

IF-ToolPrecision

Automatic measurement of tap tools

The system

Automatic tool measurement through 360°

The IF-ToolPrecision is a non-contact, automatic 3D tool measurement system for areal based and high resolution measurement of shank tools. The system is optimized to measure taps. It combines all the functionalities of a coordinate measurement machine, a surface measurement device and a contour plus roundness measurement system. Users measure more than 30 parameters throughout the automatic 360° rotation of the tools.

The function

Roughness, form plus contour measurement in research and single handed operation

Users measure form, roughness and contour including roundness. In research the IF-ToolPrecision is mainly used for tool optimization. In quality assurance parallel to production the system is used for the fully automatic measurement of taps. Parameters in the chamfer area, in the flute and in the thread area are measured.



The benefits

User friendly, auto calibration, areal based

The IF-ToolPrecision stands out through high resolution results and its user friendliness. There are no time consuming calibration routines necessary as the insertion of the tool is very simple with auto calibration included. This both reduces measurement times and increases accuracy. Also, in the single handed operation users benefit from the automatic measurement of selectable surface parameters. Measurement reports include OK/ NOT OK status, tolerances and visualization in registered true color information.

The technology

Focus-Variation

Focus-Variation uses the small depth of focus of an optic. The EN ISO standardized technology delivers traceable measurements with a high level of repeatability. Focus-Variation is used for high resolution area based quality assurance in research and production. Amongst other standards, it conforms to EN ISO 10360 and 25178.

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