Custom Laser Inc

www.customlaserinc.com

The machine pool of the contract manufacturer Custom Laser Incorporated in Lockport, USA, has twelve laser cutting machines, including a TruLaser 5030 fiber with an output of 8 kilowatts, which are all involved in the production of high-quality metal components in a factory covering over 5,000 square meters – from delicate spiral staircase rails to steel structures for solar cells.

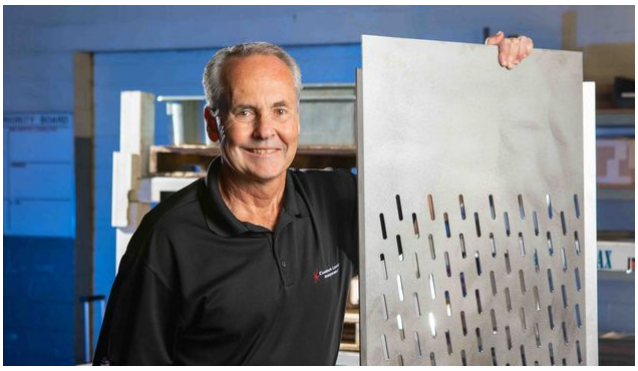
EMPLOYEES	SITE	INDUSTRY
51-200	Lockport, NY, USA	Mechanical engineering & operating technology

TRUMPF MACHINES IN OPERATION

- TruLaser 5030 fiber
- TruLaser 3030
- TruLaser 3030 fiber
- TruBend 7036
- TruBend 5230
- TruStore 3030
- TruLaser Tube 7000

Challenge

Despite its large machine pool consisting of twelve laser cutting machines, Custom Laser wants even more – or shall we say: less. That is, to use less nitrogen in laser cutting when processing thick mild steel and stainless steel plates without losing any throughput, but saving time instead. And with as little expenditure as possible. At the same time, the quality in terms of smoothness, oxidation and burr formation must also increase significantly.



"The Highspeed Eco nozzle is an excellent addition of our TRUMPF equipment."

GARY BROCKMAN
PRESIDENT AND OWNER OF CUSTOM LASER

Solution

Big claims fulfilled by a small part: the Highspeed Eco nozzle from TRUMPF. Custom Laser saves up to 70 percent cutting gas with Highspeed Eco. The modularly constructed nozzle with its patented design is a top scorer: its casing glides so closely along the material that hardly any cutting gas can escape and reaches the kerf directly. This reduces the gas pressure needed to free the kerf from molten material by up to 60 percent. Compared to standard procedures, the feed rate in fusion cutting with Highspeed Eco is also twice as high at times and the results are optimum: smooth, uniform edges, minimal oxidation at the bottom and significantly reduced burr formation even with sharp corners.

Implementation

Custom Laser's upgrade of the TruLaser 5030 fiber with the new Highspeed Eco nozzle only took one working day altogether, but will have a lasting impact for the American company. The innovative cutting procedure made it possible for Custom Laser to cut thicker carbon and stainless steel much faster – in some cases more than 250 centimeters a minute. In addition, control of the pierced holes has improved compared to when using oxygen for carbon steel.





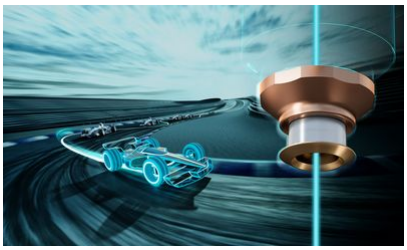


Forecast

Thanks to Highspeed Eco which is suitable for all machines of the TruLaser Series 5000 and some of the 3000 Series, Custom Laser has more or less procured a 13th laser cutting machine for the future – one

that helps to lower the costs sustainably and to step up production while saving gas.

Find out more about the products



Highspeed Eco

A good machine must be coordinated so that it achieves its objective without manual readjustment. You can set new speed records for nitrogen cutting with a solid-state laser using the Highspeed Eco cutting process. Depending on the sheet thickness, the sheet throughput increases by up to 100% using the same laser power. You also reduce cutting gas consumption by 70%.

Zum Produkt



TruLaser Series 3000

The TruLaser 3030 and TruLaser 3040 laser cutting machines with CO_2 lasers combine high performance with cut quality that is second to none. The TruFlow laser, which is robust and reliable, will create extremely smooth cutting edges which generally do not require post-processing. Due to compact machine dimensions and a simple operating concept, the TruLaser 3030 and TruLaser 3040 are the perfect overall package for the production of your laser-cut parts.

Zum Produkt



TruBend Series 5000

The TruBend Series 5000 TRUMPF's most successful bending machine worldwide. This means from programming, to setup, to bending, production productivity will be unmatched. Innovative features such as the lower tool displacement and the 6-axis backgauge provide you with complete production freedom. The operator's work is made easier by numerous innovations such as the control concept, which is a revolution in its simplicity and intuitive use, as well as new solutions in the field of ergonomics, such as the MagicShoe.

Zum Produkt



TruBend Series 7000

The ergonomic high-speed machine bends small and medium-sized parts under the best working conditions, saving space for every production system. In addition to the high level of ergonomics and user-friendliness, due to the direct drive and our automatic angle measuring system, you achieve a high output at a very high level of quality. Operation sitting down or standing up is comfortable for the operator, and due to BendGuard Automatic, the setup operation is also extremely fast

Zum Produkt

and safe.



TruStore Series 3000

The TruStore Series 3000 compact store grows along with your demands, reduces space requirements, and can be developed into a fully automatic system. The TruStore Series 3000 comes with a storage tower and pallet picker crane as standard. You can select the height of your storage system from 15 possible levels, and the storage compartments can be adjusted to 3.5 inches or 6.5 inches. The storage system can be easily connected to your TRUMPF 2D laser cutting machine, punching machine, or punch laser machine. The modular principle enables expansion at any time.

Zum Produkt