thick and mild steel up to 1 in. thick.

Offering a compact footprint along with a Cartesian cantilever structure that provides three-sided access, Platino is a cost-effective machine that is easy to operate and quick to program. Its unique stonecast frame reduces vibration and increases stiffness by about four times compared to cast iron and about six times compared to welded frames. Its low heat conductivity results in much higher thermal stability than traditional cast or steel frames.

"We cut everything we can 1 in. or less with the Platino lasers … even parts for

Owner and partner Alan Jones purchased a Platino 5,000 W laser with 10-shelf tower in 2009 and soon added a second Prima Power laser and tower.

our new building," says Jones. "The lasers have been great and have dramatically increased our accuracy that we couldn't achieve on the punch presses. We currently have a robotic cell on order that we would not have been able to utilize without the lasers. All the parts on the robotic arm have to be consistent, especially where there are welding operations involved. And they have to be consistent and within very tight tolerances. The Platino lasers provide that consistency."

Fuzzy's Radiator laser cuts carbon steel, stainless steel and aluminum with the Platino lasers. "We have taken the Platino 5,000 laser to its limits and are now cutting 1-in. plate with it," says Jones. "We run both lasers all day, every day. We really like the accuracy and cleanliness of the laser cut. Thanks to the Platino lasers, we've almost eliminated shearing operations."

Prior to the addition of the Platino lasers with the material handling towers, the shop operation was mostly run by manual labor. The Prima Power TowerServer is a loading/unloading device for handling blanks and processed sheets. "It took two to three people to handle the heavy sheets," says Jones. "Today everything is handled by racks and the parts come off in pieces that are easy to handle. We've experienced a 30 percent savings on labor and materials. We are using the nesting capabilities with the lasers, and are able to use much more of the material that we used to throw into the scrap pile."

The Prima Power lasers have also helped expand Fuzzy's Radiator's product line. "The lasers have given us more to sell," says Jones. "We were unable to manufacture some products due to accuracy problems with the punch presses. And now we have more capability. Where we used to say 'we can't do that' because of our accuracy limitations, we now say 'we can do that' because of the lasers. We use the lasers for everything we manufacture. Ninety-five percent of our product line depends on the laser. And we are exploring additional new products to bring to market."

The management of Fuzzy's Radiator inspected a number of lasers prior to choosing the Platino lasers. "We preferred Prima Power's fine optics over the competitors," explains Jones. "When you move 300 lbs. around as opposed to 5,000 lbs. around, its got be faster and more economical to run. We feel that we got the best machine for our application for the money. I am happy with every aspect of Prima. They did everything they said they were going to do, and have gone out their way to take care of us. The machines are dependable. Our personnel had no problem learning how to operate the lasers. The Platino lasers were our ticket that allowed us to compete in the marketplace. They literally changed our operation overnight." FFJ

Fuzzy's Radiator, Borger, Texas, 806/273-2818, fax: 806/274-7470, www.fuzzysradiator.com.

PrimaPower North America Inc., Arlington Heights, Ill., 847/952-6500, fax: 847/952-6590, www.primapower.com.