



— CATHARINA DAUM

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From five to eight kilowatts: particularly impressive when it comes to heavy sheet metal

A TruLaser 5030 fiber has been in service at Schickling GmbH just since April and the people there are already impressed by the 8-kilowatt solid-state laser and its speed, savings, efficiency and process reliability.

Hermann Schickling is an avowed fan of solid-state lasers. The manufacturing equipment at his family-run firm, founded in Visbek, Lower Saxony, in 1988, includes four TruLaser 5030 fiber units with 3- and 5-kilowatt beam sources. “The solid-state lasers are quite simply very cost-favorable. Energy consumption is low, the call for wearing parts is reasonable, and the machines are rugged.” This is how the businessman explains his decision to place all his bets on this technology for 2D laser cutting. When visiting the 2014 Euroblech, Schickling was immediately interested in the TruDisk 8001 laser, shown there for the first time on a 2D laser machine. This solid-state laser boasts eight kilowatts of power.

— **Thick, thicker, safer**

The Schickling GmbH is a system supplier and serves as a job shop for industries like vehicle and furnace assembly, agriculture, furniture, and many others. The company offers all the services along the process chain: from 2D and 3D laser cutting, through laser tube processing, laser welding (including its own fixtures shop), folding and deep drawing technology, as well as powder coating.

In its automated manufacturing operations, a Stopa storage system with 1,450 positions provides materials as needed during the two shifts and — if necessary — during lights-out operations at night and over the weekend. That is why process reliability has a high priority for Hermann Schickling. But that is only one advantage with which the 8-kilowatt laser racks up points. “In the past we had to farm out many orders for cutting thick sheet metal. That is now a thing of the past. With the TruDisk 8001 and the BrightLine fiber function we have not only achieved superior cutting results for 25 millimeter mild steel and stainless steel up to 40 millimeters, but also profit from the high quality of the edges,” Schickling explains.





A Stopa storage system takes care of supplying materials while a LiftMaster makes it easier to handle parts. (Picture: Claus Langer)



The BrightLine fiber option produces amazing cut edges at impressive speed, when working with mild steel 25 millimeters thick. (Picture: Claus Langer)



The machine was set up and has run absolutely smoothly since the very first moment. "You can't get any better than this," say Hermann Schickling. (Picture: Claus Langer)

— A high-speed powerhouse

In addition to the Bright-Line fiber function, which makes for excellent results when cutting thick sheet metal, the CoolLine feature ensures perfect quality at the cutting edge and an extremely stable cutting line in heavy gauge mild steel. The cutting head with its special nozzles sprays a water fog in a circle around the laser beam and onto the workpiece. The heat of evaporation for the water keeps the temperature nearly constant during the cutting process and clearly raises process reliability when working thick mild steel. Of course, the additional laser power makes itself noticeable in cutting velocity, too. "Naturally, we use the TruDisk 8001 not just for cutting thick metal, although the cutting process there is impressively quick and the piercing quality is excellent," Schickling explains. "When cutting thin- and medium-gauge sheet, the 8-kilowatt laser can truly demonstrate the power it has."

— A class of its own

Although this businessman puts his full faith in the solid-state laser, he does admit to having some initial reservations about the 8-kilowatt laser. New technology is sometimes plagued by initial difficulties when used in the practical world. But his doubt was entirely uncalled for. The machine was set up and has run absolutely smoothly since the very first moment. "You can't get any better than this," Schickling raves, adding, "The cutting process never breaks down, nothing collides with craters, and part quality is uniformly good."

The jump from five to eight kilowatts is, in the owner's opinion, a massive leap. Returning to CO₂ lasers is hardly an option. "As we see it now, the new TruLaser 5030 fiber enjoys a mighty cost advantage, based on total costs per hour, when compared with our CO₂ laser machines," he explains.

A broad range of capacities, the best quality, good service, and a wealth of expertise are, for Hermann Schickling, the prerequisites for surviving in the tough job shop market. "Offering 2D laser cutting alone is a thing of the past. Laser welding will certainly become standard because, working with laser tube processing, the results are simply great," he says. Until such time as his two sons join the business in a few years, he intends to continue to invest in the newest and best machines and will maintain his loyalty to TRUMPF. "Their quality and services are invaluable," he sums up.



