

Milling has become one of the core areas of business at mech-tron. The plant includes three HEDELIUS machining centres.



mech-tron Director Wolfgang Sterkel, Operator Alexander Dieterle and Head of the Milling Department Robert Strasser (from left to right) in front of the 5-axle RS 605 K20 machining centre.



The RS 605 K20 is mainly used for machining aluminium, while the robust machine table and rotary table significantly reduce the set-up requirements.

# From sheet metal manufacturer to technology provider – diversification ensures success

**Sheet metal processing is the core business of mech-tron, a medium-sized business from Roding with 150 employees. In order to meet ever-increasing customer demand, one of the leading manufacturers of casings for electronics and embedded equipment has also expanded into other technology sectors, in particular milling.**

The company's success story began when it was founded in October 2000, at that time offering CNC punching, laser and bending technology. Seventeen years later, the company generates 14 million euros in sales and has a broad technological base. "We started out as a manufacturer of mechanical components for the electronics industry. Over time, these became increasingly complex. Today we offer a one-stop shop for 18 different technologies," explains mech-tron Director Wolfgang Sterkel, adding, "Today, our customers expect us to be able to offer them everything from a single source." mech-tron's customers are international manufacturers of industrial computers, automation technology and industrial robots. Sheet metal processing of 0.5 to 3 mm thick parts remains the mid-sized company's core business, but it has increasingly been

establishing its other divisions, which have become hugely important for its strategic direction. "There is massive competition pressure in our industry. The technology package that we offer sets us apart from the rest. Hardly anyone else can offer what we do," says Sterkel. Its technology mix is indeed impressive. Together with stamping, bending and laser cutting, the company also offers electrowelding, milling, waxing, bonderising, powder coating, varnishing, printing and assembly. In total, it is proficient in eighteen different technologies and production steps, all of which feed into one another.

## **Core area: milling**

Milling has developed into one of the most important technologies offered by the company. It processes around 800 tonnes of material every year, 10 to 15 per cent of which is machined. The machining division has become a real core business here. "At some point, customers started requesting other processing stages together with sheet metal processing. We intended to introduce threads and drill holes to simple heat sinks and cooling elements made of aluminium profiles, which is how we arrived at milling,"

explains Robert Strasser, Head of the Milling Department. Of course, it's a bit more complex than that. A milling machine must be able to be used to capacity for customer orders. However, the long-term potential of a milling machine as an add-on to stamping, bending and cutting was soon grasped by mech-tron. As such, it acquired the 3-axle MC 40 from HEDELIUS early on. "We were committed to meeting customers' requirements," explains Managing Director Wolfgang Sterkel, adding, "We started off with simple milling processes: reaming, drilling and chamfering. Over time the demand has grown in this area, too. These days customers also request pure milling work."

## **Over a decade of experience with HEDELIUS**

That the acquisition of the MC 40 over ten years ago marked a real and significant step forward is apparent from the fact that today mech-tron GmbH & Co. KG has twenty employees solely dedicated to working on ten milling machines, in two shifts. Along with the MC 40, the company also uses a 3-axle C 60 2000 machining centre and a 5-axle RS 605 K20 machining centre from



**mech-tron  
GmbH & Co. KG**

**Contract manufacturing**

Established: 2000

Company headquarters: Roding

Employees: 150

HEDELIUS RS 605 K20

HEDELIUS. The RS 605 K20 has a fixed machine table with 1,330 mm X-travel and a rotary table with a 520 x 440 mm diameter. The machines are primarily used to produce individual parts and small batches, with component weights of 0.5 kg to 35 kg and a wide range of workpiece sizes. For the most part, the components are made of aluminium, and occasionally of stainless steel, structural steel or non-ferrous metals. "We opted for the RS 605 K20 because it allowed us to process every side of a workpiece without having to turn and re-clamp it. This meant a significant reduction in set-up times," explains Strasser, recalling the decision to acquire the 5-axle milling machine from HEDELIUS. However, other factors also played a role. Processing can take anywhere from one minute to over four hours per component. "At the end of the late shift we set up a component with a long processing time, and once that is finished during the night, the machine goes into energy saving mode until the early shift," says Robert Strasser. Wolfgang Sterkel adds, "Every year we have to conduct an energy audit and demonstrate that we are reducing energy consumption or saving

energy. As such, the eco mode on the HEDELIUS RS 605 was a deciding factor in choosing this model."

### **Increased efficiency thanks to superb surface finish**

mech-tron has also made the most of other advantages offered by the 5-axle machining centre. "Having a modern 5-axle machining centre allows us to offer our customers state-of-the-art technology. We want to offer our customers in all sectors the very latest options," says Wolfgang Sterkel. With this in mind, shortly after acquiring the machining centre the company also invested in a fibre laser. Having new machines means an appealing workplace for the employees. "Our employees are very pleased with the 5-axle milling machine, and like working on it," says Robert Strasser, Head of the Milling Department. The machining centre has also increased efficiency in production. "The finish on the workpieces is so good that they can be varnished straight away – there's no need for any post-processing," declares Sterkel with satisfaction. In addition, spindle operating times have been increased and make-ready processes optimised.

### **Robust and durable machining centres**

The MC 40 and C60 from HEDELIUS have now been in use at mech-tron for over ten years, but are both still running without a glitch. "The machines' longevity is very close to that of a press brake. These machines are far from delicate; they're highly robust," says Sterkel, who is a fan of the North German machining centres. What's more, the downtimes are very low. Strasser adds, "We have the three machines serviced by a service technician over the course of a week, so the service technician comes only once. HEDELIUS service employees are highly trained and always friendly." Milling has become a mainstay for mech-tron GmbH & Co. KG alongside other technologies, allowing it to be competitive in the sheet metal processing sector. This diversification is one of the sources of the medium-sized company's success.