

# Refrigeration Company Warms Up To Fiber Laser Technology

**T**raulsen has earned a premier name in refrigeration for the foodservice market. That reputation is grounded in a long history of delivering products designed and built to the highest possible standards of performance, quality and durability in the industry. These standards for innovation and value were set by its founder, Harry Traulsen, who formed the business in 1938 as Traulsen & Company in Queens, New York. At the time, the company was a producer of bakery fixtures – with a small product line that included refrigerated showcases.

Over the years, Traulsen has consistently expanded its range of top-of-the-line refrigeration for the worldwide food equipment market, with refrigeration offerings that include reach-ins, roll-ins, undercounters, blast chillers, prep tables, dual temperature units, heated cabinets, merchandisers and specialty applications often drawn from customer requests. Traulsen customers include restaurants, institutions, schools, hotels, hospitals, casinos, cruise ships, football stadiums, and other markets.



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Through the past 76 years, the company has experienced acquisitions, corporate buyouts, and many product innovations. Today, Traulsen is a division of ITW, and has 300 employees and has consolidated its operations to a 400,000 square-foot facility in Fort Worth, TX.

To fabricate its lighter gauge (12-22 gauge) sheet metal products, Traulsen had acquired such equipment as a turret punch press, an early model Shear Genius punch/shear combination machine, a CO<sub>2</sub> laser, press brakes, shears, welding machines, and several stamping presses. Two years ago, the company began a search for the latest fiber laser technology to replace some of its older equipment and help meet its growing production needs.



*Inspecting a sheet processed on one of its Platino Fiber lasers are (from left to right): Keith Spoon, supervisor; Mile Lalic, CNC programmer; and Matt McAleer, manufacturing engineer.*

## Search for Fiber Laser Technology

According to Rick Gazzola, manufacturing engineer, Traulsen's growing emphasis on the horizontal refrigerator market a few years earlier hastened its search for fiber laser technology. "About eight years ago, we started doing a lot of horizontal refrigerators for undercounters and pizza tops," explains Gazzola. "What we discovered as we did more of these types of products is that they differed from our standard upright rectangle refrigerator. They had a more intricate design. That's when we discovered that we really needed the lasers."

***"We are always searching for new ideas to improve efficiency and customer satisfaction and the Platino Fiber lasers are helping us do that."***

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“We also started to do a lot more 16-gauge material for drawers and tops,” adds Keith Spoon, supervisor. “We learned that the “sweet spot” of the fiber laser was lighter gauge material...and that is exactly what we do here.”

Both Gazzola and Spoon had experience with lasers from previous employers. They ruled out CO2 lasers because of their maintenance issues with resonator rebuilding, mirrors, etc. “Once fiber lasers were available and they eliminated many of those issues, we began our search,” continues Spoon. “For our company, CO2 lasers were not an option.”

**“The speed of the Platino Fiber lasers is amazing.”**

## Prima Power Platino® Fiber Laser

According to Matt McAleer, manufacturing engineer, Traulsen selected six different laser machine builders to submit proposals. “We saw many different machines, visited numerous customers, and we sent parts out for time studies,” reflects McAleer. “Once we had the time study results, it made more sense to go with the Prima Power Platino® Fiber because it was considerably faster.”



The Platino Fiber 2D laser cutting machine is the perfect balance of innovation and experience. This product combines state-of-the-art efficient and ecological fiber laser technology, with the proven reliability and flexibility of the Platino platform.



Prima Power's Compact 10-shelf TowerServer allows easy loading/unloading for blanks and processed sheets. It has an elevator for loading and unloading the pallets on and off the tower, and features single sheet separating, control systems, and sheet reference. The Platino Fiber is particularly suitable for 24/7 operation, often performed in unattended mode.

Traulsen purchased the Platino Fiber Laser with the 10-shelf tower. The first Platino Fiber Laser was installed in June 2013. A few weeks after delivery, the decision was made to purchase a second Platino Fiber Laser with a 10-shelf tower. The second laser and tower was installed in December 2013.

The Platino Fiber 2D laser cutting machine is the perfect balance of innovation and experience. This product combines state-of-the-art efficient and ecological fiber laser technology, with the proven reliability and flexibility of the Platino platform. It is the right choice for sheet metal manufacturers looking for a production tool which is:

- efficient, providing energy and maintenance savings
- productive, particularly on thin and medium-gauge sheets
- flexible, suitable for a wide range of materials, including highly-reflective metals
- reliable and capable of meeting any production need, with a variety of automation modules
- user-friendly, easy to install, use, and maintain

The Platino Fiber laser can be used to cut a wide range of materials. Fiber lasers are more effective than other laser sources for cutting highly-reflective materials (e.g. aluminum alloys, copper, brass). Platino Fiber cuts varied thicknesses, up to 20 mm of mild steel, with efficiency and quality. Productivity increases particularly with thin and medium-gauge sheet metal.

**“With the Platino Fiber lasers we are able to hold very close tolerances. We can cut different shapes and lock them together.”**

Other features and benefits include:

- Very low power consumption
- No laser gases
- Minimum maintenance and low consumables
- Floor space saving - compact automatic loading, unloading, and storage
- Easy and fast operating interface - fast setup
- Less energy, less waste of material, no laser gases
- Unique machine design using a synthetic granite frame offering the best thermal stability and vibration damping
- Cantilever design for maximum accessibility to the machine
- Protection cabin with roof, fiber-safe windows and fully opening sliding doors: total safety, visibility of the work area and accessibility



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## Flexible Automation

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The Platino Fiber is particularly suitable for 24/7 operation, often performed in unattended mode. It is a fully independent machine, with no need for manual intervention during machine operation. Once the production schedule is programmed, the Platino Fiber laser takes care of the necessary settings, tip replacement, sheet change and storage, etc.

***“Prior to purchasing the Platino Fiber lasers, Traulsen outsourced \$120,000 of laser cutting work to local job shops. Today, it is all done in-house.”***

According to Traulsen management, the two Platino Fiber lasers have had a very positive economic impact on the company. “The speed of the Platino Fiber lasers is amazing,” says Gazzola. “We used to shear a lot of parts. Since installing the fiber lasers, we took one shear out of operation, and run the second shear just one day per week. The Shear Genius cell was replaced, the old CO2 laser is gone, and the one turret punch press that used to run two shifts 5-6 days per week is now operating just 20 hours/week. Today, our production is so much faster and cleaner. Before we were always doing two operations – now we just send it to the Platino Fiber lasers.”

“At this point we are very comfortable with the machines,” explains McAleer. “We are adapting our production to the machine and using it better. Instead of using small blanks, we can do so much more using large sheets and nesting various parts.”

## Higher Quality & Increased Production

“We are also trying to eliminate welding operations on the horizontal products,” adds Spoon. “With the Platino Fiber lasers we are able to hold very close tolerances. We can cut different shapes and lock them together.”

Prior to purchasing the Platino Fiber lasers, Traulsen outsourced \$120,000 of laser cutting work to local job shops. Today, it is all done in-house.

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“Our reaction time is a lot better now,” explains Spoon. “We’ve eliminated setup times and all the time we spent handling parts. The Platino Fiber lasers have helped us reach production levels that we could not have reached without them. Our biggest challenge now is to determine what else we can nest without overproducing something.”

Traulsen runs the Platino Fiber lasers two shifts, five days per week. “The quality of our parts, especially on 16 gauge stainless, has greatly improved with the fiber lasers,” says Mile Lalic, CNC programmer. “The software is much friendlier. We used to do static nesting, today we are doing dynamic nesting. Our nest efficiencies are also much better.”

***“The Prima Power lasers have also helped cut our overtime from 15% to 5%.”***

“The Platino Fiber lasers have also changed the way that we process orders,” concludes McAleer. “Our lead times have also shortened dramatically. It used to be, if we needed to make a part, the answer would be, ‘You can have it late tomorrow... or maybe two days from now.’ Today, it’s a matter of hours, not days. We are always searching for new ideas to improve efficiency and customer satisfaction and the Platino Fiber lasers are helping us do that.”