



SYSTEM /

STEINBICHLER COMET 5 2M

APPLICATION

COMETrotary Table, COMETplus Software

INDUSTRY

Tool Making / Mould Making

CUSTOMER

Franz Banke GmbH, Isen (Germany)
Roof tile development and mold making

TASK

Franz Banke GmbH is in the business of developing roof tile models and the design and manufacturing of molds for roof tiles. For digitizing of the roof tile models, the company has been using a Steinbichler COMET sensor for many years. Their original system is by now getting quite old and it will no longer be able to meet their future tightened requirements for precision and throughput times.

STEINBICHLER SOLUTION AND PRODUCT

During the consultation with Steinbichler, it emerged that the STEINBICHLER COMET 5 2M with the latest STEINBICHLER COMETplus software and the STEINBICHLER COMETrotary table would be the most suitable successor model.

In addition to the fact that Banke was of course very familiar with the optical digitization process, the solution also met other key criteria, including independent use as a separate system and a higher data quality compared to a laser scanner.

RESULT / CUSTOMER BENEFITS

Particularly the use of the new rotary system and the 400x400 field of view, now allows for a more efficient measurement of the master molds within a single work step. The measured objects are automatically positioned by the STEINBICHLER COMETrotary table, which is controlled via the STEINBICHLER COMETplus software.

“Using the new innovative COMET 5 sensor, we have been able to achieve a higher precision with significantly shorter throughput times compared to using our old system. Moreover, the system is very easy and effective to use,” says Bernd Quaschnig, Head of Metrology and QM at Banke.

In the first step of the measurement process, the sensor captures the top or bottom side of a tile and the table is rotated automatically. Snapshots of hard-to-see areas are taken in a second step. The images are then matched. The information obtained by processing the data (using curvature-dependent pruning and noise reduction) are then provided to Banke's design office.

The generated 3D STL data can be used – also without reverse engineering in some processes – either directly or as the basis for creating a 3D CAD model.

The introduction of the new COMET 5 2M went smoothly. “Thanks to the excellent training and the good support for any questions or problems we had, we could quickly make efficient use of the system's functionality to meet our needs and requirements. Meanwhile the system is working to full capacity and has become an integral part of our range of tile design services“, adds Bernd Quaschnig.