

105

e e

00

ZOLLER Product Portfolio for your Optimal Manufacturing Process

ZOLLER Solutions Manufacturing Technology

ZOLLER

ZOLLER Solutions for your Manufacturing Process



Content Overview

Discover our ZOLLER Solutions



- 04 TOOL MANAGEMENT/SOFTWARE TMS Tool Management Solutions
- 06 TOOL MANAGEMENT/HARDWARE »toolOrganizer«
- **08** TOOL MANAGEMENT/HARDWARE »keeper«
- **10 TOOL MANAGEMENT/HARDWARE** »toolStation«
- 12 TOOL MANAGEMENT/HARDWARE »toolCart«
- 14 TOOLING SOLUTIONS »idChip« technology
- 16 TOOL HEAT SHRINK TECHNOLOGY »powerShrink«
- **18** TOOL HEAT SHRINK TECHNOLOGY »redomatic«

20	TOOL BALANCING TECHNOLOGY »toolBalancer«
20	»toolBalancer«

- 22 PRESETTING & MEASURING "smile"
- 24 PRESETTING & MEASURING »venturion«
- 26 AUTOMATION »coraMeasure LG«
- 28 DATA OUTPUT »zidCode« & »zidCode 4.0«
- **30** AUTOMATION Automation Solutions
- 32 GET STARTED DIGITALLY StartUp package & RoundUp package
- 34 SOLUTIONS ZOLLER around the world

TMS Tool Management Solutions Software

1

In smart manufacturing, data plays an essential role. The central z.One database in conjunction with the browser-based webTMS software forms the innovative first step towards an efficient tool management system.

Upstream interfaces to CAD/CAM systems and downstream interfaces to machine tools make this database available for the entire manufacturing process. The manufacturing processes are simulated in the CAM system using tool data from the cloud. ZOLLER offers you a comprehensive range of software options from a single source: with webTMS you give the starting signal for your digitization. With BRONZE, SILVER and GOLD, a further range of software packages are available for your manufacturing process – with a modular design that can be expanded as you like.

solutions.zoller.info/en/toolmanagement







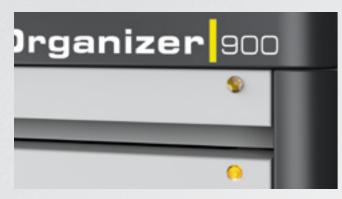
Intelligently Stored – ZOLLER »toolOrganizer«

2

The ZOLLER »toolOrganizer« is the intelligent and variable tool cabinet for cutting tools and small parts. With this organizational wonder connected to TMS Tool Management Solutions, you will always know where items are located and the quantities you have available. You can reorder them on time and decide exactly how many items are able to be taken out.



»toolOrganizer 900«



Intelligent LEDs are used for visual orientation



Individual drawers, customized according to your needs

Benefits for your tool management

- Maximum overview
- Full control and transparency
- Individually configurable

Technical Data	»toolOrganizer 600«	
Configurable useable height	600 mm	
Cabinet size (H x W x D)	875 x 800 x 790 mm	
Payload per drawer	max. 80 kg optional max. 160 kg	
Drawer height	75/100/125/150/ 175/200/250/300 mm	
Drawer divisions (compartments)	4/8/12/16/24/48	



Find out more about the ZOLLER »toolOrganizer« on: solutions.zoller.info/en/smart-cabinets





»toolOrganizer 900«	»toolOrganizer 1225«
900 mm	1225 mm
1175 x 800 x 790 mm	1500 x 800 x 790 mm
max. 80 kg optional max. 160 kg	max. 80 kg optional max. 160 kg
75/100/125/150/ 175/200/250/300 mm	75/100/125/150/ 175/200/250/300 mm
4/8/12/16/24/48	4/8/12/16/24/48



Simple storage management with »quickPick«

Control the removal process easily with the smart software modules of the TMS Tool Management Solutions. The operators will quickly find their way around, and you benefit from well-maintained stock overviews, a neat and tidy storage. You maintain full circulation and storage transparency, and storing materials in the wrong place is a thing of the past as well as machine downtimes due to missing tools.

Optimally Managed – ZOLLER **»keeper**«

2

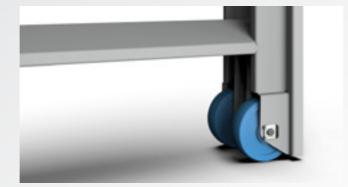
The ZOLLER »keeper« is the ideal solution to store and manage your complete tools and tool holders used in your production process. Thanks to networking with TMS Tool Management Solutions, you can view the storage location of your tools at all times.



»keeper«



Storage location management for unique identification of your tools



Sturdy heavy-duty rollers to move the drawers easily

Benefits for your storage management

- Convenient thanks to sturdy heavy-duty rollers
- Ergonomic handles
- Flexible tool frames

chnical Data 3 Pull-out drawers		5 Pull-out drawers	
Cabinet size (H x W x D)	2000 x 1000 x 1050 mm	2000 x 1000 x 1050 mm	
Drawer depth	810 mm	810 mm	
Payload per vertical pull-out drawer	max. 1000 kg	max. 1000 kg	
Tool frames per drawer	Standard 6	Standard 6	
Design	Mechanical/electronic Mechani		
Tool inserts SK, HSK, VDI, PSC	Size on request Size on rec		
Tool inserts blank	B58/B75/B120	B58/B75/B120	
Tool inserts adapter tool post	D 78 VSH size 1	D 78 VSH size 1	
Tool inserts wooden	Blank/D 42	Blank/D 42	



Find out more about the ZOLLER »keeper« on: solutions.zoller.info/en/smart-cabinets







Variety of tool inserts

The tool inserts are configured for space-saving storage of all common systems. For permanent marking of the tool storage locations, the ZOLLER marking set offers the optimal solution. The marking is quickly visible with storage location in text form and as a DataMatrix code.

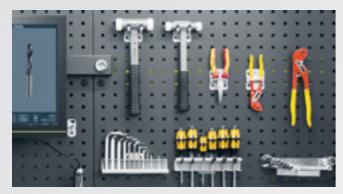
Comfortably Prepared – ZOLLER **»toolStation«**

3

The ZOLLER »toolStation« is the workbench for optimal tool assembly. You complete your tool storage and offer your employees a comfortable working environment: with optimal lighting and clearly arranged assembly tools, this workbench ensures efficient tool assembly and the provision of tools from a single source.



»toolStation«



Rear wall for attaching manual tools and containers



Tool assembly device for secure tool assembly

Benefits for your tool preparation

- Sturdy work surface for your efficient tool assembly
- Sophisticated electrical connections and light switches
- Optimal LED workstation lighting

Technical Data	»toolStation« S	»toolStation« M
Size with rear wall (H x W x D)	2100 x 1630 x 1040 mm	2100 x 2450 x 1040 mm
Size without rear wall (H x W x D)	925 x 1630 x 1040 mm	925 x 2450 x 1040 mm
Number of »toolOrganizer 600«	max. 1	max. 2
Power strip	optional	optional



Find out more about the ZOLLER »toolStation« on: solutions.zoller.info/en/smart-cabinets









Industrial Panel PC

The 24" TFT touch monitor and optional connection to the TMS Tool Management Solutions make sure that you keep everything in view, such as your parts lists.

Practically Transported – ZOLLER »toolCart«

3

With the ZOLLER »toolCart« & »toolCart 750«, you can stay mobile in your production. You can transport tools and adapters safely and comfortably on the shop floor at any time.



»toolCart«

»toolCart 750«



Flexible tool inserts for the perfect order of your complete tools



Ergonomic handle ensures safe transportation of your tools

Benefits for your tool transportation

- Extreme stability due to sturdy construction
- Tool frames with maximum flexibility
- Rollers and brakes for workshop use

Technical Data	»toolCart«	»toolCart 750«	
Size (H x W x D)	985 x 660 x 1050 mm	910 x 560 x 880 mm	
Dead weight	approx 130 kg	approx 40 kg	
Payload	max. 450 kg	max. 450 kg	
Tool frames	Standard 5, max. 9	Standard 5, max. 7	
Tool inserts SK, HSK, VDI, PSC	Configuration on request	Configuration on request	
Tool inserts blank	B58/B75/B120 B58/B75/B12		
Tool inserts adapter tool post	D 78 VSH Size 1	D 78 VSH Size 1	
Tool inserts wooden	Blank/D 42	Blank/D 42	
Delivery	Fully fitted product	Standard kit for self-assembly	



Find out more about the »toolCart« & »toolCart 750« on: solutions.zoller.info/en/smart-cabinets







Sturdy tool frame

Tool frames can be universally attached to the grid on the side walls and are suitable for complete tools of many different sizes. Thanks to the stable design you can transport with the »toolCart 750« despite its low own weight a total load of up to 450 kg. On the flexible grid you can store reliably important accessories as an oil can or working gloves with the mounting hook set.

Digitally Networked – Tooling Solutions

3

With the ZOLLER Tooling Solutions, we offer you a comprehensive range of tool holders for any requirement in your machining process – on request with ZOLLER »idChip« technology. All of our holders are consistently rated better than DIN requirements.





ZOLLER »idChip« for the maximum product lifetime of your tool holders



Error-free data transfer with ZOLLER »zidCode 4.0«

Benefits for your data transfer

- Available in the ZOLLER web shop
- Certified quality
- Perfect interface for your digital manufacturing



Find out more about the ZOLLER Tooling Solutions on: solutions.zoller.info/en/tooling







ZOLLER Tooling Solutions

Clearly identify your tool holders at all times. We offer you over 2000 holders.

We go one step further and present you the ZOLLER Tooling Solutions online: Our MYZOLLER portal with web shop ensures a simple, clear and fast overview, in addition to providing the digital twin at the push of a button.

Efficiently Shrunk – ZOLLER **»powerShrink«**

4

With the ZOLLER »powerShrink«, you increase production efficiency. Technologically and ergonomically, the »powerShrink« leaves nothing to be desired. You benefit from an induction system that is perfectly aligned to your heat shrink tool holders, the technologically-perfected cooling systems and the ergonomic and simple operator guidance with the aid of the innovative LED-controlled ZOLLER »actbyLight« operating concept.



»powerShrink 400«



»powerShrink 600«



Practical storage for quick access to your tools



»coolbyLight« operator guidance for a safe cooling process

Benefits for your heat shrink processes

- 100% made by ZOLLER
- Unique operating concept
- Certified safety

Technical Data	»powerShrink 400«	»powerShrink 600«
Shrinkable tool length	460 mm	600 mm
Maximum inner diameter of induction coil with »varOct« shielding system	45.8 mm	45.8 mm
Maximum inner diameter of induction coil with shielding discs	50 mm	50 mm
Shrinkable diameter with 14 kVA induction coil	3–32 mm	3–32 mm
Shrinkable diameter with 22 kVA induction coil	-	16-50 mm



Find out more about the ZOLLER »powerShrink« on: solutions.zoller.info/en/powershrink







Induction coil with »varOct« shielding system

An intelligent, well-designed »powershrink« highlight is the ZOLLER induction coil: Position the tool, adjust the shielding system manually or start the automated process at the push of a button. Step into the digital future of shrink-clamping with »shrinkbyLight«, the comfortable and process reliable technology of ZOLLER.

Universally Shrunk – ZOLLER **»redomatic**«

4

With the ZOLLER »redomatic«, you can produce more effectively with your multi-spindle machines and automated high volume manufacturing. With »redomatic«, you can be sure that the tool lengths are always set correctly. The shrink-clamping process developed by ZOLLER using the »masterPiece« adjusting adapter is both quick and simple.





»redomatic 600«

Benefits for your heat shrink processes

- Automated procedures for maximum precision
- Unique operating concept
- Certified safety

Technical Data	»redomatic 400«	»redomatic 600«
Maximum tool length Z	600 mm	600/800/1000 mm
Measuring range X axis	210/310 mm	270 / 300 / 400 mm
Maximum shrinkable shank diameter	32 mm	32 / 50 mm
Maximum tool diameter D	420 / 620 mm	540 / 600 / 800 mm



Find out more about the ZOLLER »redomatic« on: solutions.zoller.info/en/redomatic



Combination of carrier unit and »cockpit« control unit



»pilot 4.0« software shows exact operating instructions







Induction coil with quick-change interface

For shrinking larger shrink fit holders diameters D 40 mm to D 50 mm and reinforced shrink fit holders (thicker walls). The 22 kVA induction coil can be operated quickly and ergonomically on an alternating basis with the 14 kVA induction coil via a guick-change interface. The 22 kVA induction coil with shielding discs in diameters D 16 mm to D 20 mm, D 25 mm to D 32 mm and D 40 mm to D 50 mm – these are optionally available in a split version.

Precisely Balanced – ZOLLER **»toolBalancer**«

5

With the ZOLLER »toolBalancer«, you increase your process reliability and the quality of your components, reduce machine maintenance costs and prevent machine failures. With optimally and highly-precisely balanced tools, you achieve longer tool life, a longer spindle running time and a better surface quality of your components. With the »toolBalancer«, you get your tools into the perfect balance of sustainability, efficiency and progress.



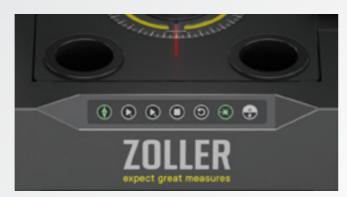


»toolBalancer 550«

»toolBalancer 750«



Device interior with interior lighting and practical storage areas

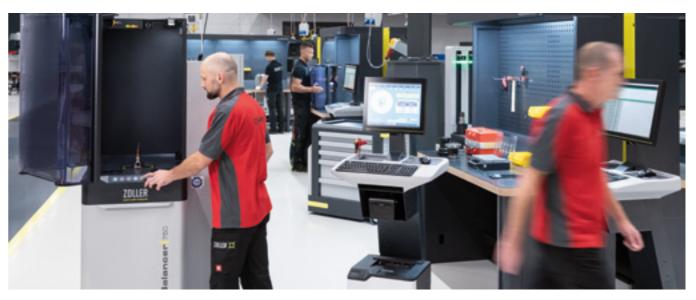


The ergonomic membrane keypad for safe measuring sequences

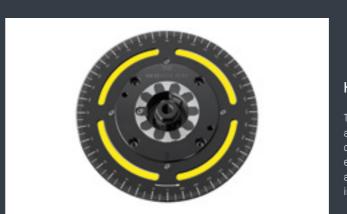
Benefits for your balancing processes

- 100% made by ZOLLER
- 500 kg massive basis
- Best balancing results: < 0.4 gmm

Technical Data	»toolBalancer 550«	»toolBalancer 750«
Dimensions with integrated control unit (monitor holder) (H x W x D)	1044 x 1725 x 807 mm	1044 x 1960 x 807 mm
Domensions with separate »cockpit« control unit (H x W x D)	1740 x 1725 x 1225 mm	1740 x 1960 x 1225 mm
Weight of standard version	740/730 kg	755/745 kg
Maximum tool diameter/maximum tool length	480 mm/550 mm	480 mm/750 mm
Maximum tool weight/maximum spindle speed	30 kg/1200 R/min	30 kg/1200 R/min
Measuring accuracy	< 0.4 gmm	< 0.4 gmm



Find out more about the ZOLLER »toolBalancer« on: solutions.zoller.info/en/toolbalancer







High-precision spindle

The selection of high-precision ZOLLER balancing adapters with a unique design facilitate power-activated and safe clamping of SK, HSK, polygonal shank coupling adapters and more, with even better repeat precision than ever before. In addition, accidents and damage caused by balancing adapters that are not screwed into the spindle are prevented.

Exactly Preset – ZOLLER »smile«

6

With the ZOLLER »smile«, you save time, reduce tooling costs and increase process reliability. With preset tools, you reduce set-up time on the machine and increase productivity. With optimally set tools, you achieve longer tool life, and with defined outer contours you avoid machine crashes. In addition, the digital transfer of the tool data guarantees secure, error-free data input.



»smile 320 pilot 1.0«

High-precision spindle SK 50







Vacuum tool clamping

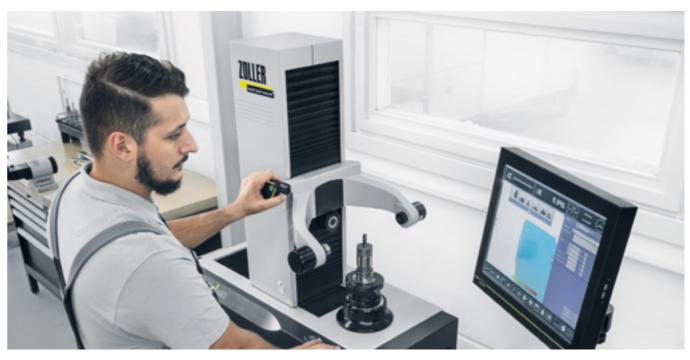
Power-operated tool clamping

»eQ« ergonomic one-hand control handle (ergonomic and quick)

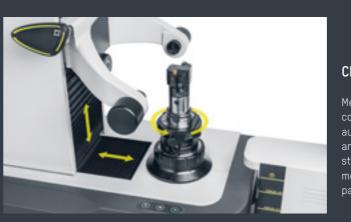
Benefits for your tool presetting and measuring

- Unique operating concept
- Maximum ergonomics at the workstation
- Measuring program selection at a glance

Technical Data	»smile 320«	»smile 420/620«
Maximum tool length Z	350 mm	420/600/800 mm
Measuring range X axis	160 mm	210/310 mm
Maximum tool diameter D	320 mm	420/620 mm
Maximum snap gauge diameter D	0 mm	100 mm



Find out more about the ZOLLER »smile« on: solutions.zoller.info/en/presetting-measuring







CNC-controlled axes and autofocus

Measuring at the touch of a button: With a »smile«, and with CNCcontrolled axes and autofocus, every tool can be measured fully automatically. As a result, the measurement results are reproducible and independent of the operator: The tool is simply inserted, then the start button in »pilot« is pressed and the tools are automatically measured – already from lot size 1 without scrap and without sample parts. This is process reliability in its purest form and real efficiency.

Professionally Measured – ZOLLER **»venturion**«

6

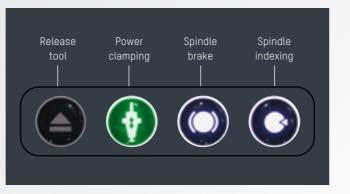
With the ZOLLER »venturion«, you save time, reduce tooling costs and increase process reliability. In addition, the digital transfer of the tool data guarantees secure, error-free data input. Thanks to the high quality of the machine and brand-name components, with the ZOLLER »venturion« you get a reliable partner for many years which reduces your maintenance costs to a minimum. In short: with the »venturion«, you simply increase the efficiency of your production.



»venturion 450«



High-precision spindle »ace« for µm-exact tool holding

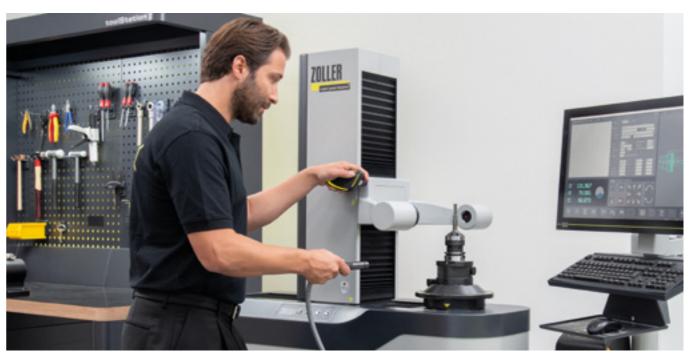


Easy operation of the dust-resistant membrane keypad

Benefits for your tool presetting and measuring

- Certified according to international standard IEC/EN 61010-1 and cNRTLus
- Exact measured values after a minimum measuring period
- Measuring at the touch of a button

Technical Data	»venturion 450«	»venturion 600«	»venturion 800«
Maximum tool length Z	450/620/820 mm	600/800/1000/1200 mm	600/800/1000/1200/1400/1600 mm
Measuring range X axis	210/310 mm	300/400 mm	500/600/700 mm
Maximum tool diameter D	420/620 mm	600/800 mm	1000/1200/1400 mm
Maximum snap gauge diameter D	100 mm	200/100 mm	200/0 mm



Find out more about the ZOLLER »venturion« on: solutions.zoller.info/en/presetting-measuring







Automatic data transfer

The best way to continue working without manual data entry is to ensure all actual tool data is correct and readily available. The »venturion« can be integrated into your network and, if desired, transfers all relevant data to your CNC machines in controller format. Benefit from error-free and safe data transfer in your networked production.

Automatically Measured – ZOLLER »coraMeasure LG«

6

With the ZOLLER »coraMeasure LG«, tools can be automatically identified and measured. Your tools are identified using the ZOLLER »idChip« technology, ensuring a fast and smooth process. The measuring process for your tools is carried out by a ZOLLER presetting and measuring machine with separate »cockpit« control unit.



»coraMeasure LG«



Room gantry robot for tool handling



User interface displays the status of the tools

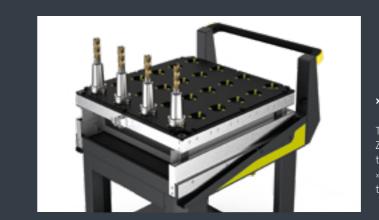
Benefits for your tool presetting and measuring

- Outstanding process reliability
- Compact and space-saving design
- Revolutionary step into a digital future

Technical Data	»coraMeasure LG«
Size (H x W x D)	3150 x 1785 x 2000 mm
Maximum tool length Z	600 mm
Maximum tool diameter D	120 mm
Maximum tool weight	10 kg
Tool-holding fixtures	HSK 63/HSK 100/SK 40/SK 50



Find out more about the ZOLLER »coraMeasure LG« on: solutions.zoller.info/en/automation







»smartPallet« system

The »smartPallet« system consists of two components: ZOLLER »smartPallet« pallet storage and ZOLLER »smartPallet« tool pallet. Tools are moved into the work area of the »coraMeasure LG« on a tool pallet or pallet jack. Then the tool pallets are transferred to the pallet storage.

Error-Freely Identified – ZOLLER **»zidCode**«

7

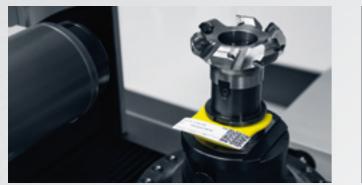
With the ZOLLER »zidCode« & »zidCode 4.0«, the efficient solution for tool identification, you benefit from correct and complete tool data that can be transferred quickly, without typing errors, and in a paperless manner. With »zidCode«, you increase your process reliability and thus your productivity. At the same time, you can enter the world of digitized production without the need for high investment costs or complex retrofitting, and you are ideally equipped for a successful future.



»zidCode«



»zidCode 4.0«



QR code label with actual tool data



»z.DMI« technology for bidirectional data transfer

Benefits for your tool identification

- Transfer tool data reliably
- Avoidance of machine crashes
- Typing errors eliminated thanks to error-free data transfer

Find out more about the ZOLLER »zidCode« & »zidCode 4.0« on: solutions.zoller.info/en/zidcode

ZOLLER z.One database

E

Integrated CAM interfaces

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 the ZOLLER TMS Tool Management Solutions in the form of a setup sheet.

Structured tool preparation

Tools, components, accessories and complete tools are digitally recorded and can be localized in the ZOLLER Smart Cabinets and with the help of the ZOLLER TMS Tool Management Solutions software. The prepared complete tools are identified and measured on the ZOLLER presetting and measuring machine. The tool data is then directly available on the machine control.

Efficient manufacturing

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





ZOLLER Automation Solutions for your Future

With the ZOLLER Automation Solutions for machine tools, we offer modular solutions for every area on the shop floor. From retrieval to assembly and tool preparation to logistics. Make your tools mobile.

TOLLES

Each automation option in ZOLLER Automation Solutions is represented on the software-side by a webTMS module. You only use the modules you need for your automation. You can easily expand your webTMS online via the MYZOLLER digital service platform.

Find out more about the ZOLLER Automation Solutions on: solutions.zoller.info/en/automation

»coraLogistic«

The »coraLogistic« module has all functions needed for automated tool logistics. These include management of the »coraExpress« mobile cobot, planning driving jobs, and assigning stations.

»loadBox«

The »loadBox« module offers everything you need to set up and manage the central tool store and activate tools for specific orders. You always have access to information such as tool inventory and tool circulation, and know which orders are currently in preparation.

»roboBox«

You can use the »roboBox« module to plan and monitor fully automatic tool assembly and measurement. You can equip the »roboBox« hardware, in turn, with up to six automation modules – for instance for automatic measurement, shrinking, torquing and balancing of tools. Each function can be operated separately in the »roboBox« software module.









Get Started Digitally in Two Steps with ZOLLER

Utilize your production potential with foresight and give the starting signal for your efficient tool management system – get started right away!

The StartUp package with ZOLLER's webTMS software forms the basis, while the RoundUp package offers you options for a customized system solution.



Tool management with the StartUp package:

- With webTMS software included ZOLLER z.One database for 6 months free of charge and on loan for testing.
- \cdot Then rent webTMS with monthly installments.
- webTMS can be operated immediately via a web browser
- on any end device connected to your company network. • Interface to your ZOLLER presetting and measuring
- machine with »pilot 4.0« from version 1.20.

Our MYZOLLER customer portal provides:

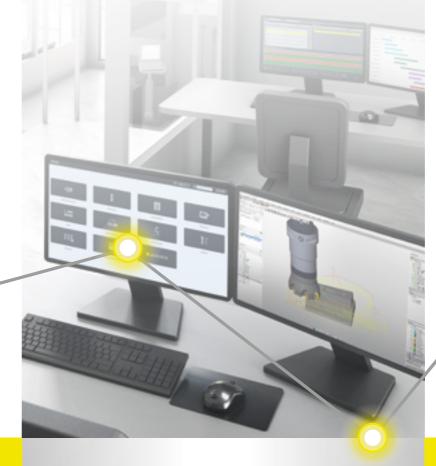
- Online training courses for webTMS
- Videos
- \cdot 1:1 expert talks



Company network with database - z.One in a private OnPremis cloud application

ZOLLER functions to increase efficiency:

- Management of tool stock and tool circulation
 Setting up a digital tool store
- · Management of the machine assignment of your fixtures
- · Error-free data transfer and tool identification
- · Direct access to the MYZOLLER service world



Step 01

StartUp package

Manage your tool data more efficiently with ZOLLER:

Producing with the RoundUp package:

- · In a defined project phase of 3 months.
- Integration of one (1) CNC machine productively to the webTMS in your production.
- Your ZOLLER TMS team creates 100x tool components, sets up 40x complete tools and introduces 5x setup sheets.
- Use »zidCode 4.0« with »z.DMI« interface on loan within the project phase for the direct transfer of your tool data to the control of your chosen CNC machine.

Set the course for your future now:

After the three-month project phase, you decide how to proceed with your production. ZOLLER is your partner for system solutions: Start with a Solution – Enter a System.



Error-free data transfer - ZOLLER »zidCode 4.0«

Step 02

RoundUp package

Your Customer Portal www.myzoller.com

simple. direct. online.

zoller

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 UK

Faraday House, Woodyard Lane, Foston, Derby DE65 5BU

T: 01283 499566 www.zoller-uk.com