

Measurable cost-efficient production

# Efficiency

Lowering costs – increasing productivity

# Profitable all round

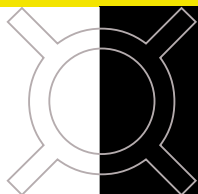
Optimize your production and maximize your profits: with ZOLLER solutions ranging from tool presetting, measuring, inspection and the management of your tools. You will benefit from proven increased productivity and lower tool costs, safe processes and perfect quality. As a global operating provider of technology and system solutions, ZOLLER offers you intelligent combinations of equipment, software and service **from a single source.** For maximum cost-effectiveness – and that decisive lead over competitors.

## **Presetting solutions** – tool presetting & measuring

Fast, easy and accurate: with ZOLLER you save on costs through measured and preset tools.

## **Inspection solutions** – inspecting & measuring

Use ZOLLER measuring machines to use 100 % perfect tools. Rely on quality and complete documentation, it definitely pays.



intelligent system solutions  
all from a single source  
for maximum cost-effectiveness



ZOLLER »venturion 600 / pilot 3.0«

## Software solutions – managing tools

The ZOLLER TMS Tool Management Solutions for the cost-effective management of tools and machines help you achieve significant cost savings and increases in efficiency.

## Business solutions – from A–Z

The international ZOLLER Service Team offers you fast and on-site support. Courses and training guarantee the effective use of ZOLLER tool presetter and measuring machines and software.

ZOLLER tool presetter and measuring machines + TMS Tool Management Solutions

# Fewer costs. More profit.

Increasing process reliability, optimizing setup times and tool life, avoiding machine downtimes and production errors, saving on tool costs: this can all be yours with ZOLLER. Check the sums!

Reduction of tool costs by 2 % per annum

Studies by the RWTH Aachen have confirmed that the tool costs incurred over a ten-year period equal those of the original machine. With ZOLLER TMS Tool Management Solutions you can save 20 % of these tool costs – that equals 2 % of the machine's purchasing price per year as cost savings! A look at the tool costs in the annual balance sheet of your company will tell you the magnitude of your cost savings.

Calculation formula: machine costs x 2 %

Productivity increase by 5 % with ZOLLER TMS Tool Management Solutions

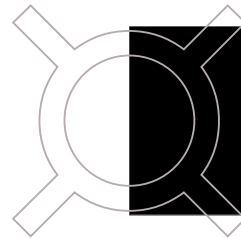
With a tool management software like ZOLLER TMS Tool Management Solutions, you can also increase your productivity by at least 5 % – this too, was the result of studies by the RWTH Aachen. With the aid of the table on the right and applying your hourly machine rate, you can calculate the contribution the increase in productivity will bring your company – in hard cash and per machine!

Calculation formula: 8 hrs/day x hourly rate x 200 days/year x 5 %

Productivity increase with ZOLLER tool presetter and measuring machines

4.52 minutes of machine downtime are caused per hour and machine by tools arriving at the machine which are inadequately or not preset, measured or prepared. Using a ZOLLER tool presetter and measuring machine, this time can instead be used for production – which, spread over the year, adds up to a measurable increase in productivity. In the table on the right we have reduced this value, determined through measurements in the automotive industry, to 3 minutes/hour and assumed 20 tool changes/day.

Calculation formula: 3/60 min. x 20 tool changes x hourly rate x 200 days/year



savings  
productivity increases  
your profit

Machine costs	Savings/year tool costs
100,000 €	2,000 €
200,000 €	<b>4,000 €</b>
300,000 €	6,000 €
400,000 €	8,000 €
500,000 €	10,000 €
700,000 €	14,000 €
1,000,000 €	20,000 €

Hourly rate	Productivity increase with tool management
40 €	3,200 €
50 €	4,000 €
60 €	4,800 €
70 €	5,600 €
75 €	<b>6,000 €</b>
90 €	7,200 €
100 €	8,000 €

Hourly rate	Productivity increase with tool presetting/measuring machine
40 €	8,000 €
50 €	10,000 €
60 €	12,000 €
70 €	14,000 €
75 €	<b>15,000 €</b>
90 €	18,000 €
100 €	20,000 €

#### Sample calculation:

Machine investment costs of 200,000 € | hourly machine rate 75 €

**4,000 €**

Savings on tool costs per annum

**+ 6,000 €**

Productivity increase with ZOLLER tool management

**+ 15,000 €**

Productivity increase with ZOLLER tool presetters and measuring machines

**= 25,000 €**

**Profit per annum per machine**

75,000 €

Savings per annum for 3 machines

**= 6,250 €**

Savings per month for 3 machines

**- 2,350 €**

Leasing costs ZOLLER »TMS PLUS« per month \*

**= 3,900 €**

**Profit per month for 3 machines**

**= 187,200 €**

**Profit over 48 months with 3 machines**

\* ZOLLER »TMS PLUS« stands for a ZOLLER tool presetting and measuring machine PLUS TMS Tool Management Solutions-Software. The leasing costs are 2.35 % of the investment costs per month for a period of 48 months, in this example 100,000 € for ZOLLER »TMS PLUS« = 2,350 €.

And how much can you save? Do the calculation online. Use our productivity calculator and find out how much you can gain with ZOLLER:

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



# 18 good reasons for a perfectly balanced system

---

You can calculate your effective gains with ZOLLER. The reasons are given here. 18 advantages provided by the combination of ZOLLER tool presetting and measuring equipment and ZOLLER TMS Tool Management Solutions »TMS PLUS«:

---

>\_ **Things can be so easy with ZOLLER!**

When tools arrive preset and/or measured at the tool machine, exact workpieces are produced immediately. This significantly increases the service life of your machines – calculated over the year this adds up to many hours of additional production. At the same time you avoid machine crashes and the corresponding maintenance and repair expenditure – and you also deliver the workpieces to your customers at a high level of quality and on time. The net result: satisfied customers and more orders.

---

>\_ **Full tool check for best quality and cost savings**

Checked tools let your machines run smoothly and run production with greater accuracy. But, intelligent checking starts much earlier: at goods receipt. This is where all parameters can be measured, faulty tools can be sorted out and complaints issued to the suppliers. Using the ZOLLER »flash« software you also have an overview as to whether the service lives promised by the manufacturers are also lived up to. This lets you save hard cash, allows you to work with quality-conscious suppliers in the long term, thus increasing your quality.

---

>\_ **Overview on tools for better planning, reduced search times and storage costs**

With ZOLLER TMS Tool Management Solutions you always know which tools are available for which machines and where they are located. The graphic display completely dispenses with search times. Ordering of tools is fast and uncomplicated via the supplier data saved in the system. Using a hit-flop list, you can see which tools are used how often, i.e. you only order what is actually required; this effectively reduces the diversity of tools and saves on expensive storage space.

---

>\_ **Correct tool data for extended tool life and maximum utilization of the tools**

ZOLLER TMS Tool Management Solutions records the data of all tools and saves the target data. The data are printed on labels or outputted control-specifically – input errors resulting in costs are avoided, time for setup is saved. By checking the data during each tool presetting and measuring process, only correct tools will arrive at the machine. This prevents collisions, the breaking of tools, and always maintains optimal cutting speeds and feeds, so that the time for the production of parts is always the same and can thus be calculated. The tools are utilized optimally, tool life is extended and tool costs reduced.



- 01 Increase running time of machines
- 02 Avoid rejects
- 03 Increase service life of tools
- 04 Avoid broken tools
- 05 Lower maintenance costs  
for machines and tools
- 06 Adhere to calculated lot sizes
- 07 Plan tool requirements
- 08 Reduce diversity of tools
- 09 Lower storage costs
- 10 Prevent machine crashes
- 11 Optimize machine utilization
- 12 Dispense with tool search
- 13 Tool check
- 14 Utilize maximum tool life
- 15 Optimize setup times
- 16 Check tool life
- 17 Always use the right tools
- 18 Tool data are always correct



ZOLLER

# solutions

## PRESETTING SOLUTIONS

presetting & measuring

## SOFTWARE SOLUTIONS

managing tools

## INSPECTION SOLUTIONS

inspection & measuring

## BUSINESS SOLUTIONS

from A-Z

ZOLLER solutions - comprehensive optimization of your manufacturing operations. We combine machines, software and services to individual system solutions to improve quality, efficiency and productivity. As a customer of ZOLLER you not only benefit from our know-how as market leader in the field of tool measurement technology, but equally from our claim as a family-run business to guarantee you a sustainable competitive advantage and thus make a measurable contribution to your success.

Subject to technical modifications. The depicted machines may include options, accessories and control variants. BRWR.01-EN 03/2014  
Concept & design: www.absicht.ag



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



E. Zoller GmbH & Co. KG | Tool presetter and measuring machines  
Gottlieb-Daimler-Straße 19 | D-74385 Pleidelsheim  
Phone: +49 7144 8970-0 | Fax: +49 7144 8060-807  
[post@zoller.info](mailto:post@zoller.info)

**ZOLLER**  
expect great measures®