

Digitalized Measurement Processes,
Efficient Production Flow, 100% Documentation

ZOLLER
expect great measures

Measuring Technology 4.0

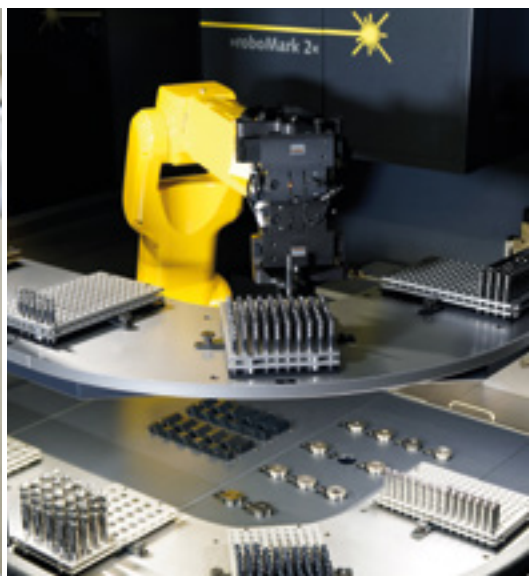


Data consistency for an optimal grinding and regrinding process

With measuring technology 4.0 solutions from ZOLLER, you are optimally positioned for the networked future, the Smart Factory. From incoming inspection to manufacturing and final inspection, ZOLLER offers the perfect solution for inspecting and measuring tools and grinding wheels for every process step, including storage systems and automation concepts – all networked via the central z.One tool database.

- The shopfloor-compatible compact solutions for universal tool inspection are easy to operate and adapted to your requirements.
- Grinding wheel management, easy measurement of grinding wheel packs, data transfer and inspection of initial grinding results are essential for the effective set-up of grinding machines.
- The ZOLLER Smart Cabinets save you the trouble of searching for your grinding wheels and accessories. These storage units with software connections create maximum transparency and order with minimum effort.
- Smart automation solutions not only ensure quality, but also deliver high efficiency.

For 100% flawless grinding wheels and tools as well as digitalized processes – measuring technology 4.0 from ZOLLER



Measuring Technology 4.0 in your Grinding Shop



The ZOLLER TMS Tool Management Solutions software is perfectly integrated into the overall process and offers everything for efficient tool management. This software solution can be networked with CAM, ERP and other systems.



z.One is the central tool database. All steps of the manufacturing process access this database, as well as ERP and other software systems. Maintaining multiple databases is not necessary.

1 Incoming Goods/ Wear Inspection

After delivery of tools, you can import the tool data in DIN or ISO format into the **z.One database**. The incoming goods inspection, on **»edgeControl 600«** for example, provides not only actual geometry data but also measurement data on tool wear. The z.One database manages all **tool management data**.



2 Production Planning

Computer-aided ZOLLER, or **»caz«**, is a **virtual measuring machine**. With this software solution, you can generate and simulate measuring sequences on an external workstation. Tool management with **ZOLLER TMS Tool Management Solutions** provides interfaces to all major **CAD/CAM and ERP systems**.



3 Warehousing

The **Smart Cabinets** not only store grinding wheels, components and accessories safely and transparently, they also enable **automatic stock control**. ZOLLER's **tool management software** supports you with a **graphic display of the storage location** so you can find items quickly.



4 Balancing

If you want to achieve the **highest cutting edge quality**, it is essential to balance the grinding wheels. The ZOLLER **»toolBalancer«** measures the unbalance with an accuracy of **< 0.4 gmm**.



5 Measuring Grinding Wheels and Data Output

The **»smile«** or **»venturion«** measures the geometries of grinding wheels and tools quickly and precisely. Thanks to the **»pilot 4.0« image processing software**, many things can be done at the click of a button, such as processing the **»caz«** generated measurement sequences. The measurement data is stored in the z.One and transferred directly to the grinding machine if required.



6 Manufacturing

The GDX data interface enables **direct data exchange** between the ZOLLER measuring machine, such as the **»genius«**, and the grinding machine. Measurement data is exchanged quickly, securely and without errors.



7 Process-Oriented Measurement

The **»pomBasic«** is the compact, process-oriented solution for measuring tools next to the grinding machine. This determines the actual data and the wear parameters for **resharpening tools**. The **»reGrind«** resharpening module transfers the data in controller format to the CNC grinding machine.



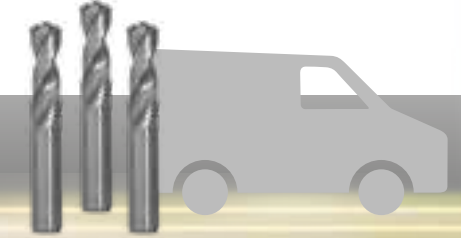
8 Tool Inspection

The **»roboSet 2«**, in conjunction with the **»genius«** universal measuring machine, is the **automation solution for the final inspection** of ground tools. Every tool is 100% inspected before delivery.



9 100% Quality Delivered

The measured values are summarized in inspection reports and can be supplemented with additional parameters. All measurement and tool data are available in the **z.One database**.



Scan the QR code and find out more about the smart set-up process from ZOLLER.



Generation of the measuring sequence at the external workstation using the **»caz«** software module that simulates a measuring machine.



Assembling the grinding wheels on the **»toolStation«**, supported by the **»keeper«** and **»toolOrganizer«** Smart Cabinets.



With optimally and precisely balanced grinding wheels, you can achieve longer spindle running times.



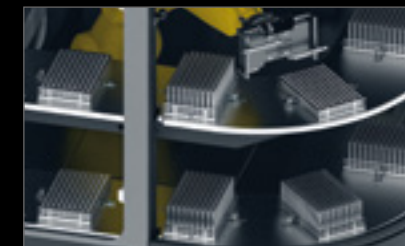
Measuring the grinding wheel pack with the ZOLLER measuring machine leads to μm -accurate, centrally stored data for the subsequent process.



The identification of the measured tools and grinding wheels with **»zidCode«** starts the automatic data transfer to the grinding machine.



The **»pomBasic«** inspection machine checks tools on up to 70 tool parameters in a matter of seconds. Insert, align, measure.



Take advantage of significant workforce relief thanks to the **automation of final inspection with the »roboSet 2«** and the **»genius«** universal measuring machine.



Create **customized measurement reports** quickly and easily and use **numerous evaluation methods**. This allows you to document tool quality and to ensure traceability.



ZOLLER

Solutions

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.

Presetting & Measuring

Tool Management

Inspection & Measuring

Automation

Everything from a Single Source.

Everything for your Success.

Everything with ZOLLER Solutions.

ZOLLER
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