VideoCheck® Fixed Bridge Machines

Dual Ram Now Available for HA Versions of Large Measurement Ranges

The Werth VideoCheck® FB, with a fixed bridge and dual ram, is now available in an HA version for larger measurement range (image page 2). The multisensor coordinate measuring machine has a measurement range up to 1000 mm x 2000 mm x 800 mm (X,Y,Z). The construction principle provides a double benefit. The shorter span in the X direction means that the bridge is shorter and thus more stable. The machine is also easily accessible and can be loaded from four sides. The proven dual ram concept is used primarily for large workpieces and with a rotary / tilt axis to avoid collisions.

The Werth VideoCheck® FB HA is specified comparable to ISO 10360 and VDI/VDE 2617. Under good measurement lab conditions, the maximum permissible error, MPE E, is (0.95 + L / 600) µm using the SP80 probe system. The granite table with air bearings can maintain the specified maximum permissible error while supporting up to 100 kg, or optionally up to 250 kg. For measurements on especially heavy workpieces, it is possible to remove the transmitted light unit.

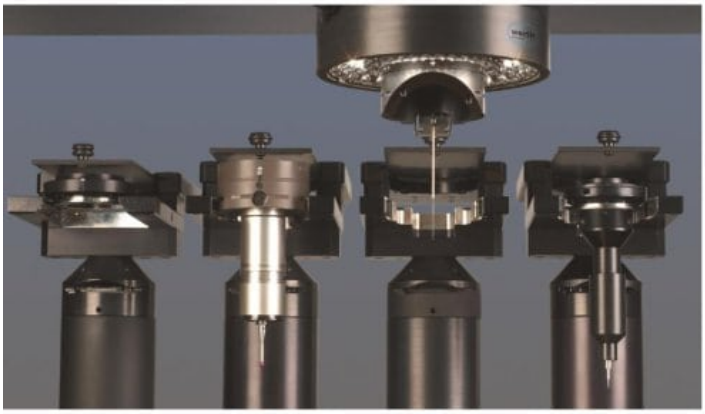
The two ceramic rams can be equipped with a wide range of sensors. For example, the SP80 tactile sensor and a rotary / tilt PH10 head with the SP25 probe may be exchanged on the same ram, while the second ram is equipped with optical and tactile-optical sensors.

Dual ram with tactile, optical and tactile-optical sensors

Werth Fiber Probe WFP/S

Full Integration in the Werth WMS Magnetic Interface Concept

The Werth WMS magnetic interface is a universal exchange interface for diverse sensors such as conventional mechanical probes, the WCP Werth Contour Probe, lens attachments and angular optics.



WFP/S Werth Fiber Probe on the WMS magnetic interface, with other sensors in the background

The loss of measurement range when using multiple sensors, due to the offset between the sensors, is now a thing of the past. This multisensor interface is now available for the WFP Werth Fiber Probe as well. The new WFP modules, specially developed for the WMS, are available for both the Werth Zoom and for telecentric optics. They can be exchanged fully automatically via a parking station. The purchase of a fiber probe includes two modules with one fiber each. Stylus tips that have been pre-aligned at the factory are available upon request.

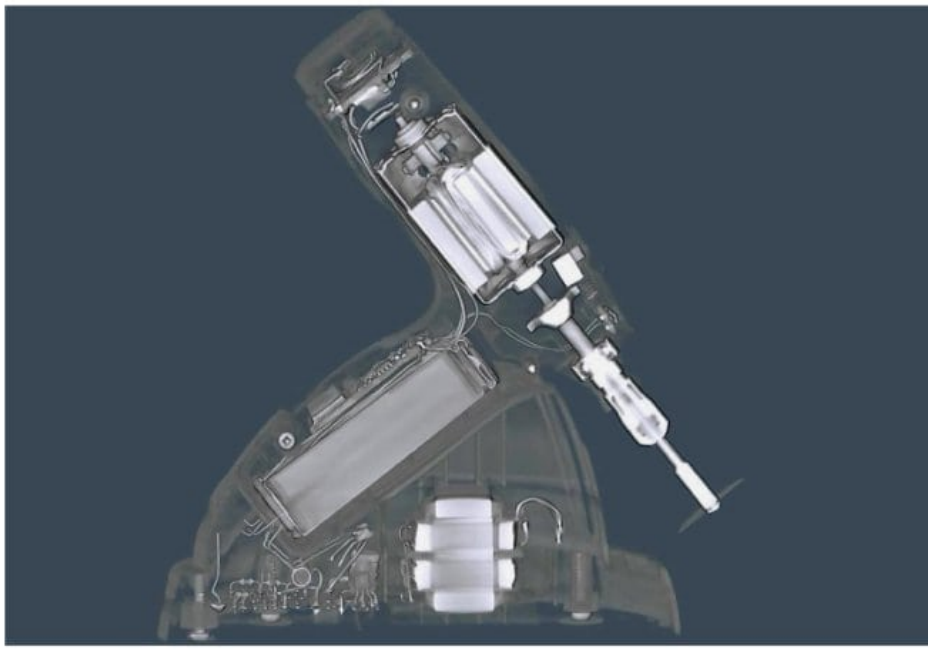
Computed Tomography

Analyzing Volume Data with Avizo

TomoScope® and TomoCheck® coordinate measuring machines are often used for qualitative analysis of the structure of workpieces, in addition to measurement tasks.

Avizo 3D volume analysis software is an effective solution for analyzing data from computed tomography. For example, blowholes and glass fibers can be analyzed, assemblies made of multiple materials can be segmented, wall thicknesses can be measured, and the measured volume can be animated in various rotational orientations.

Procurement costs for Avizo are relatively low. Because the complete package already includes full functionality, the cost is only one-fifth that of comparable software solutions. Avizo can also be adapted by the user to suit their applications by macros that can generate application specific sequences. Avizo has very powerful filter functions that can increase contrast, improve focus, or smooth out the entire volume. Virtual disassembly of components is also supported, along with sectional views that cut through the volume.



Sectional cut through a multifunctional tool