



The ACURA 65 machining centres by HEDELIUS are used to manufacture parts including moulded segments and cutting elements.

HEDELIUS Tiltenta 7-2600 machining centres are used to produce components for mould blocks.

The Tiltenta 7-2600 is integral to production at SD Automotive. It is used to process small spacers and large components of up to 1,400 mm long and 300 kg in weight.

The choice of SD Automotive: (from left to right) Ulrik Standfuß, Head of Operations, and Bardhyl Beqrama, Head of the Machining Department, in front of the 5-axis Tiltenta 7 machining centre and the ACURA 65.

# Machining centres win plaudits for their high stability

**Within a few years, SD Automotive GmbH has evolved into a specialist supplier for the automotive industry. Thanks to the constant expansion of their range of machinery, the company has been able to meet the high demands, particularly in terms of milling. The latest metal cutting technology comes from HEDELIUS, based in Meppen.**

“Three quarters of the added value of a car is created by suppliers and service providers. SD Automotive GmbH, founded in 1984, is one such service provider. The expertise of this company, based in Georgsmarienhütte in Germany, ranges all the way from tool and prototype construction to model and car body construction, and the manufacture of spare parts. In the 35 years since its foundation, the medium-sized company, which has 430 employees, has become one of the leading suppliers in this field. It enjoys a superb reputation among its clients, which include many renowned international car manufacturers and their suppliers. „We often receive precisely defined specifications from our clients, for instance for the use of certain materials,“ explains Ulrik Standfuß, who is in charge of operational management at SD Automotive GmbH. In

order to meet requirements, many tasks are carried out in-house, from engineering to finished parts. But companies supplying this family-run firm also have to meet high standards. „The materials that we purchase must be of the utmost quality, and we also set very high standards when it comes to further processing, so that we can meet the requirements of our customers,“ continues Ulrik Standfuß. As such, the company regularly invests in modern machine technology. Most recently, it has added four HEDELIUS machining centres to its range of equipment.

## Greater output at higher speed and precision

In order to increase quality and productivity in manufacturing, older CNC milling machines should be replaced. Over the course of a year, those in charge at SD Automotive observed, evaluated and tested machines. They opted for two 5-axis ACURA 65 and Tiltenta 7-2600 machining centres from the northern German machine manufacturer HEDELIUS. They were particularly impressed by the high stability of the milling machines. „The HEDELIUS machines have enabled us to achieve a

greater output and process more material, while still achieving top speeds and the required level of precision. That was not the case for many of the other manufacturers whose machines we tested,“ says Bardhyl Beqrama, recalling their selection process. As Head of the Machining Department, he knows what makes a good machining centre. He oversees a machine pool of over 20 CNC machines and has already been involved in some investment decisions. Along with stability, a number of other factors came into play when assessing the results. „Of course, precision was important, so we did some on-site testing in Meppen. The parts also had to be machined in one clamping position, which is possible with HEDELIUS machines. What’s more, the machining centres are very compact. They fitted perfectly into our hall,“ he says. The company was also won over by the casing, which allows simultaneous crane loading, plus the large control screen by Heidenhain, the large window of the front-operated tool magazine for the ACURA 65 and the movable terminal of the Tiltenta 7-2600. In order to make the company even more productive and reduce set-up times, all of the machines have been equipped with a

## SD Automotive GmbH

**Automotive industry**

Established: 1984

Company headquarters:  
Georgsmarienhütte, Germany

Employees: 430

HEDELIUS ACURA 65

HEDELIUS Tiltenta 7-2600

zero-point clamping system. „With the zero-point clamping system, we can simply leave the vices on a plate, so that it only remains to insert them into the clamping system. This reduces our set-up times by quite a way,“ says Bardhyl Beqrama, who is a fan of the system.

### **Small spacers and large tool elements**

Both ACURA 65 machining centres, which have X/Y/Z travels of 700 x 650 x 600 mm and a rotary tilt table, are used to manufacture for example mould segments and cutting elements. The two T7-2600 machines feature a swivel head and can be used more flexibly. The large clamping surface and high table loads allow the machining of both small spacers and tool parts up to 1,400 mm long and 300 kg in weight. Bardhyl Beqrama says, „We do not use the full length that the machines allow. At the moment we are using the machines to manufacture pieces ranging from small spacers to tool elements of 1.4 m long. However, flexibility is the key thing for us. The market is changing, so we need to be prepared.“ With travel distances of 2,600 x 750 x 695 mm (x/y/z) and a clamping weight of up to 2,500 kg, there's certainly plenty of room for expansion.

### **Fully satisfied with man and machine**

The flexibility aspect has even greater weight when it comes to batch sizes. „We seldom make duplicate products; almost all of our output is one-off items. The throughput times for workpieces are between five minutes and several hours,“ says Beqrama. „We handle a variety of materials, from steel, tool steel, cast iron and aluminium to plastics, even though we rarely work with the latter.“

SD Automotive GmbH has been working with the four HEDELIUS machining centres since spring 2017. Since purchasing them, the automotive supplier has also been satisfied with the service provided. „When the machinery was moved in, we only had a centimetre gap between the door and the T7, but the process was all highly professional and went very smoothly. It was also very fast to put into operation,“ says Bardhyl Beqrama. Ulrik Standfuß adds, „We are delighted with these machines. So far, we haven't had any malfunctions or problems, despite running them in two shifts. We can't fault the service provided by HEDELIUS, either.“