

Efficient Production Flow, Digitalized
Measurement Processes, 100 % Documentation

# Smart Manufacturing



# **Data consistency** for an optimal manufacturing process

In smart manufacturing, data plays an essential role. They can image the entire production process in advance and later safeguard the real production process. This is the basis of modern, safe manufacturing.

- All tool data are stored in the central tool database z.One and can be called up at any time and from anywhere. Upstream interfaces to CAD/CAM systems and downstream interfaces to machine tools make this database available for the entire manufacturing process.
- ZOLLER Tooling Solutions form the perfect interface to your digital manufacturing. On request, we supply all toolholders with ZOLLER »idChip« technology. This allows to clearly identify your tool holders at all times in your manufacturing process.
- All functionality has its origin in the »pilot« software. It is not only optimally developed for the presetting and measuring machines, but also turns all tool data into more. This includes measurement sequences as well as evaluations, specialized measuring programs, simple operation and the entire tool management. In this way, the entire ZOLLER system from order entry to delivery functions smoothly and safely.
- TMS Tool Management Solutions software lets you manage your tools. Together
  with Smart Cabinets, there is always order in the hardware and in the software.
  And comprehensive evaluations additionally increase the productivity in your
  manufacturing.

For 100% flawless components through digitized processes – ZOLLER Solutions for smart manufacturing



## **ZOLLER Solutions** for your Manufacturing Process



The 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



**z.One** is the central tool database. All steps of the manufacturing process access this database, as well as ERP and other software systems. Multiple data maintenance is not necessary.



## CAD Construction

Already during the design phase the designer can access tool data from the **ZOLLER database**. The manufacturing of component parts can be produced on the basis of standard tools, which speeds up manufacturing and makes it more cost-effective.

## **CAM Production** Planning

The manufacturing processes are simulated in the CAM system using tool data from the cloud. The tool data from the CAM system is transferred directly to TMS Tool Management Solutions in the form of a setup sheet.

## Warehousing

With the help of **ZOLLER Smart Cabinets** and the ZOLLER TMS Tool Management Solutions, tools, components, accessories and complete tools are entered digitally and can be located. With the help of the ordering system software module, stocks can be monitored and parts automatically reordered.

Supported by assembly graphics including dimensions, each step in tool preparation can be represented in exact detail. Together with the tools stored at hand in the **Smart** Cabinets, tool preparation is child's play.

## 5 Shrinking

With **ZOLLER »powerShrink«** you benefit from an induction system that is perfectly aligned to your heat shrink tool holder, the technologically-perfected cooling systems and the ergonomic and simple operator guidance with the aid of the innovative LED-controlled **ZOLLER** »actbyLight« operating concept.



## 6 Balancing

To use your machines in the most efficient way possible and with the best performance, you need finely balanced tools. With the **\*toolBalancer\*** balancing system developed and produced by ZOLLER, you balance your tools with unbeatable precision and you will use a long-lasting, extremely ergonomic, and sustainable product.



## Presetting and Measuring

The prepared complete tools are identified on the presetting and measuring machine. After the measurement, the actual data is processed in controller format and transferred to the machine either by network or ZOLLER »zidCode«.

## Manufacturing

All tool data of the tool holder with integrated ZOLLER »idChip« technology are transmitted to the machine by »zidCode 4.0«. The scanning process at the control unit »zidCode 4.0« ensures fast, simple and error-free data transfer.



### 100 % Quality Delivered

Exactly set tools immediately lead to correct components and thus to good parts. This reduces delivery times and makes them exactly predictable.







Scan the QR code and experience the ZOLLER **Smart Factory Solutions** in the video!



In our webshop you can get the digital twin for the tool-holding fixture, which can be used immediately in your CAM and tool management system.



With the help of the module Storage Location Management every storage location of tools and accessories is entered and known – both in the Smart Cabinets and in storage systems.



The assembly of the tools at the workbench is supported by assistance systems such as the assembly assistant or stored help.



The **»pilot« software scan function** enables the reliable selection of the appropriate shrink parameter by scanning the holder number.



The balancing adapter with center offset is designed with a two-point contact and a pressure element. These features enable a large and more measurable sensor signal.



By scanning the ZOLLER **»idChip«** on the presetting and measuring machine, the tool data is called up directly and the measurement sequence can start.



With ZOLLER »zidCode 4.0« you transfer all digital tool data to the CNC control without any typing or transmission errors.



Plannable tool use and exact measurement of tools reduce costs, increase productivity and produce more good parts.

simple. direct. online.



# 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.

