



AUTOMATED PRECISION MILLING

From left to right: Sascha Riesinger, sales manager, graduate in business administration (FH) Jürgen Stickel, managing director, and Bernd Zepf, production manager, all from Fetzer Medical GmbH & Co. KG in Tuttlingen



Fetzer Medical GmbH & Co. KG employs tailored yet universally flexible Hermle machining centres in its role as an OEM partner manufacturing a wide range of surgical instruments and medical technology components to customer specifications

"From the idea to the finished product, or: All in one inclusive Labeling!" – that is the slogan of Fetzer Medical GmbH & Co. KG. In order to build further on the family business' long-standing tradition in the development and manufacture of surgical instruments and medical devices, the owner took the decision to expand, employing its ideal combination of mechanical skills in the production of surgical instruments with new technologies in the highly demanding medical technology sector to offer an industrial portfolio.

FLEXIBLE PRODUCTION OF SURGICAL INSTRUMENTS AND MORE TO ORDER

Fetzer Medical processes all relevant materials, including titanium, into a range of products from prototypes and single parts to mass-produced components and complete devices, all supplied to customers in ready-to-use form. Among the portfolio of machinery operated by the company's current workforce of 45 highly skilled staff are high-performance five-axis machining centres, nine-axis turning/milling centres, five-axis grinding centres and CNC lathes. Most of the work (accounting for 75%) is complex milling/drilling. From the very beginning the business has employed – and now more than ever relies on – a range of high-performance five-axis CNC machining centres from Maschinenfabrik Berthold Hermle AG. Fetzer Medical production manager Bernd Zepf comments on the

choice of Hermle machining centres: "The Hermle machine concept featuring three axes in the tool and two in the work-piece is ideal for five-axis complete machining in one or two clamp fixings."

FROM MANUAL SINGLE PART FABRICATION TO INDUSTRIAL PRODUCTION

Two C 22 U high-performance five-axis CNC machining centres are equipped with 11-pallet changers/storages of type PW 150, and are used for the flexible production of a wide range of components in lots up to 300 pieces. Another high-performance five-axis CNC machining centre of type C 12 U is combined with an RS 05 robot cell for the manufacture of a modular-design scissors range. Since all the installed Hermle machining centres are essentially based on the same concept and on the same control and operating philosophy, operators are quickly familiarised with running the various machines, and staff confidence and acceptance of the machinery is enhanced as a result. That is advantageous, firstly, in terms of the machines' productivity. They are run basically in single-shift mode under operator control, though the aforementioned machining centres with the pallets and robot system do of course run overnight and at weekends for automated machine loading.

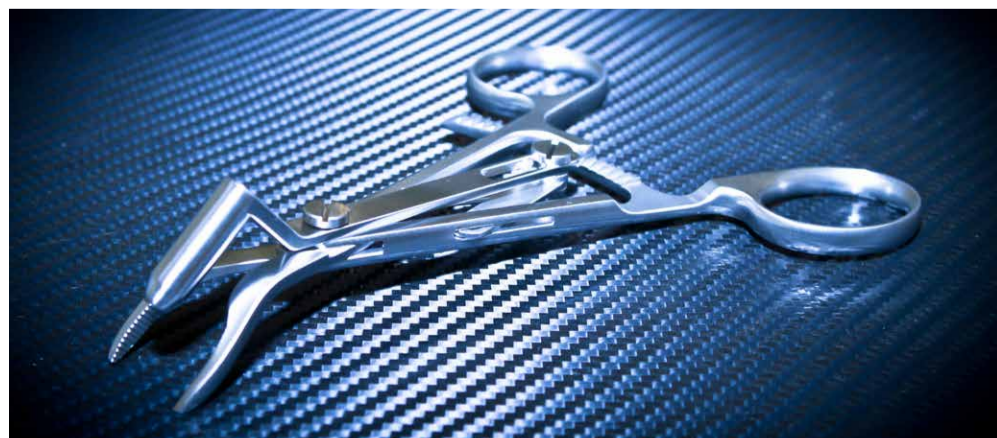


Left: The working area of the five-axis C 22 U machining centre with the swivelling rotary table on which a multiple clamping system is installed. Right: The line of five-axis machining centres: the C 22 U featuring PW 150, the C 12 U with RS 05, and the C 40 U in the new production centre at Fetzer Medical GmbH & Co. KG



VALIDATED AND CERTIFIED: PRODUCTION PROCESSES ON HERMLE MACHINING CENTRES

In detailing the benefits of high-end manufacturing on Hermle machining centres, Fetzer Medical sales manager Sascha Riesinger adds to those "hard facts" a number of "soft facts" which are key factors in the highly demanding production of simple surgical instruments through to complex medical devices: "All our production and quality assurance equipment has to be validated and certified in accordance with the requirements of the relevant EU and US regulatory bodies. With regard to US certification in particular, it is a major advantage that many American medical technology companies also use validated Hermle machining centres in their production."



Reduction forceps with exterior hole guide manufactured at a C 22 UP dynamic