

2018 EDITION

magazine

**SUCCESS**  
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SUCCESS ACCELERATORS

**COVER STORY**

Key factors for more success in your production

**TOOL STORAGE 4.0**

Software-linked 'Smart Cabinets'

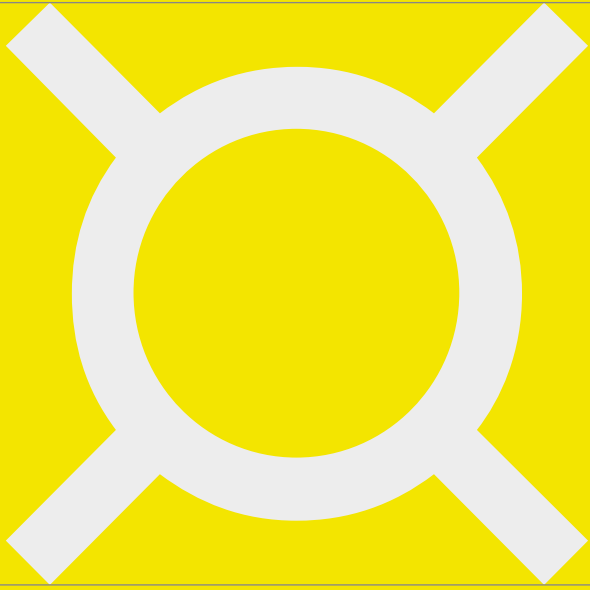
**INDUSTRY SPECIAL**

System solutions for tool grinding

**DOUBLY EFFICIENT**

Tool manufacturer ProProTec chooses ZOLLER twice

**ZOLLER**  
expect great measures®





## Dear Readers,

We all know that time is money. But the pressure to be as efficient as possible and to manufacture products quickly is growing. The digital transformation has once again tightened framework conditions. Now more than ever, companies that can deliver on time will be in the running for the most lucrative orders. In today's economy, quick availability can be even more valuable than a discount.

There are a few things that are essential to fast manufacturing: reliable, easy to operate machines and digital networking from goods-in to tool storage, from simulation to the finished workpiece, including documentation. Only when everything works together can processes run quickly, reliably, and profitably. What do you need to make sure that happens? You need partners that support you in the many different tasks you have to handle.

For over 70 years now, we at ZOLLER, have been offering system solutions for presetting, measuring, inspecting, and managing tools. We combine hardware, software, and service to create products that integrate easily into your existing systems and help you accomplish your goals more quickly than ever before. Our new smart tool cabinets with software integration are a prime example of this. This and other exciting news from the world of ZOLLER is available on the following pages.

We hope you enjoy reading it.

**Christoph, Eberhard and Alexander Zoller**  
CEOs of E. Zoller GmbH & Co. KG

# Zmagazine

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# 2018 Edition



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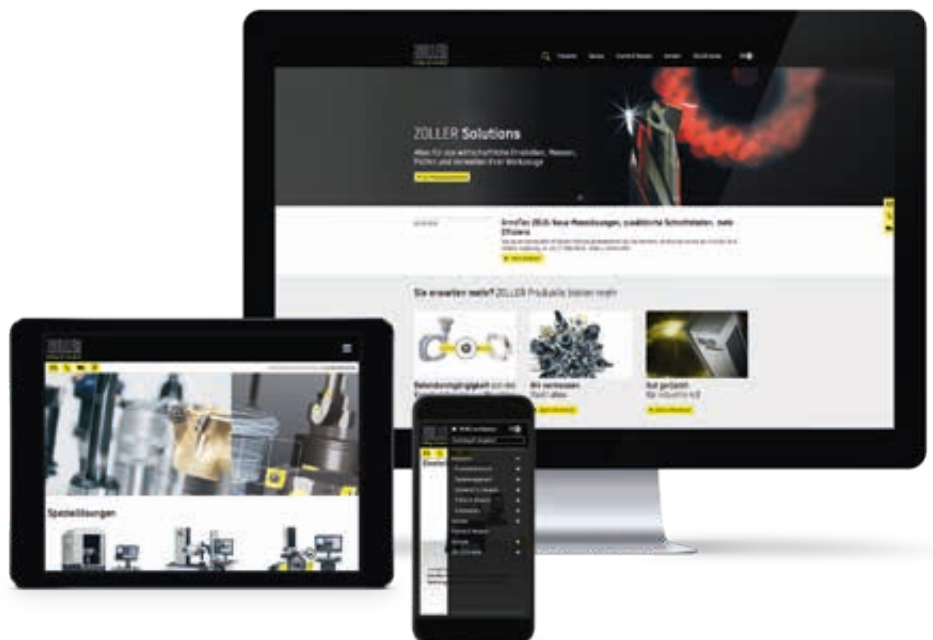


# Z shortcuts

## FRESH LOOK NEW ZOLLER WEBSITE

Ample information, modern design, and easy to use: The ZOLLER website has a whole new design as of January 2018. The look isn't the only thing that's new; the website also offers more comprehensive information and application examples. Check it out!

 [www.zoller.info](http://www.zoller.info)



## IT'S ALL ABOUT METAL!

Strong showing: ZOLLER once again hit the mark every step of the way at METAV, the international exhibition for metalworking technologies in Frankfurt. The company offered innovative solutions for networked manufacturing, from smart warehouse solutions to intelligent quality control.





## EVERYTHING UNDER CONTROL

100% control, documentation, and traceability: These were the focal points of the presentation for ZOLLER's product portfolio at "Control" in Stuttgart, the world's leading exhibition for quality assurance. Many companies from the automotive sector and major machine manufacturers came by the stand – and were excited about what they saw.

Michael Haas from ZOLLER (left) and the first visitor on the opening day of "Control" look to be in great spirits.



## DIGITAL WORKFLOW

Attendees at the Tebis in-house exhibition got a live look at what successful collaboration looks like: with the new ZOLLER-Tebis CAM interface in combination with Tebis ToolControl. The demonstration started out with live scanning of real tool contours on site. These scans were then transferred to Tebis ToolControl, and the real tool data was used to create, simulate, and optimize the processing program.

# THE SEARCH IS OVER!

# TOOL STORAGE





# 4.0

Who hasn't had this experience: The tool you need isn't where it's supposed to be. It either has to be re-ordered, or you have to spend precious time searching for it until it turns up – typically at a colleague's workstation. Both of these situations cost time, energy and money. Thankfully, there are storage solutions that provide transparency, data consistency, and organization with minimal work. The name for these tool cabinets says it all: Smart Cabinets



»toolOrganizer«



»keeper«



»twister«



»locker«



»autoLock«



Cabinet solutions can be connected in a series and linked using the z.One central tool database.

# SMART CABINETS

## Smart Tool Cabinets with Added Value

ZOLLER now offers practical Smart Cabinets for comprehensive networking in production. These software-linked storage cabinets can be used to store a wide variety of individual components and complete tools.

## A Smart Solution, And Not Just For Tools

Tools and components, measuring equipment and even accessories like gloves and hearing protectors – everything has its

place in Smart Cabinets. The »toolOrganizer« and its drawers are ideal for tools and tool components, for instance. The vertical compartments are a great place to store complete tools, while the »twister« is better for components and accessories. There's also the »locker«, an automatic locking compartment. And there's also »autoLock« for handheld tools, lubricants, measurement, and testing materials.

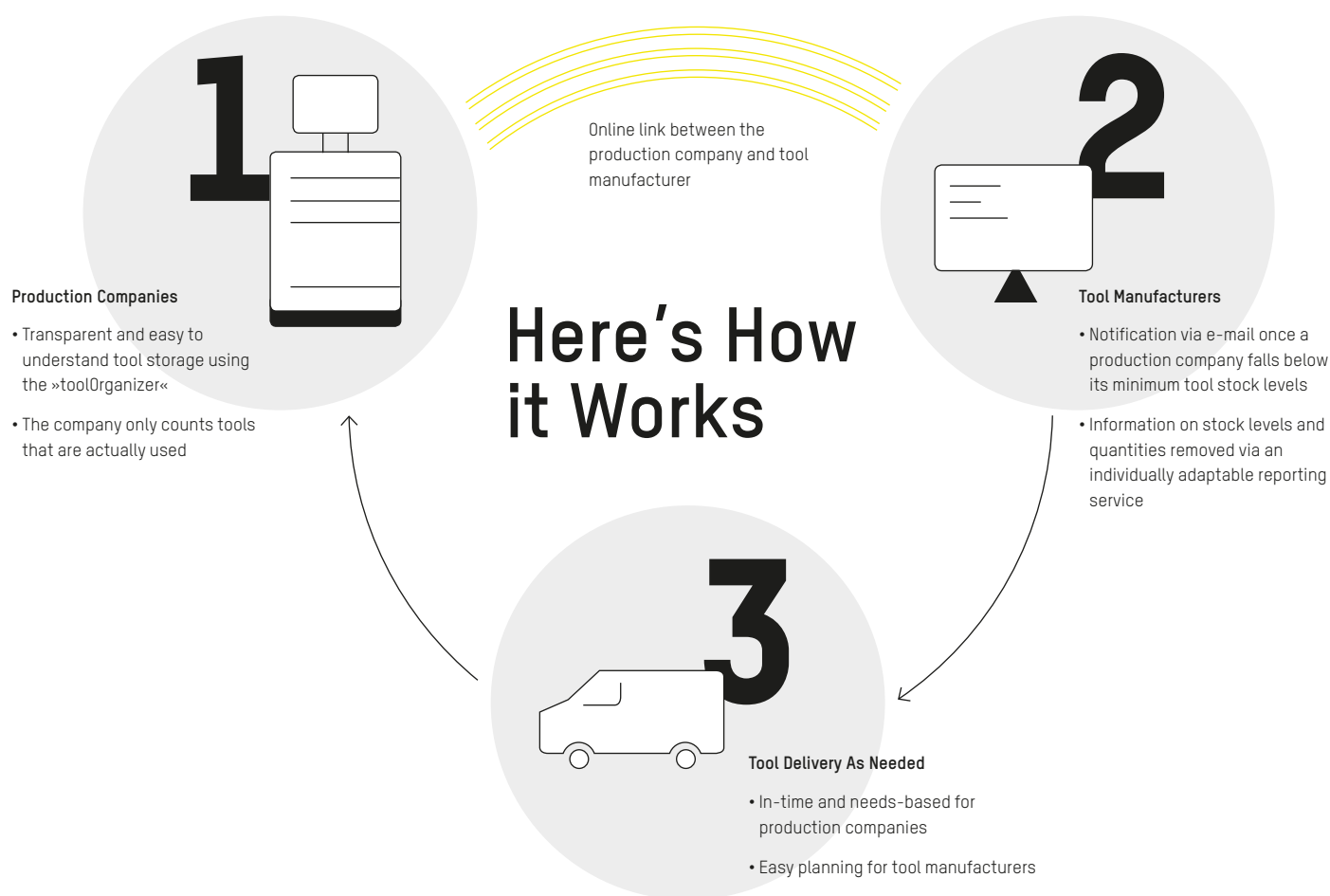




# CONSIGNMENT WAREHOUSE







↖ The software offers a practical 3D display of storage locations – time-consuming searches for tools are a thing of the past.

#### Including Connection to ZOLLER TMS Tool Management Solutions

The direct software link between Smart Cabinets and TMS Tool Management Solutions allows storage locations to be displayed graphically, inventory overviews to be printed out, and orders to be triggered with just a simple click. You can also control access rights and have full transparency on tool circulation and storage. Last but not least, materials stored in the wrong location will be a thing of the past, as will machine downtimes due to missing tools. That's not only extremely practical, but saves both time and cost. It's a comprehensive approach to optimizing tool inventories.

#### Also Practical for Use as a Consignment Warehouse

An advantage to tool manufacturers and production companies alike: Using Smart Cabinets in combination with TMS Tool Management Solutions as a consignment warehouse. This combination provides production companies all the tools they need frequently at any time, but only charges them for the ones they actually use. Tool manufacturers, in contrast, can reduce storage costs and ensure their customers are always supplied with tools to meet their needs. A reporting service informs them of customer stock levels at individually adjustable intervals. That provides complete production and planning reliability to tool manufacturers and production companies alike. Simply smart!

# THE Z EFFECT

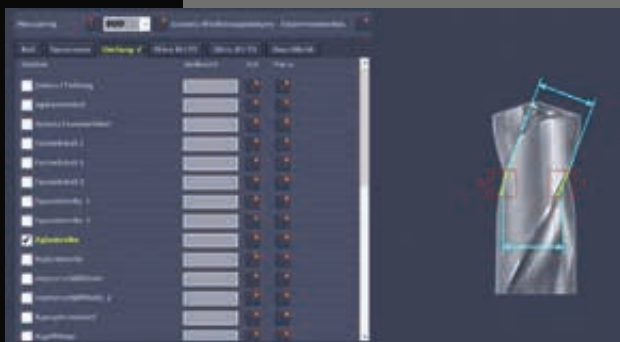
## MEASURE ACCORDING TO YOUR NEEDS – WITH »EXPERT«

The Task: Easily measure a wide variety of parameters without programming in incident light.

The Solution: »expert« by ZOLLER. Parameters to be measured are arranged by "chip space", "scope", or "face" and displayed graphically. They can easily be selected by checking the appropriate boxes – and the measuring procedure is ready to start.

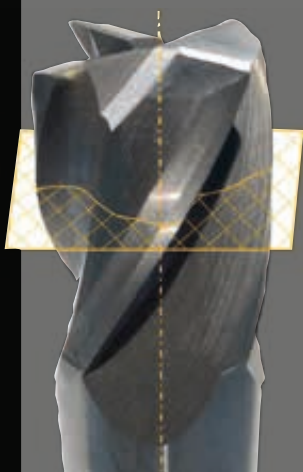
The Result: Measuring procedures are saved for follow-up measurements, and can be edited and expanded. New parameters can simply be clicked, deselected, or repeated individually. This is practical and time-saving.





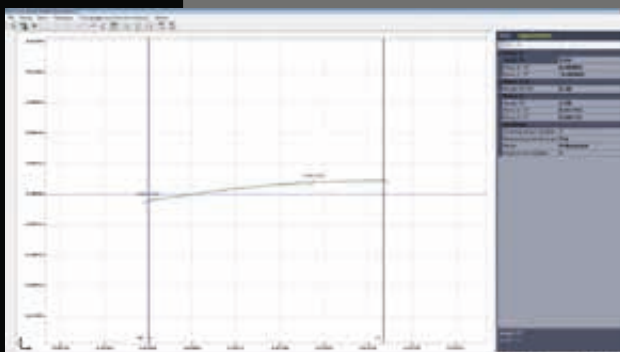
### Selecting Parameters

There is no need to program measurement macros first: Simply select the desired parameters by clicking the check box, and the automatic measuring procedure will start.



### Tool Cross-Section

Cross-sections can be used to determine all of the dimensions of the cutting tool edge.



### 2D Assessment

The cutting tool edge contour is assessed in a 2D format and can then be documented.



LET'S GO



# ACCELERATOR ON THE PATHWAY TO SUCCESS

Digital transformation, global collaboration, customized individual orders, tight tolerances, new materials, tight delivery deadlines: Possibilities and challenges in the production industry change rapidly. The goal, however, remains the same: to reach the desired result as quickly as possible. Anyone who wants to be in the race needs partners and systems that can help them accelerate their processes. With such a variety of different tasks to handle, it's near impossible for one company to have every area of expertise it needs. But what do you really need to put your foot on the gas? What's important when it comes to software, hardware, and service? How can companies guarantee speed and safety at the same time? Z.magazine will describe how to recognize true accelerators for success on the following pages.

## ACCELERATING SUCCESS NO. 1: DIGITAL EXPERTISE

The more important networking and automation become to production, the more important software becomes. Software developers and engineers have been working side by side in research and development departments for quite some time. The goal is to network individual production stations and elements and to link different locations and machine manufacturers together all around the world for remote maintenance.

The “smart factories” created by these kinds of networks essentially control themselves. Downtimes, timeconsuming searches for tools, crashes – smart factories know how to avoid all of these kinds of problems. Machines notify users if parts need to be exchanged before they cause problems. Figuring out tool stock levels or locations no longer requires a trip to the warehouse, but rather just a click in the right app. Once a tool is outside of the tolerance range, the presetter sounds an alarm and tools aren’t even delivered to the machine. And once a tool is nearing the end of its service life, users are notified automatically and tools can be re-ordered directly. Theoretically, any request can be processed quickly and economically – from a minimum batch size of just 1.

Sounds good? It is. However, there is still great uncertainty, especially among smaller companies, about the best way to approach digitization. Many providers promise solutions – but which is the right one? Which one will work with the company’s existing production elements? And how will employees learn to work with the solution? Especially among specialists with many years of experience, it can be tough to foster openness to new possibilities. One key reason for this is concern that digitization may eliminate jobs. Another concern is that these specialists may not have the knowledge they need to handle the new software.

Any company looking to counteract resistance to introducing new systems would do well to use the simplest and most well-developed solutions available that have proven themselves on the market. Digitization has been underway for many years, and valuable empirical data is available. Of course, new solutions also need to integrate well into existing processes – after all, most companies aren’t looking for a complete overhaul. They need to ensure smooth connections to higher-level controlling and third-party systems as well as data transmission appropriate for control technology.



### SIMPLE COMMUNICATION

New systems need to integrate seamlessly into existing production structures. Just like ZOLLER system solutions. Thanks to easy connections to third-party systems and higher-level controlling systems as well as different data transmission options, they can be directly integrated.

## DIGITAL ROAD TO SUCCESS

Modern grinding machines and leading measuring technology – everything is perfectly networked at Nachreiner Spanabhebende Werkzeuge GmbH. "In addition to reliable quality control, our goal is to produce more quickly and reliably, and with better networking. We've got a good partner in ZOLLER on both counts" explains Siegfried Nachreiner, company founder and innovative problem solver focused on tool production.





SIMPLE OPERATIONS MAKES FOR SATISFIED USERS

"Every grinding machine operator can also operate measuring machines. The software has a clear and easy to understand structure, and since measuring programs have been created and optimized for almost every tool, that makes it even simpler and faster" explains Michael Göstl, Production Manager at Nachreiner Spanabhebende Werkzeuge GmbH, talking about the advantages of ZOLLER »pilot« software.

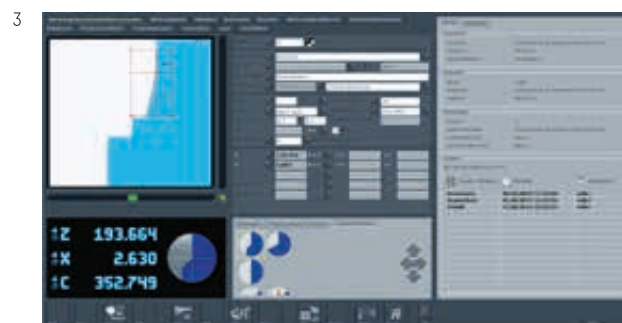
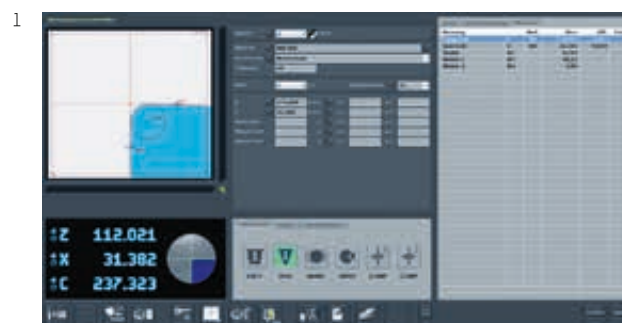


## ACCELERATING SUCCESS NO. 2: SIMPLE TO USE

The world of production is becoming smarter and smarter – and more and more complex. That's why it's important for machine controllers to navigate users to their goal quickly and reliably. Graphic user guidance, especially, is a major aid in simplifying intuitive controlling through the measuring program. Custom adjustment options for different workplaces and operators that allow them to block or lock all the functions they don't need provide a more easily understandable interface. Information saved in the software, for instance on tool assembly, ensures processes are standardized and efficient. Standard processes can be initiated at the push of a button, helping avoid errors and increasing speed. Data is transmitted digitally, replacing error-prone, timeconsuming manual input.

Other key features include seamless communication between software systems and expansion options for future challenges. From the CAM system to the warehouse to the machine, everything needs to work together, and new functions have to be easy to integrate.

Truly great software should be able to learn and should be easy to communicate with. It should also offer easy operation to everyone – with as little training as possible.



Reliably achieving precise measuring results: »pilot« software, trusted for decades worldwide, easily guides users through different programs with a graphic interface – for instance using dynamic cross-hairs (1), a tool library (2) and cutting edge shape detection (3).



Practical! The Tool Assembly Assistant in ZOLLER »pilot« software for customized, realistic tool assembly.



MACHINES AS RELIABLE COMPANIONS

In use for over 15 years – still as precise as on the very first day. FRAISA has trusted in ZOLLER quality for many years.

## ACCELERATING SUCCESS

### NO. 3: EXCELLENT QUALITY

If software is the brain, then hardware is the worker – the machine controlled by the software. It has to offer a lot to stand up to the rigors of everyday production environments. Only when everything works in concert, from a well-developed design to careful assembly, will devices stand up to high demands over many years. The details are what separate the wheat from the chaff – close investigation before making an investment pays off.

It all starts with the cladding: Are electronic components fully protected against outside dirt and dust? Is the base cushioned against vibrations and resistant to temperature fluctuations?

The control elements are another key consideration: Are they easy to reach, and can they be adjusted for individual users? Is there a risk of injury? Are manually movable components easy to adjust?

Internal features are also key to precision and long service life: Are cables wired cleanly? Can wear parts be exchanged easily? Is component finishing high-quality?

If these questions have been answered to your satisfaction, then the machine will fulfill all your requirements and be a reliable companion in your production processes. However, if companies don't take a closer look when making a purchase, they might risk falling into a money pit – either because of expensive repairs, downtimes, or because produced parts don't fulfill requirements. In the worst case scenario, machines may need to be replaced after just a short time. High-quality devices, in contrast, can often remain in service for ten to twenty years or longer. Of course, they need to be calibrated and maintained regularly – good service across the machine's entire lifetime is essential.

#### RELIABILITY ACROSS GENERATIONS

FRAISA SA, one of the world's most renowned manufacturers of cutting tools, is already using five ZOLLER inspection machines and one presetter. Even the oldest machine, a 15 year-old »genius«, runs on the newest software and still offers absolutely reliable and precise results thanks to its outstanding finishing quality and high-quality components. It has more than paid off.





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## SUCCESS ACCELERATOR

### NO. 4: SERVICE

A good partner is someone you can always rely on. They'll journey with you on your path to success, support you in your everyday work, and will be by your side immediately in case of an emergency. Those are the kinds of qualities that make up good service. It all starts with thorough advising before you purchase a product – preferably including a live test. The only way to know controls function as easily as promised, after all, is to test them out yourself. After the purchase, good service continues with commissioning and employee training. This is followed by regular maintenance, quick aid in case of questions, and adjustments to new requirements as necessary.

Having competent contacts is always important – both on the phone and on site. You shouldn't just give the device itself a thorough inspection, but the company behind it as well. Are there branches nearby? An emergency hotline? Does the company have an international organization? How long has it been in existence? This kind of information can tell you what kind of service is available – as we all know, making promises is easier than fulfilling them.

It's always a good idea to look at a company's entire portfolio. If you're satisfied with your provider, you can save lots of time – and typically lots of money too – by purchasing different products or whole system solutions from a single source.



EXCELLENT SERVICE ON BOARD





#### GOOD SUPPORT: PRICELESS

FRAISA SA CEO György Varnkna (right), Veronika Espákné, Head of Quality Assurance, and Gerald Rackaseder, Head of Service at ZOLLER Austria discussing measurement requirements. Varnkna emphasizes: "ZOLLER support is always one hundred percent reliable. Our good experiences with maintenance and support are simply priceless. I didn't just buy a machine."

#### Digital Expertise, Simplicity, Quality, and Service:

These four success accelerators have been our focus over the last few pages. If a company can offer all of them, chances are good they'll have the right products and partners to accelerate your processes right from the start. Each company needs a unique approach – as we can clearly see from two very different contract manufacturing companies working with the same system that combines presetting and measuring technology and tool management. With great success, as you will see.

Read on to learn how they do it.



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TWO COMPANIES ON THE HOME STRETCH

# A



# SYSTEM FOR SUCCESS

Whether they're working with prototypes, complex special designs, or series products: Contract manufacturing companies handle a wide range of different projects, produce many different products, and support customers from every imaginable industry.

H.P. Kaysser GmbH + Co. KG is a provider of many different kinds of sheet metal components, while ANFOTEC Antriebstechnologie GmbH primarily produces high-quality industrial and mechanical drive elements.

Despite the differences in their product ranges, both companies have to produce products flexibly, quickly, and inexpensively. It's no wonder that they both also start with the same solution: the »venturion« pre-setting and measuring machine combined with TMS Tool Management Solutions by ZOLLER. Z.magazine visited them live on site to get a sense of how they used this system to optimize their production processes.

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## H.P. KAYSSEY GMBH + CO. KG: TOOL DATA TRANSPARENCY AND IMPROVED SETUP TIMES

Automotive, mechanical engineering, medical technology, computer industry, food technology... companies in these and more than 30 other industries have one thing in common – they all use H.P. Kaysser GmbH + Co. KG as a provider of sheet metal components. H.P. Kaysser's contracts are just as diverse as its customers. The company's production processes have to be versatile enough to match a variety of needs, meaning machines frequently need to be re-fitted. With a central set-up location combined with efficient tool management, the company has a handle on set-up times and has an accurate overview of tools.

### It All Starts With Warehouse and Set-Up Time Optimization

Over 4,000 complete tools and an equal amount of single components are in use at H.P. Kaysser – which is a significant cost factor. To work more efficiently and lower tool costs, the company launched a project to optimize tool storage and management in 2015. "In the past, employees frequently had their own storage areas at specific machines. It was almost impossible to know where a certain tool was," explains Peter Pfeleiderer, Project Manager of Tool Management at H.P. Kaysser. "Machine set-up times, especially, were too high. That's why we decided to establish a central set-up station with two Kardex shuttles, while optimizing tool management at the same time." The company chose to partner with ZOLLER – they were already aware of the company from joint projects in the past, and had been operating TMS Tool Management Solutions on a ZOLLER »venturion« presetter since late 2015. The diversity and modular design of TMS Tool Management Solutions by ZOLLER, and the fact that they could receive tool presetting and management from a single source, were key factors behind the decision.



**GOAL 1: SMART PATHWAYS FOR  
BETTER FLEXIBILITY AND EFFICIENCY**





Everything uniform, everything simple: User interfaces on devices and tool management use an identical structure – helping employees get comfortable quickly.

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## “Everyone Immediately Saw the Advantage of the Central Database.”

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Peter Pfleiderer, Project Manager of Tool Management at H.P. Kaysser

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### Achieving Goals, Step by Step

To quickly benefit from tool management, the company needed to differentiate required project modules from desirable modules, then address them one by one. “If we had tried to start off at our current level of detail, we might have been overwhelmed by the many different options ZOLLER-TMS offers,” Pfleiderer says, explaining why they chose a step-by-step approach to introducing the new system. Getting employees on board with the changes early in the process was also helpful. This allowed them to inform everyone involved of the project’s benefits right from the start, and handle any reservations before changes were made. Especially when handling ongoing tool data entry, the company needed to foster an awareness that it was looking for good work processes that would ultimately benefit everyone. Pfleiderer notes that one key factor in the smooth switch over was how easy ZOLLER products are to use: “The ZOLLER product user interface is very easy to understand and is always the same, no matter whether it’s on a measurement device or on the PC. That helped shorten our training time.”

### 1. Milestone: Transparency, not Storage Confusion

Careful data import for component designations, complete tools, and set-up sheets via Excel tables, and manually linking storage locations, quickly paid off, says Pfleiderer: “Thanks to the central ZOLLER z.One tool database, we have a transparent tool inventory with no more confusion about where tools are stored. Finally, everyone can access the knowledge of the whole staff without having to search for tools – that saves time. Everyone immediately saw the advantage of the central database.”



## 2. Milestone: Direct CAM and ERP Link

After storage management was up and running, the CAM and ERP systems were also linked to ZOLLER-TMS. As Pfeleiderer explained: "Our CAM system TopSolid now directly accesses the central tool database. This really lowers our programmers' workload. ZOLLER tool management is also already paying off in purchasing: Since we have such good transparency, we only order what we really need – a major cost saving."

## 3. Milestone: Process Reliability and More Speed

The company is adding further options from the extensive and modular TMS Tool Management Solutions range over time. Pfeleiderer notes the »quickPick« storage module as one example, which allows the company to quickly book and remove items in just a few clicks, as well as »cetuss«, a software module used to optimize tool requirements: "Thanks to »cetuss«, the control center for all tools is now the office; we don't have to ask each individual machine operator what tools they have on their machine, since all the data is saved in the system. The program calculates tool requirements based on current machine magazine fittings. Then a picking list is created automatically, and only the tools that truly need to be exchanged are. That helps us save even more time and costs."


## A Complete Success – To Be Continued

A central set-up location and ZOLLER Tool Management combined to accelerate set-up times at H.P. Kaysser, also simplifying programming and purchasing processes, which in turn helped lower costs: "On average, we are saving 20-30 percent of our tool and operating material costs, and our production processes are already 10-15 percent faster", reports Udo Schwarz, Production Manager of CNC Machining Technology at H.P. Kaysser. However, for H.P. Kaysser all of this success is no reason to rest on their laurels – the company has already planned its next steps toward a profitable digital future: "Above all, we want to continue reducing our tool costs by using the Item Statistics module in ZOLLER-TMS to find optimizations", said Pfeleiderer.

← The CAM system directly accesses the central ZOLLER tool database – greatly reducing workloads for programmers.

↓ Udo Schwarz and Peter Pfeleiderer from H.P. Kaysser also use ZOLLER-TMS as a mobile app.



 Metalworking  
DE-71397 Leutenbach

H.P. Kaysser is a family-owned service provider using highly modern production technologies in metal processing and finishing. Its sheet metal components are used in over 30 industries.

With two locations in Germany and Romania, over 400 employees (f/m), and 27,000 m<sup>2</sup> of production space, H.P. Kaysser is one of Germany's leading mid-sized metalworking companies. The company serves as a supplier, development, and strategy partner for its customers.

[www.kaysser.de](http://www.kaysser.de)



Already planning upcoming optimizations: Udo Schwarz, Production Manager of Machining Technology, Peter Pfeleiderer, Project Manager of Tool Management at H.P. Kaysser, and Tugay Dedeli, Team Leader for TMS Tool Management Solutions at ZOLLER (from left).





GOAL 2: FASTER PRODUCTION






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## ANFOTEC: SERIES PRODUCTION DRIVE ELEMENTS

ANFOTEC produces industrial and mechanical drive elements for semiconductor equipment, tooling machines, and measuring technology in Medebach in the Sauerland region of Germany. Most of these high-quality components are produced as series parts and are made of aluminum and gray cast iron. Prototypes are also in demand. The company's clients expect high levels of precision and dynamism. Thanks to its ongoing growth, it has had to both move to larger facilities and optimize and accelerate its processes. That's why ANFOTEC started by investing in a ZOLLER »venturion« presetting and measuring machine for external tool presetting, then invested in ZOLLER tool management software to go with it.

CEO Christian Hast describes the initial situation: "In the past, every technician was doing their own thing when it came to tools. As the number of machines grew this became less efficient and more expensive, particularly for cost-intensive tools." Project Manager Michael Schnellen continues: "We wanted to get the tools away from the machines and eliminate tool storage problems." At the same time, the company wanted to ensure efficient tool management to give an overview of exact tool inventories and locations, avoiding multiple re-orders.

Florian Niggemeier (left), Project Manager at ANFOTEC Antriebstechnologie GmbH, explains current manufacturing challenges to André Dabisch, ZOLLER Sales.



### **Set-up Times Minimized, Cutting Performance Increased by Up to 15 Percent**

"In particular for the big machines, that have a six to seven hour run time and that use up to 60 tools for one work-piece, the setup times added up; [especially] when the specialists had to also spend time looking for the tools," explains Planning Engineer Florian Niggemeier. A combination of external tool presetting and management has reduced set-up times at ANFOTEC significantly today, since there's no need to look for tools and setup can be completed in parallel to machining operations. "The organization is tip top, and the success is apparent: We have between ten and fifteen percent more cutting performance," confirms CEO Hast. "The specialist fits the tool changer, checks all the technologically relevant settings once more, and the machine runs. Before, our specialists set up everything on the machine themselves. The ZOLLER system's setup sheets are a major advantage, especially for repeat parts.

### **20–50 Percent Lower Tool Costs**

A separate position was set up to design the tool management – all of the components and complete tools were systematically recorded and a transparent process flow was developed, from creation to follow-up orders. "Today, over 1,200 complete tools and more than 2,000 single components have already been created in the ZOLLER tool management system" explains Niggemeier. All tools are managed centrally; thanks to the ZOLLER warehouse management, they can also be found immediately in the cabinet. The "Ordering" module allows tools to be re-ordered at just the right time. "Of course, when you're introducing a tool management system you have to do some internal work winning over employees, getting rid of habits, and involving employees right from the start" says Niggemeier. Tool management combined with a reduced supplier diversity drastically lowered tool costs. "It really paid off," summarizes Christian Hast, "the costs in purchasing were cut by almost half in the first year!" Today, a savings of 20–30 percent over the initial prices has resulted.

### **More Productivity – Safely and Easily**

The switch to ZOLLER TMS Tool Management Solutions has paid off in the area of prototype manufacturing. Valuable tools are produced here using expensive machines. Specialists benefit not only from fast setup times, but also

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**"The organization is tip top, and the success is apparent: We have between 10 and 15 percent more cutting performance."**

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Christian Hast, Managing Director of ANFOTEC Antriebstechnologie GmbH

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from additional safety at the machine during unmanned cutting. Narrow tolerances have been established for tool presetting. If these are not complied with, the tool is never approved for the machine. "The user interface of the ZOLLER presetting and measuring machine is very easy to operate. Guidance through the measuring process is great; even a non-machinist can preset and measure a tool using the »venturion«" explains Hast. Nothing goes wrong anymore; machine crashes caused by tools are a thing of the past.

### **The Future Will Be Even Better**

"The success is there – but of course we can still expand on it. The interface to the CAM system 'SolidCam,' for example, still isn't being used to its full extent. And we are also going to take a closer look at data transmission from the presetter to the machines, above all the new »zidCode« solution ZOLLER offers," says ANFOTEC's Managing Director of the company's future outlook. They have already achieved their most important goal: faster retooling plus safety in relation to the tool and much shorter lead times. Today, ANFOTEC focuses on production, not setup.



← Technicians set up the tool exchanger – then all they have to do is check relevant settings, and the machine will be up and running.

↓ External tool presetting and management have significantly reduced set-up times at ANFOTEC.

↓ Simple operation included – the ZOLLER »venturion« presetting and measuring machine provides support with clear navigation on the way to precisely preset tools.




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**ANFOTEC**  
Antriebstechnologie GmbH

🏭 Contract manufacturing  
📍 DE-59964 Medebach

Since it was founded in 2000, ANFOTEC Antriebstechnologie GmbH has established a leading position for itself in drive and mold building technology. The company has such an outstanding reputation among customers especially thanks to the high precision and dynamism it offers in contract manufacturing for machines and modules.

The company's core areas of expertise are in development, production, and assembly. Its key business fields are semiconductor equipment, tooling machines, and measuring technology.

[www.anfotec.de](http://www.anfotec.de)

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↑ More cutting power and lower tool costs  
– Christian Hast, CEO of ANFOTEC, is satisfied.



## THE BULLDOGS ARE STATE CHAMPIONS

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49:0 – that was the unbelievable score that clinched the Baden-Württemberg state title for the LUDWIGSBURG BULLDOGS, a U13 flag football team sponsored by ZOLLER. The team also won a decisive victory in the second game of the final “best of three” series with an outstanding 47:0 victory against the Mannheim Bandits. The trophy was more than deserved.

Congratulations, keep it up!







## KICK IT!

A solid goal: The ZOLLER Inc. indoor soccer team, the ZOLLER Microns, has already enjoyed several successful seasons. Their passion for precision is a huge advantage as they aim for goal.



## ALL ACROSS BÖNNIGHEIM ...

... and through the hills and vineyards at the eastern edge of the Stromberg, following the course of the Bönnigheimer Stromberglauf race, which was held in icy temperatures. A picturesque backdrop for runners, and an event not to be missed for the Z. sports team.



## BEACH PARTY

The ZOLLER badminton team had a great summer training on sand courts near Pleidelsheim. The best thing? There was even a grill at the court – perfect for an “après beach party”

# Zsports

## EVERYTHING'S SMOOTH SAILING AT ZOLLER!

ZOLLER employees race for all they're worth. Whether they're up in the alps, in the Zillertal region, or on the Iberian peninsula – Z.sports cyclists are taking to the pedals. They're highly successful too. See for yourself.



### ALPINE GOLD

509 participants, including elite mountain bikers, were at the starting line of a 45 km tour across the Münsinger Alb region. Z.sports mountain bikers Markus Müllner (left) and Michael Haas took places 53 and 101. Congratulations!



### THINGS WERE HEATING UP ...

... at the Strombike marathon in Bönningheim. Roughly 700 riders rode 55, 75, and 100 kilometer distances in near 90 degree heat under a bright blue sky.

17 Z.sports participants made it to the finish line and more than earned the Weißbier that awaited them there!



## A TRUE CHALLENGE!

That's what was in store for the Z.sports MTB team at the Zillertal Bike Challenge. Key data: 4 ZOLLER employees, 3 days, 16,591 meters of elevation, and 535 kilometers. What a performance! Their reward: a sensational mountain panorama.



# inside

## GREAT MOOD

Bright sunshine, delicious food, a win for the home soccer team, and Fritzle as a special guest: There was lots to do for ZOLLER employees at the VfB Stuttgart Aufstiegsfest. Everyone was in a great mood. A live preview of the new VR app provided entertainment, along with an inviting barbecue and – of course, a collegial goal-scoring competition with attractive prizes.



➤ Excellent weather and grilled treats ensured everyone was in a great mood.

➔ Excellent VfB support: Hans-Peter Schwebisch (ZOLLER employee) with Fritzle, the mascot of VfB.

⬇ ZOLLER employees always impress with their precision – even while scoring goals.







Three lucky ZOLLER scholarship holders in mechanical engineering, computer sciences, and economic engineering at the award ceremony on October 23rd, 2017 with the Head of the ZOLLER Academy, Martina Hagist-Rupp (2nd from left), who gave out the scholarship awards.

# START-UP SUPPORT FOR SUCCESS

As an innovative company, ZOLLER is proud to promote talented young people. Three students at the Hochschule Karlsruhe, scheduled to graduate in 2017-2018, recently received support from ZOLLER. They were selected as recipients of the German scholarship, which provides support to gifted students at German universities in all departments from sponsors in German industry. For ZOLLER, this is a great opportunity to seek out contact with future graduates and offer them practical experience while they complete their studies. ZOLLER wishes the scholarship recipients great success!









# PRECISION WITHIN REACH

Worldwide digital networking, remote maintenance, video conferences – is it still necessary to be live and on site in today's modern world? Yes – at least when it comes to service. That's the only way customer advisors can assess directly on site what companies will need. It's the only way they can be there quickly in case of an emergency. And it's the only way to create true collaboration based on partnership. That's why ZOLLER works to be close to its customers – continuously expanding its global network of locations and branches in 58 countries. For outstanding service around the globe.





## NEW ZOLLER LOCATION

ZOLLER opened its new location in Bursa, Turkey in 2017. There, customers can learn about our entire product range in the new show room – from presetting and measuring machines to universal measuring machines to smart cabinets.

→ General Manager of ZOLLER Turkey, Mr. Mustafa Kaynakci, is glad to see measurable success for his customers.





A strong team – Christian Andlauer (1st row, 2nd from right), who founded ZOLLER France in 1991 along with Eberhard Zoller, with his employees in front of the new building.

## FROM 90 TO 260 m<sup>2</sup>

ZOLLER France employees really pitched in recently and used the “ZOLLER on Tour” display vehicle as a moving truck. In the new facility in Lingolsheim, there’s not only plenty of space for the growing team, but also for lots of presetting, measuring, and inspection machines as well as a tool management area.



## TAKING OFF IN PARIS

Key representatives from the aerospace industry have been meeting every two years at the Paris Air Show since 1909. Of course, ZOLLER is on site too – after all, excellent quality is a key consideration in airplane manufacturing.





## TECHNOLOGICAL TRENDS WITH AN EXCELLENT OUTLOOK

ZOLLER Austria was on the hunt for undiscovered potential in the production process at the “Production Efficiency Technology Day” with partner companies ISCAR, HERMLE, HAINBUCH, WESTCAM and VPW. In addition to the possibility of discovering technological trends, participants also enjoyed the view from the Bergisel ski jump in Innsbruck at the event location.



← Wolfgang Huemer, CEO of ZOLLER Austria, explained trends in tool measuring and inspection technology against a sensational backdrop.







↑ The WNT team clearly had fun on its bike tour – no wonder in such a picturesque setting.

← Swen Hamann from ZOLLER Ibérica was at the starting line for his team.



## ZOLLER IBÉRICA PEDALS ON

ZOLLER partner WNT Ibérica organized a cycling tour through the beautiful Spanish landscape. Of course, Swen Hamann, CEO of ZOLLER Ibérica, was along for the ride. It's great when you can make this kind of progress together in your free time, and not just on customer projects.



## PRODUCTION PROCESSES IN A REMARKABLE AMBIANCE

The 6th A+B Solutions user forum in Schwäbisch Gmünd took place at Manufaktur B26 – an old factory facility where historic vehicles and restaurant locations meet. Participants got an overview of process sequences at the company INDEX and learned about new products from A+B Solutions and ZOLLER.



➤ In the former factory building filled with classic vehicles, Bernd Schwenning, Head of Sales at ZOLLER, explained the networking options available from the company.





## "PRODUCTIVITY PERFORMANCE"

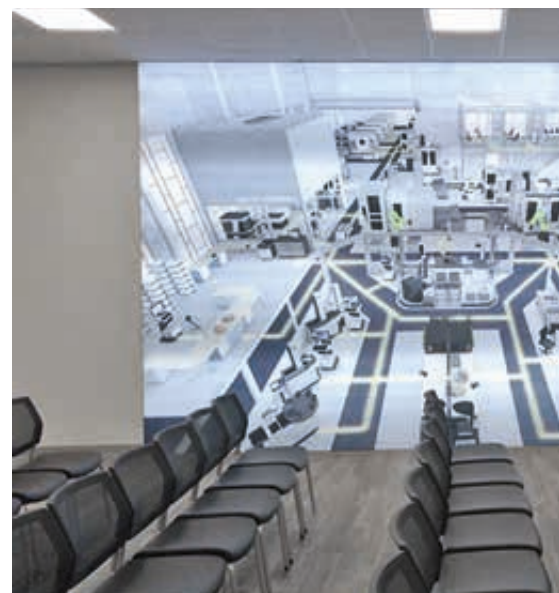
Increasing productivity through automation and reliable data transmission from CAD to machinery – that was the topic of the 3-day ZOLLER event held alongside Mazak, ISCAR, and DeltaCam/Autodesk in Herning, Denmark. Attendees got an impression of fully optimized production processes during the event. "It's important to experience the entire process live to see that it works" visitors said.



↑ Hans Jørgen Piepgräss from ZOLLER branch KJV presented optimal tool (data) handling on the »venturion 450«.







## THINK BIG! NEW BUILDING FOR ZOLLER INC.

Dynamic and flowing shapes, highly modern equipment, and 4,100 m<sup>2</sup> of space – the new headquarters of ZOLLER Inc. is impressive in many different ways. After two years of planning and construction, the building was completed in January 2018 in Ann Arbor, Michigan.

The highlight of the new facility is definitely the 8,800 ft<sup>2</sup> Industry 4.0 Tech Center. There, customers and stakeholders can get a sense for ZOLLER's entire range of solutions live on site – from compact starter devices for

professionally tool presetting and measuring to universal measuring machines, from TMS Tool Management Solutions to new smart warehouse solutions, everything's on display.

Perfect for training sessions: ZOLLER products are integrated into a complete production process from the CAM workstation to the CNC machine. Visitors to the smart factory can experience ZOLLER solutions in action and test them out live.



← That's the way to work: Werner Lueken and Matt Brothers from ZOLLER Inc. enjoy working in the excellently appointed new building.



← Unmistakably ZOLLER: the entrance to the new ZOLLER Inc. building.

↑ Fully equipped: the 8,800 ft<sup>2</sup> Industry 4.0 Tech Center.

## "SHOWING CUSTOMERS WHAT'S POSSIBLE."

Alexander Zoller

Alexander Zoller was there for the construction of the new ZOLLER Inc. headquarters right from the groundbreaking ceremony. Z.magazine asked him why the new building was constructed, what the focal points were during development, and what it's like to work in the new facility.

"The old buildings simply didn't have enough space. Above all, we weren't able to show customers the full breadth of our range of services. That's why the "Industry 4.0 Tech Center" was extremely important to us in developing the new building. We can use it to show customers what's possible live and in person. That's the only way to grasp the enormous advantages of ZOLLER system solutions. And it works – initial feedback has been entirely positive. Of course, customers aren't the only ones who benefit. ZOLLER employees also enjoy the new and generous space. They can concentrate on their work there, and the new bistro is the perfect place to relax throughout the day."





## "BEST OF PRODUCT AWARD" FOR ZOLLER

The stoneworking industry discovers ZOLLER! In 2017 ZOLLER took part in the TISE (The International Surface Event) exhibition in Las Vegas for the first time – and won a prize too! An outstanding start for partnerships in an industry where ZOLLER has been essentially unknown up to this point.

## STRONG SHOWING AT EASTEC

The new machine design of ZOLLER presetters was a big hit at the EASTEC in West Springfield, Massachusetts. Michael Stepke from ZOLLER Inc. and the rest of the sales team was proud of their success. They were also glad to see keen interest in the »genius« universal measuring machine and the simple data transmission solution »zidCode«.



Alexander Zoller (right) is visibly proud of ZOLLER Inc.'s great introduction to the stoneworking industry.



Alexander Zoller (left) and the ZOLLER Inc. team had a successful trip focused on precision at EASTEC 2017.





## ZOLLER GOES HOLLYWOOD

The ESPRIT World Conference took place in the heart of the American film industry in 2017: in Hollywood, Los Angeles. ZOLLER Inc. presented the new ESPRIT interface to TMS Tool Management Solutions. New options for turning tools, in particular, were in the spotlight.



The ESPRIT World Conference is known for its illustrious locations – this time, it was held downtown, right where the stars meet. Dietmar Moll took the stage as the main presenter for ZOLLER to introduce the new ESPRIT interface to TMS Tool Management Solutions.





# FUN MUD RUN DETROIT

ZOLLER Inc. employees give a clean performance each and every day. In August 2017, they decided to make an exception: The "Fun Mud Run" in Detroit was definitely a down and dirty endeavor. The charitable event was put on by the National MS Foundation, which supports people with multiple sclerosis, and involved an obstacle course and plenty of mud. It was no match for the Z.sports team, who handled the course with plenty of humor and tons of fun. Congratulations!







← Together through thick and thin: The ZOLLER Inc. Z.sports team shows that a well-functioning team isn't just more successful, they also have more fun.





## IMTEX 2017 – A COMPLETE SUCCESS

The team from ZOLLER India once again enjoyed great success at the IMTEX in Bangalore, India. Many potential buyers got a look at the overall ZOLLER portfolio at the stand. Employees were able to give full explanations of ZOLLER system solutions to lots of attendees.



↑ A strong team – ZOLLER India with Christoph Zoller (rear, center) and ToolMax.

## “INDIA IS AN EXTREMELY DYNAMIC MARKET.”

Christoph Zoller

Christoph Zoller gave Z.magazine a statement on the rapid development of production technology in India: “ZOLLER has been active in Asia since the 1990s, and is now becoming more active in India as well. We are seeing a trend towards very high-quality production here. Because of this, it’s a very interesting market for ZOLLER and we want to continue expanding our position as a technological leader here.”



Employees at PSDC were excited as ZOLLER employees presented new options to them.

## LEARNING WITH »SMILE«

Trainees were able to experience the possibilities of tool presetting and measuring live at the PSDC training center (Penang Skills Development Center) in Malaysia by working with a »smile« equipped with tool inspection and »zidCode«. They also got a glimpse into the advantages of direct data transmission to the CNC machine – a Mazak machine was available to the students.



A full house and lots of interested attendees at the JIMMOR seminar.

## TAIWAN IS "READY FOR 4.0"

The seminar at Taiwan ZOLLER branch JIMMOR was very well received by the 188 attendees from 78 different companies. The entire process sequence was on display live, and was also shown on the walls on large monitors. From the CAM station with hyperMILL®, the process continued to the warehouse and the »toolOrganizer« tool cabinet, then from there to the »venturion 450« presetting and measuring machine. Data transmission from the »pilot« measuring device software to the machine was demonstrated using the Heidenhain demo machine controller and »zidCode«.





→ ZOLLER employees enjoyed phenomenal insights into the natural beauty of the island of Yakushima on a company outing.





## JUST DIVE IN

One true highlight for employees at ZOLLER Japan was the company outing to the island of Yakushima, 40% of which is preserved as a natural park and covered by dense evergreen rainforests. Of course, employees spent plenty of time inspecting the amazing landscape – on land, on water, and even under the water as well.



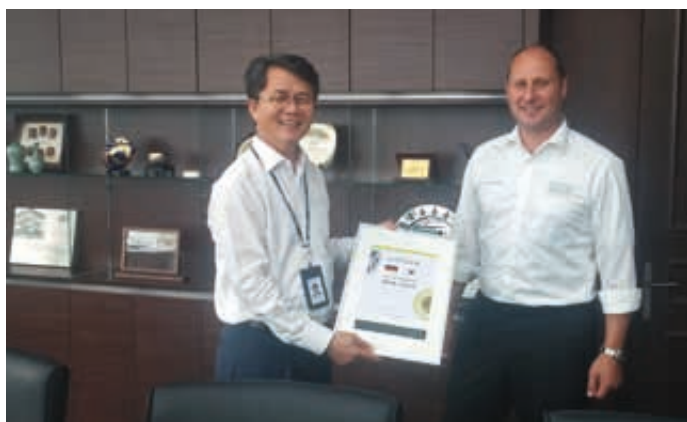


↑ Employees from ZOLLER branch VORNA fangostar Co. Ltd. Received enthusiastic support from Christoph Zoller, CEO of ZOLLER (right) and Mustafa Kaynakci and Gökhan Ekiz (from left), ZOLLER Sales.

## HIGH LEVEL AT THE 2ND AMB IN TEHRAN

Once again, the ZOLLER stand was a true eye catcher and drew in lots of potential buyers – no other provider at the exhibition had such a variety of solutions on display. The simple operation offered by the »pilot« software, especially, generated lots of excitement among attendees.





Jörg Seiter (right) gives Joo-Suk Park, CEO and President of MAPAL HITECO the award "Best Agent 2016."

## KOREA IS BEST AGENT

MAPAL HITECO, ZOLLER Korea branch since 2003, dedicated a new, prestigious company facility in South Korea in summer of 2017. Jörg Seiter from ZOLLER Sales not only brought a present to the event, but also handed out the recognition award for the "Best Agent 2016" to the most successful branch worldwide. The award is handed out once each year.



Impressive – "Smart Factory Solutions" by ZOLLER were displayed using a 3D warehouse.

## PRETTY SMART(PHONE)

All of the smartphone manufacturers in the world produce their products in southern China, with the exception of Samsung. China's second largest mechanical engineering exhibition took place there as well, the SIMM in Shenzhen. ZOLLER employees presented solutions for smart factories at the event in 2017, with strong support from ToolMax.



Having fun – CIMT attendees enjoying the ZOLLER WeChat game.

## ZOLLER – FOR THE PLAYERS

This time, ZOLLER had something special in mind to entertain exhibition attendees at the CIMT in Peking: A WeChat game against the backdrop of TMS Tool Management Solutions. The player who transfers data to the machine the fastest wins. Just like in real manufacturing situations. Players didn't just enjoy great prizes, but also new insight into efficient production.





# THE FINAL POLISH FOR TOOL GRINDERS – **WITH COMPREHENSIVE SYSTEM SOLUTIONS**

Grinding is a highly precise production process in any situation. But just as elsewhere throughout the manufacturing industry, tolerances are becoming narrower in this field as well, while demands for flexibility, speed, and quality controlling continue to increase. To work economically into the future, processes have to be comprehensively optimized – that's where ZOLLER comes into play with its holistic system solutions.





1A1

1FE1



2CH

2CH3R



6A2

11A2



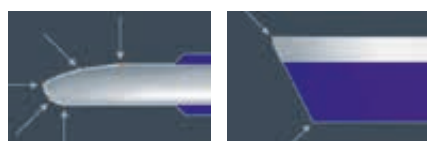
12V9

14EE1



1R

1V1



2R

4BT9



11M2

11V9



K700

PRF

### KEEPING EVERYTHING IN LINE – THE BEST CHOICE FOR EFFICIENT GRINDING

High quality, correctly assembled grinding wheels are essential for highly precise ground tools and efficient machine grinding. That's why ZOLLER offers everything you need to economically measure and manage grinding wheels in a single package: from initial inspection of tools to be ground, to grinding wheel measurement on the presetting and measuring machine and matching storage cabinets. Everything is connected through a central tool database, and everything is simple, thanks to specialized measuring and management programs for grinding wheels.

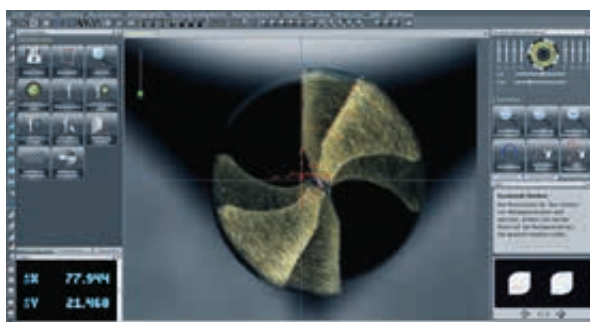


← ↑ Grinding wheel measurement according to FEPA standards is simple with the specialized ZOLLER program, thanks to a photo-realistic input dialog.



→ The »pomBasic« inspection device is ideal for measuring cutting tools.

↓ Direct comparison of the target and actual contours by overlaying saved images of cutting edges with the live image of the new tool.



#### FULL CONTROL FROM THE START TO THE INSPECTION REPORT

The »pomBasic« inspection device is ideal for quickly and easily inspecting tools, including recording to actual data and wear data. If tools need to be reground, the »reGrind« software module automatically sorts them into a separate pallet. All measurement values can be transmitted to the customer in inspection reports.

#### EVERYTHING IN HAND, IN REALITY AND VIRTUAL REALITY

A grinding wheel program is used to complete fully-automatic measurements easily and precisely on the presetting and measuring machine according to FEPA standards – without any data input and independent of the individual operator. This allows all grinding wheel parameters like diameter, angle, flange offset, and corner radius to be measured. Wheels can be saved and measured individually or as a package, depending on their type and geometry.

#### SMART ORGANIZING

With the grinding wheel management package, all the data you need is available immediately, as are parts lists for configuring and assembling grinding wheel packages. Storage location management is especially practical in combination with smart cabinets: The monitor graphically displays the location of the grinding wheels users need in 3D – allowing users to find them right away at the indicated location in the cabinet. Finished and assembled grinding wheel packages can also be organized and stored here.

#### UNIFORM DATA THROUGHOUT THE PROCESS

The central z.One tool database by ZOLLER ensures consistent tool data across all stations of the production process. The GDX open data interface can be used to exchange data directly between the CAD/CAM system, ZOLLER measuring machines like »genius«, and the grinding machine. Alongside ZOLLER TMS Tool Management

Solutions, processes can be mapped in tool management as well. This provides grinders access to digital twins of every tool and every component at all times – allowing them to easily provide data to customers along with the real tool.

#### THE RESULT: AN OPTIMAL REGRINDING PROCESS

With consistent system solutions by ZOLLER, tool grinders have a handle on all their processes – from inspection to tool management and inspection reports, from the CAM system to the grinding machine. That helps ensure they're optimally prepared for the networked manufacturing of the future and can profit immediately – as quality increases, tool lives are extended, set-up times are minimized, tool searches are eliminated, and tooling costs are reduced.

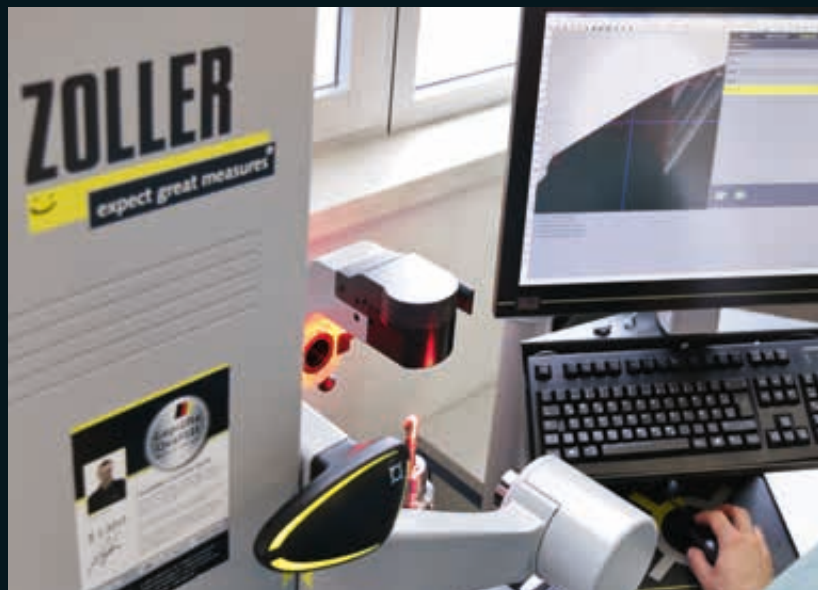




# DOUBLE EFFICIENCY

## Consistent Operating Concept and High Precision Provide Better Economic Efficiency

Process, production, technology – these are the terms behind the company name ProProTec Präzisionswerkzeuge GmbH & Co. KG. The Memminger company manufactures cutting tools and precision components made of solid carbide used in machine construction. Its moulding or precision finishing tools, indexable inserts, machine components, and specialized ring gauges are used in automotive, machine, tool, and mould construction as well as in hydraulics, pneumatics, electronics, and electrical equipment. ProProTec uses ZOLLER solutions to preset, measure, and test the quality of its cutting tools and grinding wheels.



↑ Ideal for complete tool control – the »genius« universal measuring machine by ZOLLER.

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**“With »genius«,  
we Can Measure Everything  
we Need to Easily”**

Thomas Reim, Measurement Engineer at ProProTec

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↑ In addition to tools, »smile« with »pilot 3.0« can also measure grinding wheel packs

→ Thomas Reim, Measurement Engineer at ProProTec, is excited about the fast and easy operation offered by »smile«.



### Ensure Certifiable Quality

ProProTec has been using the »genius« universal measuring machine from ZOLLER, a popular and trusted choice around the world, since 2014. »genius« is used to provide quality assurance for all kinds of cutting tools, in final controlling processes for both individual tools and large tool series. Tests range from quickly checking individual geometries such as the exterior contour of a tool, to automatic, user-independent complete controlling of specialized tools. ProProTec's portfolio of services for its global customers includes over 2,000 different precision solid carbide tools, each with an individual tool design.

No tool series leaves the ProProTec company without a documented quality control on the »genius« universal measuring machine. This is the only way the company can fulfill its international customers' high demands. "With

»genius«, we can measure everything we need to simply" Thomas Reim says, describing its daily use. "And we can document tool quality as well" adds Jürgen Seethaler, Operations Manager at ProProTec.

### Fast Inspections During the Production Process

Cutting tools manufactured by ProProTec need to be tested to ensure the quality of individual geometries in a process-oriented manner, in order to provide the highest quality and fulfill the highest requirements for the finished components. The grinding machine also needs precise parameters for grinding wheels and spindle date. More and more, the company needed fast and simple inspection of individual tool geometries during the ongoing production process – in addition to complete controlling on »genius«.



### The Ideal Second Device

A »smile« was the right solution to meet the company's additional needs for simple, fast, and reliable recording of these parameters. ProProTec has measured and set grinding wheels and quickly inspected individual tool parameters directly beside the grinding machine using this ZOLLER presetting and measuring machine since 2017. As an attractive shop floor device, »smile« is the ideal complement to »genius«. This allows ProProTec's employees to fulfill the rapidly growing requirements for concentricity and reproducible precision for specialized and standard tools at all times.

### Significantly Shorten Set-Up Times

Measured parameters can be transferred to the specific grinding machine immediately. Thanks to the high precision the system offers, almost no subsequent corrections are required on the grinding machine itself. This means faster set-up and saves time and costs during the production process.







┐ Jürgen Seethaler, Operations Manager at ProProTec, and Thomas Reim, Measurement Engineer at ProProTec, discuss their requirements with ZOLLER Applications Engineer Dieter Müller (from left).



### Fast Tool Inspection

ProProTec uses the »smile« presetter not only to set and measure cutting tools and grinding wheels, but also for fast tool inspection during the production process. Because of this, the company has set up the presetter where it will be used – directly beside the machines. The device is also equipped with a swiveling incident light camera and the »metis« tool analysis software for tool inspections. This allows the system to detect wear and breakage directly on the shop floor, then complete and document tool optimizations. Since the presetting and measuring machine is set up directly beside the grinding machines, employees don't have to walk far. Device operations are highly precise and simple, thanks to quick adjustment and a hand wheel for fine setting. Since the device uses the same vertical tool clamp as »genius«, users are already familiar with the process.

In addition, it uses the uniform operating concept offered by the ZOLLER »pilot 3.0« software – a key benefit of »smile«, since "if you can operate everything, you can use all the devices with the »pilot« image processing software" – says Reim.

### Consistent Operating Concept

Just as the simple operation offered by »genius« was the key argument that got the company to choose ZOLLER in the first place, the same is true of »smile«: Employees can operate the device immediately "without having to search for menus, buttons, or functions. »smile« is the right addition to »genius«" Seethaler says, confirming the company's decision.

### Expandable Software

The user-friendly operation is all thanks to »pilot 3.0« image processing software. »pilot 3.0« covers the whole bandwidth of measurement and inspection to tool management, ensuring efficient and uniform documentation across different devices. Measurement functions can be adapted to individual needs and expanded as necessary, as the software offers a modular structure. The self-explanatory software interface with graphic menu buttons and help functions ensures users get their bearings quickly and can easily use the program.

### Uniform Reports

Inspection reports can be output by both »smile« and »genius« – either as separate reports for each individual tool or as joint reports for whole batches, if complete measurements are carried out for series production. This documentation is a key step to fulfill the ever-growing quality demands at ProProTec.

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**"Right From the First Day,  
Both Devices Ran Like  
Clockwork with no  
Problems."**

Jürgen Seethaler, Operations Manager at ProProTec



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"Right from the first day, both devices ran like clockwork with no problems," Seethaler confirms. If the company does have service issues, "ZOLLER is available at all times to provide us with competent support," Reim adds.

That makes shop floor solution »smile« and »genius« universal measuring machine the perfect combination for ProProTec – proving a cost effective team in production.

## **ProProTec**

Process Production Technology

 Tool construction  
 DE-87700 Memmingen

Process, production, technology:  
That's what ProProTec

Präzisionswerkzeuge GmbH & Co. KG  
from Memmingen stands for.

The company specializes in  
cutting tools and precision components  
made of solid carbide.

It delivers products to customers  
worldwide from a broad range of  
industries – from automobile, machine,  
tool, and mold construction to products  
for use in hydraulics, pneumatics,  
electronics, and electrical engineering.

[www.proprotec.de](http://www.proprotec.de)



THE CONNECTION TO THE





**EMO**  
Hannover  
18-23.9.2017



# FUTURE

"Connecting systems for intelligent production" – that was the motto of EMO 2017. In line with the motto, ZOLLER presented solutions for digital production processes. More than 10 innovations, 36 pre-setting, measuring, and inspection machines, and extensive tool management software solutions were on hand to discover at the 4500 ft<sup>2</sup> ZOLLER stand. But that's not all: Attendees were also invited to take an entertaining virtual tour through modern manufacturing, an option that generated great excitement at the stand.

Attendees sit in comfortable armchairs in a comparatively quiet corner of the 2017 Hannover Messe. Of course, they're not there for relaxation, but rather taking a tour through a highly modern manufacturing environment. They even have a tour guide, ToolMax, ZOLLER's comic mascot. He is taking them through a virtual warehouse with networked production stations, showing them how everything works together – from the CAM system to the CNC machine. "This is a real experience" says one of the attendees, impressed, as he removed his VR goggles.

10 INNOVATIONS  
36 PRESETTING,  
MEASURING, &  
INSPECTION  
MACHINES  
4500 ft<sup>2</sup> ZOLLER LIVE





↵ ↴ A virtual tour through the production warehouse was a hit at the ZOLLER exhibition stand.

↵ The good mood is clear: ZOLLER employees wore yellow tennis shoes, making them easy to find. The highly motivated team gave attendees at the exhibition a good impression of ZOLLER's extensive expertise.





His colleague in a neighboring chair adds: "Our production should look like that tool." Excited reactions like these help create a good mood at the ZOLLER exhibition booth. The VR tour wasn't the only highlight for guests to enjoy; the entire stand concept was also unique, reflecting networked production structures both virtually and in reality. From CAM systems to presetting and measuring machines, smart storage cabinets to machine controls: All of the stations were set up in the 4500 ft<sup>2</sup> and digitally linked. "Reliable networking between production elements is more important now than ever. That's why we're displaying our Smart Factory solutions here, which allow for a consistent flow of tool data throughout the production process and a higher degree of automation" explains Alexander Zoller, adding: "Automation is the future of tool preparation. But it will take consistent quality in the tool database."

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#### DIGITAL MANUFACTURING AND AUTOMATION SOLUTIONS

ZOLLER thinks consistently right from the start, as a look at the product portfolio on display shows: Hardware, software, and service are cleverly combined to create comprehensive system solutions for presetting, measuring, inspecting, and managing tools. The company also offers new developments like the Smart Cabinets on display for the first time at the EM0. ZOLLER solutions can be used to physically and digitally record, measure, manage, store, and inspect tools throughout the entire tool life cycle. This comprehensive way of thinking and consistent focus on the future was clearly a hit with exhibition attendees.



↑ State Secretary Katrin Schütz (center) believes ZOLLER's virtual production tour has great potential as an entertaining learning unit for trainees.

↗ ZOLLER- employee Gerald Rackaseder (right) explains the advantages of networked production.

↗ Alexander Zoller presents a robot solution combined with the »redomatic« presetting, measuring and heat-shrink machine.

→ Alexander (left) and Christoph Zoller (2nd from left) talking things over.





## WOULD YOU LIKE TO EXPERIENCE THE VIRTUAL FACTORY LIVE?

ZOLLER will be raffling off three pairs of VR One Plus goggles by Zeiss to participants. In addition, every participant will receive a ZOLLER VR Card Box for their smartphone.

Simply send an e-mail with the subject "VR" and your name, company name, and company address to [VR@zoller.info](mailto:VR@zoller.info) by August 1st, 2018 to take part.\*

**If you already have VR goggles, of course, you can get started now:**

Simply download the ZOLLER VR app for free from the iTunes or Google Play store.



\* All employees of the ZOLLER company worldwide are excluded from participating in the raffle. Participants must be over 18 years old. Data is only used for the purpose of the raffle, and is deleted afterwards. Prizes cannot be exchanged for cash payment. The judges' decision is final. Only participants who include all of the required information in their e-mails will be entered in the raffle. If a participant wins a prize, they declare their consent to have their name and company name published on the ZOLLER Facebook page and website.

INTERVIEW WITH CHRISTOPH ZOLLER

# "WHEN IT COMES TO NETWORKING, WE'RE ONE OF THE WORLD'S TOP COMPANIES."

Christoph Zoller, ZOLLER CEO

How does the 2017 EMO motto "Connecting systems for intelligent production" fit in with ZOLLER solutions? What role does EMO play in the industry? What possibilities does smart production offer smaller companies? Christoph Zoller talked about these and other questions with Z.magazine.

## **Mr. Zoller, to what extent does ZOLLER offer solutions for networked manufacturing?**

We create the framework for smart tool management, both in terms of real tools and associated data. ZOLLER sees the possibilities offered by digitization from the perspective of the "tool" variable. That's why we work with the central z.One ZOLLER tool database, TMS software and hardware, ZOLLER automation solutions for cutting tools, and of course our presetting, measuring, and inspection machines.

## **Can smaller companies also profit from digitization?**

Networked production processes mean consistency, transparency, and economic efficiency – these factors are important to companies of any size. That's why ZOLLER products can generally be integrated into existing production environments. No one in the world offers anywhere near as many networking options from CAM systems to machine controllers as ZOLLER does. In addition, all devices and systems can also be expanded and upgraded. That means our customers are always equipped for future challenges. Of course, they also see immediate benefits. For example from having a





# FUTURE



uniform database – with us, there's no need to enter data twice, everything is transmitted digitally and typos are a thing of the past, as are searching for tools and lost tools. To put it another way: The goal is to have the right tool with the right data, at the right place at the right time. That quickly pays off, even for small companies.

#### **What new products did you present at EMO?**

At the trade show, we presented our "Smart Cabinets" product line for the first time, which are entirely new intelligent tool storage systems with software connections. By connecting the Smart Cabinets to TMS Tool Management Solutions software, storage locations can be graphically displayed in 3D and inventory can be tracked, all at the click of a button. We not only offer the software, but also the compatible hardware for efficient and reliable tool handling over the entire lifespan of the tool, from a single source. We also demonstrated live at EMO that 24/7, unmanned tool preparation is possible.

#### **What was especially well received by exhibition attendees?**

We received outstanding feedback from customers and potential buyers from all over the world, especially due to the wide range of products covered by our portfolio that help us keep the entire production process in view. In addition to Smart Cabinets, automation solutions for tool preparation were also popular. We combine a robot solution with the »redomatic« presetting, measuring and heat-shrink machine for this purpose.

#### **How important is EMO to the production industry?**

EMO is a trendsetting exhibition in the industry. It helps us see where we are going, and what's possible right now. For a company like ZOLLER that's actively shaping the future of manufacturing and is on site worldwide, EMO is very important because it is such a key place to present innovations and because it attracts such an international group of attendees. Quality and innovation, alongside user-friendliness, are the pillars ZOLLER is built on – and the reason our customers can achieve measurably more economical results with our solutions. From the first generation to current Industry 4.0 options. We will continue to significantly influence and drive this development.

# Zcalendar

## STAY IN TOUCH!

Whether at an exhibition, practical forum, or workshop – ZOLLER is here for you at many different venues.

Visit us at one of the event highlights of the second half of 2018 and experience innovative ZOLLER solutions live.

We're looking forward to hearing from you!

IMPRINT | Z.magazine | 2018

### Published by

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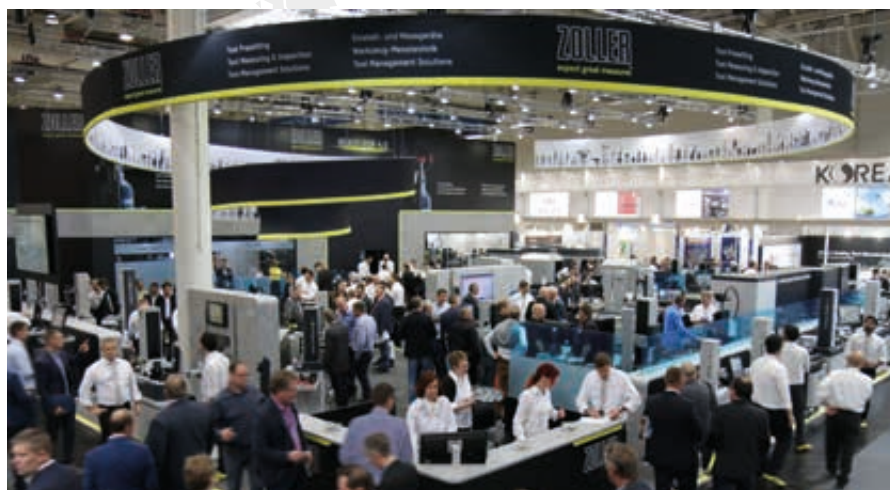
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2018

## &gt;&gt;&gt; JULY

07.20

**Z.CONNECT**

Pleidelshheim, Germany

Ready for 4.0: Workshop focused on tool management with practical solutions for efficient tool organization in networked production.

## &gt;&gt;&gt; AUGUST

08.22-08.25

**INTERNATIONAL METALWORKING**

Manila, Philippines

Visit ZOLLER at the International Metalworking exhibition in Manila, Philippines at Stand D2-07.

## &gt;&gt;&gt; SEPTEMBER

09.10-09.15

**IMTS**

Chicago, USA

The IMTS (International Manufacturing Technology Show) is an international exhibition for production technology in Chicago. ZOLLER will be on site exhibiting the future of modern production "hands on" – from leading tool measuring technology to production organization and smart automation solutions.

09.18-09.22

**AMB**

Stuttgart, Germany

ZOLLER will be presenting the newest process optimization software solutions and its current product portfolio for presetting, measuring, inspecting, and managing tools at the industry's leading international metalworking fair in Stuttgart.

09.26-09.27

**METALMADRID**

Madrid, Spain

ZOLLER Ibérica will be on hand at the only annual exhibition for the production industry in Spain (Stand 4E29).

09.27

**Z.CONNECT**

Hanover, Germany

Ready for 4.0: Workshop focused on tool management with practical solutions for efficient tool organization in networked production.

## &gt;&gt;&gt; OCTOBER

10.02-10.07

**MAKTEK**

Istanbul, Turkey

ZOLLER Turkey will be presenting leading ZOLLER technologies at MAKTEK, the international professional metalworking exhibition (Hall 12, 1215C).

10.09-10.13

**BI-MU**

Milan, Italy

Professional exhibition for tooling machines, robots, automation, and accessory materials at the new Fieramilano exhibition grounds.

10.18

**Z.CONNECT**

Hanover, Germany

Ready for 4.0: Workshop focused on tool management with practical solutions for efficient tool organization in networked production.

10.23-10.25

**SIANE**

Toulouse, France

ZOLLER France will be presenting leading solutions in measuring technology and efficient tool management at this nationwide industrial exhibition.

10.26

**Z.CONNECT**

Pleidelshheim, Germany

Ready for 4.0: Workshop focused on tool management with practical solutions for efficient tool organization in networked production.

10.30-11.01

**METAVAK**

Gorinchem, The Netherlands

ZOLLER will be telling attendees about leading presetting and measuring machines and TMS Tool Management Solutions at the industry's leading exhibition for metal, cutting, and molding tools at the Laagland stand.

## &gt;&gt;&gt; NOVEMBER

11.21-11.24

**EMAF**

Porto, Portugal

ZOLLER Ibérica will be presenting leading measuring technology solutions at EMAF, the international exhibition for machines and accessories.

11.29

**Z.CONNECT**

Hanover, Germany

Ready for 4.0: Workshop focused on tool management with practical solutions for efficient tool organization in networked production.

11.30

**Z.CONNECT**

Pleidelshheim, Germany

Ready for 4.0: Workshop focused on tool management with practical solutions for efficient tool organization in networked production.

## &gt;&gt;&gt; DECEMBER

12.11-12.14

**INDUSTRIALIS**

Bern, Switzerland

At the INDUSTRIALIS in Bern, ZOLLER representative Springmann SA will be presenting cross-sector, leading solutions for tool presetting, measurement, inspection, and tool management.

## &gt;&gt;&gt; 2019

04.15-04.20

**CIMT**

Peking, China

The CIMT – China International Machine Tool Show – is one of the world's largest and most influential professional trade fairs for tooling machines. ZOLLER will be presenting new developments related to pre-setting, measuring, inspecting, and managing tools.

You can find these and other events at:  
**WWW.ZOLLER.INFO**



Quality Precision Ergonomics Time Savings Data Consistency  
Economic Efficiency Smart Factory Solutions User-Friendliness  
Tool Management Networking Increased Efficiency Industry 4.0  
Advance Repeatability Brand Name Components Documentation  
Process Reliability Experience Tool Storage Solutions Expertise  
Top Technology Production Optimization Intuitive User Guidance  
Innovations Modularity Digital Twin Robustness Virtual Tool  
Long-Lasting Quality Automation Solutions Service Future Order  
Stability System Solutions Adaptability Simplicity Tool Expertise  
Diversity Fully-Automatic Measurements Digitization Reliability  
Consignment Warehouse **Made by ZOLLER** Process Acceleration  
Quality Precision Ergonomics Time Savings Data Consistency  
Economic Efficiency Smart Factory Solutions User-Friendliness  
Tool Management Networking Increased Efficiency Industry 4.0  
Advance Repeatability Brand Name Components Documentation  
Process Reliability Experience Tool Storage Solutions Expertise  
Top Technology Production Optimization Intuitive User Guidance  
Innovations Modularity Digital Twin Robustness Virtual Tool  
Long-Lasting Quality Automation Solutions Service Future Order  
Stability System Solutions Adaptability Simplicity Tool Expertise  
Diversity Fully-Automatic Measurements Digitization Reliability  
Consignment Warehouse User-Friendliness Process Acceleration