



User Report
»genius«

ZOLLER
expect great measures

Significant Time Reduction in Tool Measurement

More Efficiency in Tool Production





The ZOLLER »genius« always guarantees you µm-accurate measurement results – even in the production environment. Its metrological precision is based on exact mechanics and highly accurate optics. The »pilot 4.0« operating software offers every user a high level of convenience with customized options.

Significant Time Reduction in Tool Measurement

More Efficiency in Tool Production

One of our customers, who is based in the Kansai area of Japan, was experiencing significant time losses during the setup process for precision tool manufacturing,

particularly for small diameter tools with D 0.6 mm or less. For the customer, the primary issue was frequent “air cuts” in the grinding wheel.

Specific problem

The customer had to solve a specific problem. The grinding wheel would not make contact with the workpiece during the initial tool grinding program, requiring four to five adjustments before contact was established. Each adjustment took approximately 15 minutes, resulting in a total setup time of 1.5 hours per tool change.

Counteract Time Loss

This high expenditure of time is obviously accompanied by higher costs: With an average time charge of 100 Euro per hour, this translated to a substantial cost burden as we are talking about 150 tool changes per month by 10 tool grinding machines.

High-precision optics for ZOLLER tool measurement technology ensure that you can measure almost anything on tools precisely, fully automatically and without contact, no matter how complex the tool is.



ZOLLER Solutions

To address these challenges, ZOLLER's »genius« precision tool measuring device was introduced. The »genius« was utilized to precisely measure not only cutting tools but also the grinding wheels used in the tool grinding machine, implementing an external setup process.

Remarkable Improvements

The implementation of ZOLLER's »genius« yielded overall benefits for the customer.

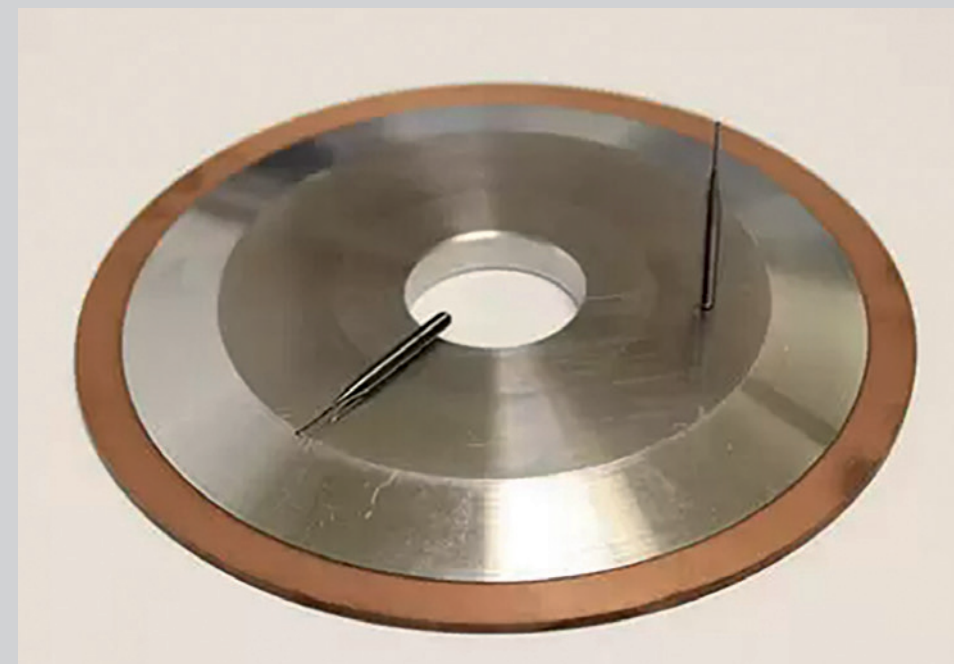
First, grinding wheel air cuts could be eliminated by precise measurement of the grinding wheel shapes and dimensions. For sure, this meant a significant reduction in setup time: The elimination of air cuts resulted in a 1-hour reduction in setup time per tool change. Which means in total: the current setup time is 0.5 hours, meanwhile previously it was about 1.5 hours. In fact, enormous cost reductions can be recorded. The solution with ZOLLER translated to a monthly cost saving of approximately 15,000 euro based on time charge calculations.

Calibrating measuring machines on site with certified inspection tools and reference standards is an important part of quality assurance at ZOLLER. This enables us to guarantee reliable measurement results and the high precision of our customers' products in accordance with applicable standards.



Conclusion: Cost Efficiency with ZOLLER »genius«

The introduction of the »genius« precision tool measuring device has significantly contributed to reducing setup time and costs in precision tool manufacturing at our customer. The high-precision measurement capabilities of ZOLLER's »genius« eliminated grinding wheel air cuts, leading to increased efficiency in the manufacturing process. As future outlook, the company plans to continue utilizing »genius« measuring technology of ZOLLER to further enhance productivity and ensure consistent quality in their manufacturing processes.



High-precision tool manufacturing needs high-precision measuring and inspection technology for tools and grinding wheels



ZOLLER

Solutions

Presetting & Measuring

Tool Management

Inspection & Measuring

Automation

More speed, higher quality, safe processes – with ZOLLER, you increase the efficiency of your production. ZOLLER offers you outstandingly precise devices for adjusting, measuring and testing cutting tools, software, interfaces, cloud services and solutions for the automation of tool processes. You can combine all of this to create your individual system solution – on your way to the smart factory.

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E. ZOLLER GmbH & Co. KG

Tool presetter and measuring machines

Gottlieb-Daimler-Straße 19 | D-74385 Pleidelsheim

Phone: +49 7144 8970-0 | Fax: +49 7144 8970-70191

post@zoller.info | www.zoller.info

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