

PRESS RELEASE 03/09

Leading innovations presented at CONTROL tool show

ZOLLER Delivers Easy Solutions to Challenging Measuring Tasks

Based on customer demands ZOLLER, the leader in tool presetting and measuring system technology continues to develop its latest image processing technology »pilot 3.0«. The newest version has recently been introduced at the CONTROL tool show in Stuttgart, Germany, showing even more intriguing functions. Challenging measuring tasks are solved “at the push of a button”. Once more, ZOLLER brings it to the point and delivers the solution: economic tool measuring and inspection machines that can be easily operated and deliver repeatable measuring results precise to the micron.



image 1

The new measuring program “**distortion rake angle**” is especially important for manufacturing, re-grinding and inspection of form tools. With the ZOLLER »genius 3« inspection machine (image 1) and the software function »lasso«, the contour at the turned part and the desired contour of the carbide inserts (image 2) can be compensated in correspondence to the distortion caused by the rake angle. An automatic inspection of the actual contour and the input of the desired rake angle in the »lasso« software (image 3), provide an automatic nominal/actual comparison via a DXF nominal contour and the display of a tolerance band within seconds.



image 2

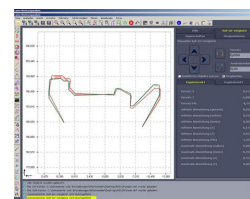


image 3

When inspecting, measuring and correcting eroded or ground form tools, it's important to determine exactly what corrections to the grinding machine program must be made. Otherwise, valuable time and material is wasted on trial after trial making adjustments. The **ZOLLER »CoCon« software module**, when used in conjunction with ZOLLER's »lasso« software, eliminates the guesswork. After manufacturing or grinding a tool, the tool's contour is scanned on the presetter and measuring machine (image 4) using »lasso« contour measuring. »lasso« then executes a nominal to actual comparison between the scanned tool contour (image 5) and the contour defined in the nominal DXF file. »CoCon« automatically calculates a corrected contour based on the comparison (image 6), and transmits the



image 4

information back to the grinding machine control. This simple, straightforward process virtually guarantees a correct tool after the very first run.

»lasso« also enables easy measuring of **form milling cutters** (image 7). The contour of either one or all teeth is scanned by the tool presetter and with the help of a new "PlugIn", the system automatically adapts a measuring point at the highest point of the radius. The width of the tooth face is then calculated in an adjustable measuring depth, fast and precise to the micron.



image 5

Especially for ground or eroded form cutters and plates the nominal contour often includes the area a **grinding wheel** would need to **approach and leave** a part. ZOLLER's »lasso« function has been expanded to keep those DXF elements within the nominal contour. Thus an automatic nominal/actual comparison with contour correction »CoCon« can be carried out using the original DXF data including positioning elements. These elements are automatically detected and excluded from the correction while the connection to the positioning elements is restored (image 9).

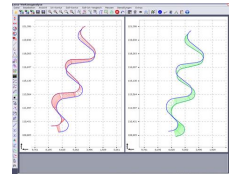


image 6

All software modules run on ZOLLER's new »pilot 3.0« operating platform using an intuitive graphical interface. For more information about these new options, contact ZOLLER.



image 7

E. Zoller GmbH & Co. KG
ppa. Christian Pfau

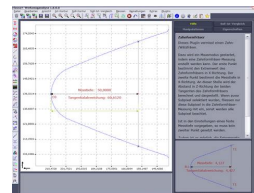


image 8

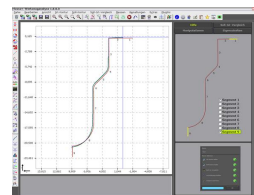


image 9