

## User report

October 1, 2013

### Strong partners for zero defect production

#### Two companies with guaranteed quality

VAT, an internationally operating Swiss company and market leader in vacuum valves for the semiconductor and vacuum coating industry, has been manufacturing in accordance with the zero defect principle for years. This requires unconditional quality - across the entire value chain. And makes ZOLLER a valued partner with its technologically leading, one hundred percent reliable and highly accurate presetting and measuring machines.

Perfection in all areas of business is important to secure market leadership - and this also applies to metal cutting operations. To attain this goal you need the right partners during all stages of manufacturing. Zero defects is the governing principle, absolutely reliable technology essential.

#### Measuring highly complex tools independent of operator

Setting up a new milling and turning center at VAT's Haag, Sennewald (Switzerland) location provided the opportunity of looking for a suitable measuring solution to successfully support the zero defect philosophy in production. The challenge consisted in measuring and inspecting highly complex tools independent of operators. "As far as we were concerned, ZOLLER was the only option worth considering to ensure reliable and error-free measurement including large tools", state Urs Roduner, Tool Coach and Tool Procurement at VAT.

The center height measuring camera attached to the optical carrier base of the »venturion 450/8« measures the cutting edge. The optics move directly to the cutting edge to measure or preset the center height. "Only ZOLLER can handle these tools, which can be up to 350 mm in diameter and weigh up to 26 kg", says Urs Roduner.

#### »ace« spindle guarantees a change accuracy of 0.001 mm

Here, the ZOLLER »ace« spindle is unrivalled. It delivers power-operated tool clamping like in the machine - which results in extremely easy changing of tool holding fixtures (tool posts), absolutely free from backlash and with a guaranteed changing accuracy of 0.001 mm.

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VAT: market leader for vacuum valves in the semiconductor and vacuum coating industry. Production at the Haag, Sennewald (Switzerland) facility



»venturion450/8« for measuring and inspecting highly complex tools at VAT in Haag, Switzerland

## One hundred percent reliability

Meanwhile two further tool presetter and measuring machines of the modular »venturion« premium class are employed in serial production as well as the new factory in Penang in Malaysia.

The main advantages over all fields of application according to Urs Roduner, are the safety and reliability of the ZOLLER machines: "No matter which age, nationality or education level, no matter who works the machine; I can rely on the results one hundred percent." The image processing system »pilot 3.0« is like no other measuring machine software: self-explanatory, homogenous and operator-friendly design throughout.

In concrete terms, ZOLLER supports zero defect production through operator-independent measuring, automatic tolerance checking of all parameters during the measuring process, as well as control-adequate output of data directly to the machines via RFID technology.

During serial production, some 300 tools are measured daily and provided to 30 different machines, in other words, the »venturion« tool presetter and measuring machine is in constant operation. Some 60 tools are required for a single order. The prime advantage here, is that ZOLLER has optimized the entire measuring process to a maximum of two minutes - for complex multi-stage or multi-insert tools. Owing to the CNC-controlled, operator-independent system, the measuring process is now considerably faster.

## One hundred percent consistent data

Errors due to manual data transfer are now excluded from this manufacturing step and the paperwork has become obsolete. The tool data are correct, and it is ensured that the right tools are in the machine. This ensures that machine crashes on the tool side are now a thing of the past.

All data, including those conveyed to programming, are error-free. "This way we no longer have any incorrectly labeled tools. If ZOLLER gives the green light, then that's a fact", says Urs Roduner.

VAT has the ambition of staying market leader in a clearly defined niche and thus feels obliged to be seen as innovation leader. This is why VAT manufactures according to the latest standards and



Measurement of up to 300 tools daily on a single machine



»venturion« with image processing »pilot 3.0« always delivers reliable results - regardless of operator



Accurate and fast measurement of step tools

with state of the art solutions. "With ZOLLER we have a strong partner in the field of presetting and measuring tools", confirms Urs Roduner. For 20 years, ZOLLER has been successfully represented by the Springmann company in Switzerland and they also provide VAT with advice and service. The Springmann service is trained regularly in the ZOLLER head offices.

## VAT Vakuumentile AG

VAT Vakuumentile AG (vacuum valves) is an internationally operating Swiss company based in the Sennwald District in the Canton of St. Gallen. The company is active in the development, manufacturing and sales of vacuum valves for the semiconductor and vacuum coating industry as well as for research. VAT is a worldwide synonym for vacuum sliding valves, especially in Anglo-Saxon regions.

[www.vatvalve.com](http://www.vatvalve.com)

## Springmann SA

Since 20 years, ZOLLER has entrusted the sales of its products in Switzerland and the Principality of Liechtenstein to the Springmann company, who provide advice, sales and customer service from their head offices in Neuchâtel and the branch office in Niederbüren SG. Experience and the mastering of constantly advancing manufacturing technologies enable Springmann to not only offer above average products, but also to find advanced problem solutions together with manufacturers and customers leading to decisive economic advantages.

[www.springmann.ch](http://www.springmann.ch)

## E. ZOLLER GmbH & Co. KG

With a passion for tool presetting and measuring technology, the E. ZOLLER GmbH & Co. KG. based in Pleidelsheim near Stuttgart, have been developing innovative solutions for greater efficiency in manufacturing processes for nearly 70 years. More than 30,000 presetting and measuring machines with worldwide unrivalled software solutions have been installed to date across the globe. ZOLLER is developing more and more from a manufacturer of presetting and measuring machines to a globally operating provider of technology and system solutions. An international network of subsidiaries and agents ensures the highest level of service quality with personal customer care.



Stefan Bühler (Sales at the ZOLLER representative Springmann in Switzerland) and Urs Roduner (Tool Coach and Tool Procurement at VAT) in front of the main office in Haag, Sennwald.

## **About ZOLLER Inc.**

In 1945, Alfred Zoller founded the company ZOLLER in Germany, which is today in its third generation. On March 1, 1997, ZOLLER Inc. was founded in Ann Arbor, Michigan. ZOLLER Inc. is providing sales and service to its customers within the U.S., Canada and Mexico for tool presetting, tool measuring and inspection machines, tool management software, heat-shrink systems and balancing machines.

[www.zoller-usa.com](http://www.zoller-usa.com)