

## TRUMPF'S 'HEAD' FOR AUTOMATION HELPS MICROKERF

A Leicester-based laser cutting subcontractor that claims to offer the most diverse profiling service in the country has ordered a new TruLaser 5030 CNC laser profiling centre from TRUMPF complete with single head technology and 5kW TruFlow laser. Microkerf will now process material ranging from 0.025mm shim steel up to 25mm thick steel jobs.

ISO9001-accredited Microkerf has established a strong reputation for diversity of service since its formation in 1990. "It's true that the work we process is extremely varied," states the company's Managing Director David Gattward. "I would say that if we are not number one in the country for diversity, then we are certainly in the top three."

With so many jobs featuring different material thickness, the need to keep laser cutting head changes to an absolute minimum is paramount. However, although this is possible using meticulously planned production schedules, it does introduce a certain degree of inflexibility to factory throughput.

"At present we have to organise our production so that we cut all of our urgent thin jobs, followed by all of our urgent thicker work. By doing this we avoid constantly changing heads on our existing 3kW laser cutter," explains Mr Gattward. "However, planning can become more complex as a result, and it does make things difficult when we are trying to work with short lead-times."

And short lead-times are increasingly prevalent in the industries that Microkerf serves, which include the medical device, pharmaceutical, motorsport, yellow goods, food and lighting sectors.

At present, Microkerf can limit its cutting head changes to twice a day, each of which takes approximately 20 minutes to complete. While this doesn't sound very long, it equates to approximately 175 hours of lost production time every year.

Due to be installed during summer 2008, the TRUMPF TruLaser 5030  $(3,000 \times 1,500 \text{mm})$  will help Microkerf regain these lost hours and make intricate production planning a thing of the past. Thanks to innovative TRUMPF single head technology featuring automatic nozzle changes it is now possible to cut all material thicknesses up to 25mm without swapping the cutting head.

The merits of automatic nozzle change technology were recently proven in a trial that processed 20 jobs with a large variety of parts and materials with and then without the use of the new nozzle changer. The outcome was significant. The new system saved more than 60 minutes of handling and waiting time – 60 minutes that could have been spent on producing more parts.

The carrier plate of the changer can hold up to eight nozzles arranged according to job requirements. During the exchange process the laser head and swing arm of the nozzle changer assume the transfer position, before the rotary clamp chuck of the swivel arm removes the nozzle and relocates it on the carrier arm. A new nozzle is retrieved and inserted into the cutting head ready for the next job.

"We opted for the TruLaser 5030 because of its improved processes, higher dynamics and shorter non-productive times," concludes Mr Gattward. "It will enable us to achieve even faster and better quality processing, and will certainly provide an edge over the competition."