



One step ahead

OMATECH is a Bulgarian company which primarily distributes products for the metal-working industry of well-known European manufacturers. Its focus is on cutting tools and cooling lubricants for metal processing. Yet OMATECH is far more – particularly for EROWA.

The company is based in Plovdiv and was set up by Todor Daskalov in 2001. The Plovdiv region is Bulgaria's most important industrial location after Sofia. Thanks to the strategically excellent situation at the main transit route between Asia Minor and Europe, many industrial enterprises have settled there.

Demo center supplements consultancy

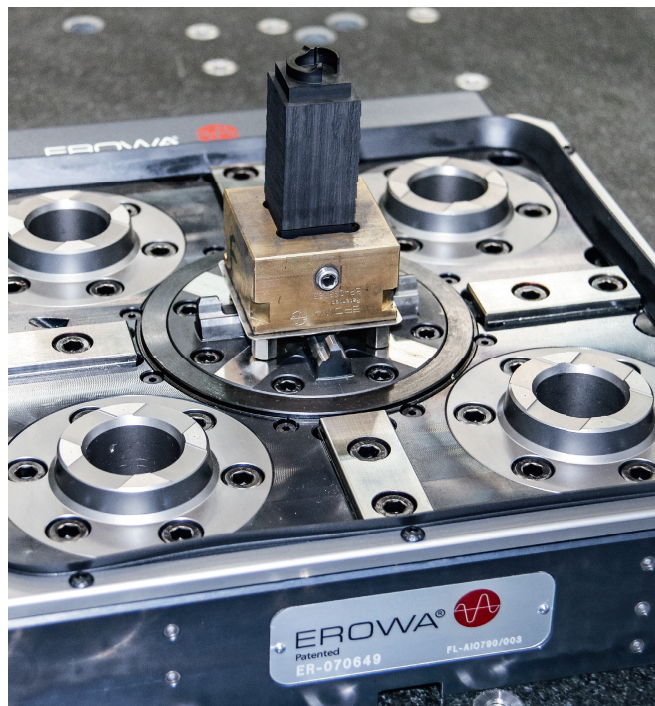
Products such as workpiece clamping systems can be sold perfectly well with good consultancy services – and demo material. This becomes slightly more difficult when it comes to selling robots and, quite generally, automation. "I've noticed various

times that my customers are hardly able to imagine what well-thought-out automation tailored to specific requirements would be capable of achieving," says owner Todor Daskalov.

"On the basis of these experiences I decided that it would be of advantage if I could demonstrate the systems in practical application. And so I launched a project in July 2016 which constitutes a quantum leap for regional circumstances."

OMATECH invested in a state-of-the-art production cell, in which one EROWA Robot Compact 80 serves two Ingersoll machines: a high-speed Eagle V5 milling center and a Gantry Eagle 500 EDM machine. The cell has been in productive operation since February 2017. It serves as a demonstration center, but at the same time, OMATECH also manufactures parts for regional companies, primarily one-off parts and small series.





EROWA Robot Compact 80

The Robot has a great and flexible magazine capacity. It ranges from small and light ITS 50 mm electrode holders to the heavy UPC pallets 320 × 320 mm with fitted CleverClamp tooling system. It manages transfer weights of up to 80 kg and is optimally suited to OMATECH's range of parts. Thanks to its lean design, the Robot saves space between the two machines.

The cell is controlled by the EROWA JMS^{pro} process control system. "It's extremely helpful for us to organize the various production data and to keep them under control," says Todor Daskalov. The basis and the interface, however, was the universal tooling system on all the machines. "It enables us to position workpiece carriers with speed and precision," he adds.

The equipment also includes an EROWA Lift as a manual loading station, as well as an EROWA CMM Qi coordinate measuring station for presetting and quality control.

A small team

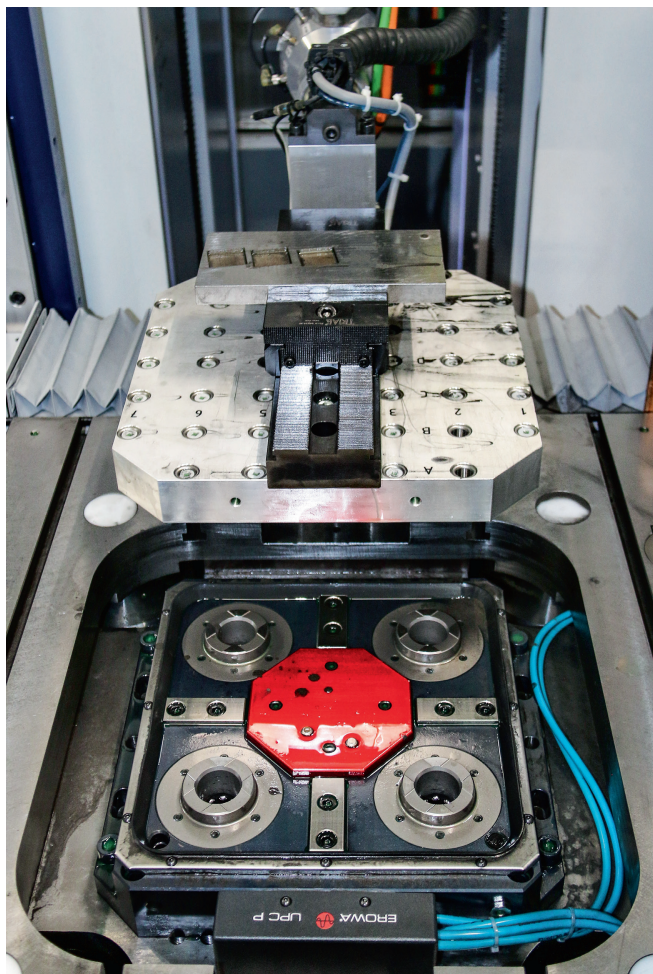
A small team is sufficient to be able to profit from the capacity of the production cell.



Daskalov's employees are trained machine engineers and master the entire production process. Their work involves various technologies, and they program both CAD/CAM and the process control system. Data are transmitted from the programming office to the machines through a special high-speed data cable.

The machines are then set up, as is the Robot. Then the workpieces or blank electrodes are prepared. Machining is followed by quality control. "We want to prove that the use of EROWA products and the universal manufacturing philosophy are able to improve productivity and flexibility within a short period of time while still satisfying the highest quality standards. In our country, there's still a lot of potential in this respect."





Local need for development

In fact there is an interest in automation in Bulgaria. Although the country is still at the outset of this development, it has certainly begun. Also, there are many well-trained specialists; Todor Daskalov's machine engineers are no exception. And yet: "When I tell potential customers about automation, I usually meet with incomprehension," he says.

In many places, people still fail to recognize the signs of the times correctly: "They produce with 'time-tested' manual processes. Or they invest in automation but then still have to set up the machines by hand because there's no universal workpiece tooling system, and where there is one, it's usually cheap copies with many sources of errors." There is a need for development here – but obviously also potential. And this is where Todor Daskalov sees his mission.

Digital network: smart factory

However, the production cell does not only serve OMATECH for demonstration purposes. The firm also serves its own cus-

tomers, some of whom operate in mold-making and aluminum casting while other are subcontractors to the automotive industry. OMATECH machines steel and aluminum, and graphite in EDM.

Demanding parts are produced, and new jobs are prepared, during the day. At night, the machines work autonomously and machine the workpieces loaded by the Robot. "Digital interlinking is quite high in our company," Todor Daskalov sums up. "The combined use of EROWA products and the continual data exchange with the ERP system, the process control system, the production cell and the measuring station have turned us into an actual 'smart factory'. And thanks to our production job, we're killing two birds with one stone: we demonstrate productivity, efficiency and flexibility in such a cell and are able to amortize it more quickly at the same time."



Omatech Ltd.
Office 118, 59 Sankt Peterburg Blvd.
4000 Plovdiv, Bulgaria
Tel: +359 2 9627167
omatech.bg@gmail.com
www.omatech.bg

EROWA AG
CH-6233 Bürön
Switzerland
Tel: ++41 (0)41 935 11 11
info@erowa.com
www.erowa.com