

from left to right Martin Rateike (Division Manager Design Engineering, Production and Assembly), Alexander Schmalz (Head of Department Machining and Production), Sven Beckenfelder (Programmer and Operator of the 5-axis milling centres), all from EUROIMMUN AG, Thomas Mielke (HPV Hermle Vertriebs GmbH).

EUROIMMUN develops and produces devices for fully-automated medical diagnostics. The components are made on 5-axis machining centres from Hermle. The HS flex automation solution increases flexibility of the parts range and manufacturing scheduling and minimises non-productive times.

Molecular infection diagnostics analyses smallest amounts of DNA of bacteria or viruses. The development of the reagents and devices necessary for the purpose is based on processes requiring absolute precision and comprehensive know-how. EUROIMMUN AG has both.

top EUROIMMUN produces all parts for its fully automatic microscope on the Hermle machining centres. right 75 percent of the components are milled from aluminium blanks – as these assembled housing parts.

"Our unique feature is that we do not only develop and offer diagnostics but also efficient automation solutions for laboratories," sais Martin Rateike, Division Manager Design Engineering, Production and Assembly at EUROIMMUN AG. This includes for example a fully automatic microscope with computerized analysis in immunofluorescence technology. Mr. Rateike studied biomedical technology and supervises the design of the devices from the start. In 2012 he already ordered the first machining centre from Hermle – a B 300 U. "We had invested before in the milling machine from another manufacturer and were disappointed particularly about the reliability", Rateike remembers. "Machine failures can never be excluded but it must be possible to remedy them easily and quickly."

The laboratory diagnostics specialist is currently building between 300 and 500 serial instruments a year. In addition there are various production facilities for the production of various in-house diagnostic instruments. "The production figures are highly variable – and we unable to do long-term planning," Martin Rateike explains. "Two years ago we were looking for milling centres with a connected automation system to increase our in-house production depth and still be able to produce flexibly." Rateike is sceptical about bought-in systems not produced by a single manufacturer – he fears long downtimes in the event of faults and unclear responsibilities.

"CONSEQUENTLY WE HAD THE COURAGE - IN RELYING ON HERMLE SERVICE - TO TAKE THE RISK AND ORDERED A C 32 U WITH THE NEW AUTOMATION SOLUTION." Martin Rateike

The machining centre with HS flex turned out to be the perfect solution for EUROIMMUN. "We are able to produce different parts in variable numbers quickly and precisely. This is also a reason why we ordered three further milling centres with HS flex automation from Hermle."

Usually one employee is responsible for two machines, and at peak times even three machines at the same time. Combined with unmanned shifts this offers precious leeway in production scheduling for EUROIMMUN. The workpieces are machined between 20 minutes and six hours. Thanks to the HS flex system, setting up and loading the pallet storages is done in a half shift only without interruption of the machining process.

"We increased our in-house production depth thanks to the Hermle machines – we machine milled parts to 98% by ourselves now thus saving time and money," Rateike concludes. The automation system makes unmanned shifts possible and helps to balance peak times in the best possible way. The four milling centres with HS flex automation offer EUROIMMUN the security to be able to produce independently and flexibly without having to give away technological know-how.

## A CONVINCING PROTOTYPE

When visiting Hermle in February 2017, the decision-makers from EUROIMMUN were able to cast a glance on the HS flex system prototype. "The concept seemed promising to us. Consequently we had the courage – in relying on Hermle Service – to take the risk and ordered a C 32 U with the new automation solution," the division manager remembers.

