

NEWS.

THE SCHWANOG NEWS FOR CUSTOMERS,
EMPLOYEES, AND FRIENDS OF THE COMPANY.

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Knoth GmbH relies on Schwanog:

HIGHEST PRODUCTIVITY IN BROACHING APPLICATIONS

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EDITORIAL:

Dear business partner,

In our third Newsletter this year, we would like to bring you a little closer to the world inside of Schwanog along with some highly productive application topics.

In our customer profile on Page 2, we introduce you to the Knoth Metallwaren company, which uses our broaching tools with great success.

Our report on the Schwanog Escomatic System on Page 3 of this News also focuses on maximum productivity with materials that are difficult to machine.

In addition to first-class technical solutions, long-term market success can only be achieved with a well-coordinated, motivated team. That is why we rely on qualified training and the long-term loyalty of our employees. Read our News on pages 3 and 4 of this issue.

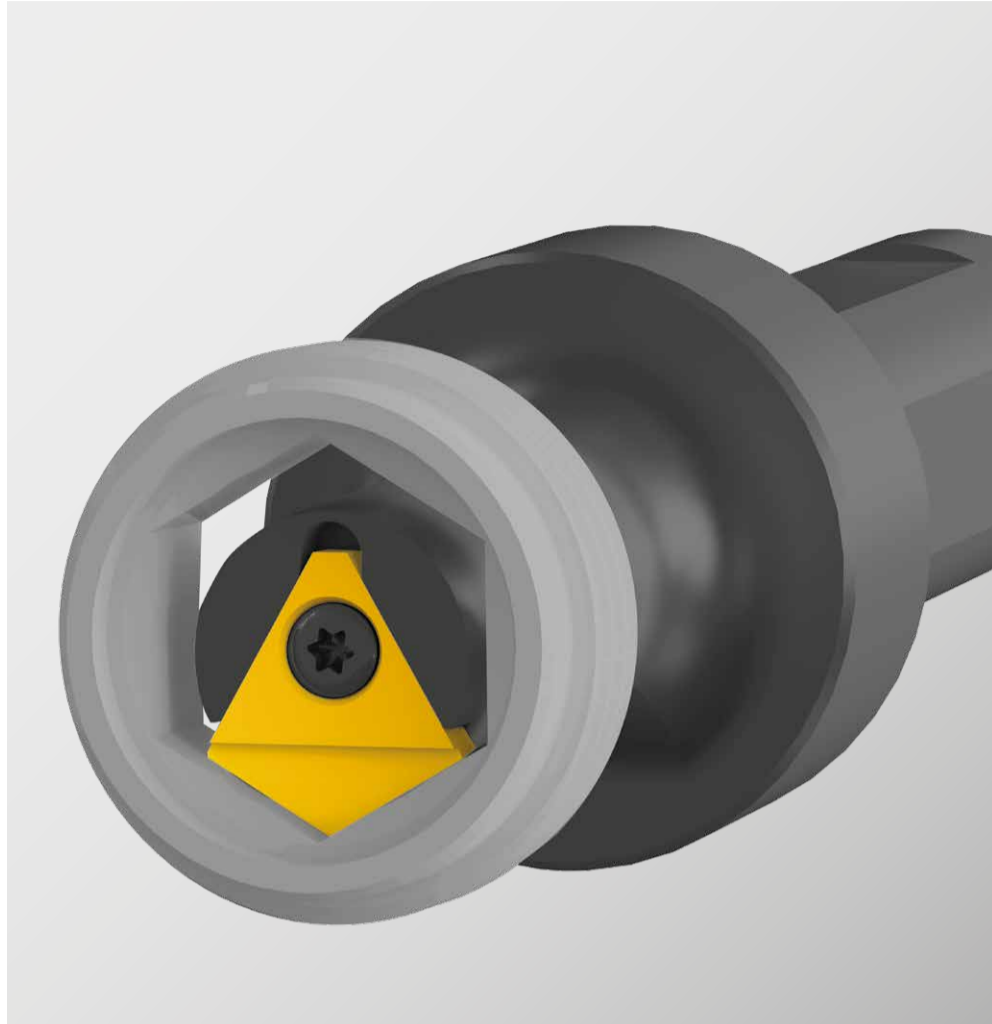
International trade shows have once again shown how important personal dialogue with our customers is.

Our team is ready for you, and we wish you all success for the final quarter of this year.

Clemens Güntert
Managing director

Highest productivity in broaching applications:

KNOTH METALLWAREN CONSISTENTLY RELIES ON SCHWANOG SOLUTIONS.



Schwanog insertable hex broach

Knoth Metallwaren is a medium-sized company that was founded in 1955. They have specialized in the production of complex turned parts with the highest precision over 65 years of successful company development. In 2015, Kerstin Combe, granddaughter of the company's founder, became the sole shareholder of the company. She is assisted by her husband Christian Combe, as Managing Director, and a team of around 20 experienced employees.

Knoth Metallwaren has focused on two core areas of competence: The production of complex turned parts according to customer specifications, mainly for the hydraulic and electromagnet industry and the aerospace industry, as well as modules, including assembly. The company is open to everything. We can offer products in any desired materials, with any surface and heat treatments, fully assembled and delivered directly to the customer, ready-packaged. Around 3 million parts are produced every year, mostly in small batches of 500 to 5,000 pieces.

One of the secrets of the company's success is our willingness to continuously invest in the latest technologies and manufacturing processes to guarantee our customers maximum productivity.

This means, the more complex the task, the clearer advantages will be for the customers. Here is a good example: A customer required an assembly of several turned parts and standard parts with an initial sample test report, stamping marking, surface and heat treatment, and specific packaging. Everything was delivered on time and with reliable quality.

No problem – thanks to TÜV authorization for restamping according to DIN 13401, certification according to DIN ISO 9001, and maximum process reliability.

Two companies, driven by the highest level of customer orientation

The high level of customer orientation is a solid pillar of Knoth Metallwaren's corporate philosophy and fits in quite well with the skills that distinguish Schwanog. So, it was probably only a matter of time before Schwanog was able to establish itself as a supplier of highly productive tooling solutions for Knoth Metallwaren. Andreas Bornbaum has been advising the company as a technical sales representative since 2017. He has been able to assure a significant increase in productivity in broaching applications.

Broaching of serrations and hexagonal broaching with impressive productivity

In production, Knoth uses Schwanog tooling solutions for broaching of ID and OD serrations, as well as ID hexagonal broaching. These Schwanog tools have proven themselves in countless applications worldwide and the benefits have also made an impression on Knoth.

This includes complete machining on the machine with the finished component from bar stock without a post-processing step. No further processing step on an additional machine required, with machining right up to the collar and high flexibility in the choice of materials.



Left to right: Andreas Bornbaum, Christian Combe, Andreas Pfeiffer

Managing Director Christian Combe is enthusiastic:

We appreciate our collaboration very much because complete processes have been worked out. No further post-processing on other machines was required. The highest level of productivity could be achieved with Schwanog tools. Wrench flats from 17-32mm can be achieved with one tool.

In addition, Mr. Bornbaum is always on site immediately when urgent projects are pending, as well as Mr. Jaud from Schwanog's technical sales department.

Mr. Pfeiffer, as a machine setter who is directly entrusted with the applications of Schwanog tools, emphasized the high quality of the Schwanog solutions and the support provided by Mr. Bornbaum.

Together into the future

In view of the successful collaboration that has gone on for more than 5 years, Christian Combe says that Schwanog will always be included in new projects. For Andreas Bornbaum, the collaboration with Knoth Metallwaren is the best example of how two medium-sized companies can master the huge challenges of the market together.



Finished part with internal hexagon

Best investment for the future:

SCHWANOG RELIES ON HIGHLY QUALIFIED TRAINING!

Both in the commercial area and in production, Schwanog has always relied on qualified training with the clear goal of long-term employment at the company.

Under the leadership of training manager Patrick Faller, six apprentices are currently being trained as metal-cutting mechanics. Among them is our new addition, Jannik Hummel, who started his apprenticeship with us on September 1st, 2022. We wish him all the best on his journey.

The level of the training workshop is supported by continuous investments to offer all apprentices just the right state-of-the-art support.

In addition to several conventional machines for drilling, milling, turning, and grinding, a 6-axis Fanuc robot has also been included in the workshop equipment since July of this year. This ensures

that all trainees can learn the basics of how to program and control a robot. With this high quality of training, all doors are open to every apprentice for their future professional career at Schwanog.

For example, a former apprentice is working in the USA for four months to assist colleagues at Schwanog LLC. And another former apprentice has successfully graduated as a technician and is now working as a process optimizer at Schwanog, Villingen.

These examples show that young people with grit and determination have first-class development opportunities, even in a medium-sized company like Schwanog.



Left to right: Our apprentices: Jason Heler, Fabian Hummel, Alexander Wolf, Malcolm Trost, Ben Laessig



Jannik Hummel, First year of apprenticeship



Jason Heler (left) and Training Manager Patrick Faller (right)

Maximum productivity even when machining tough materials:

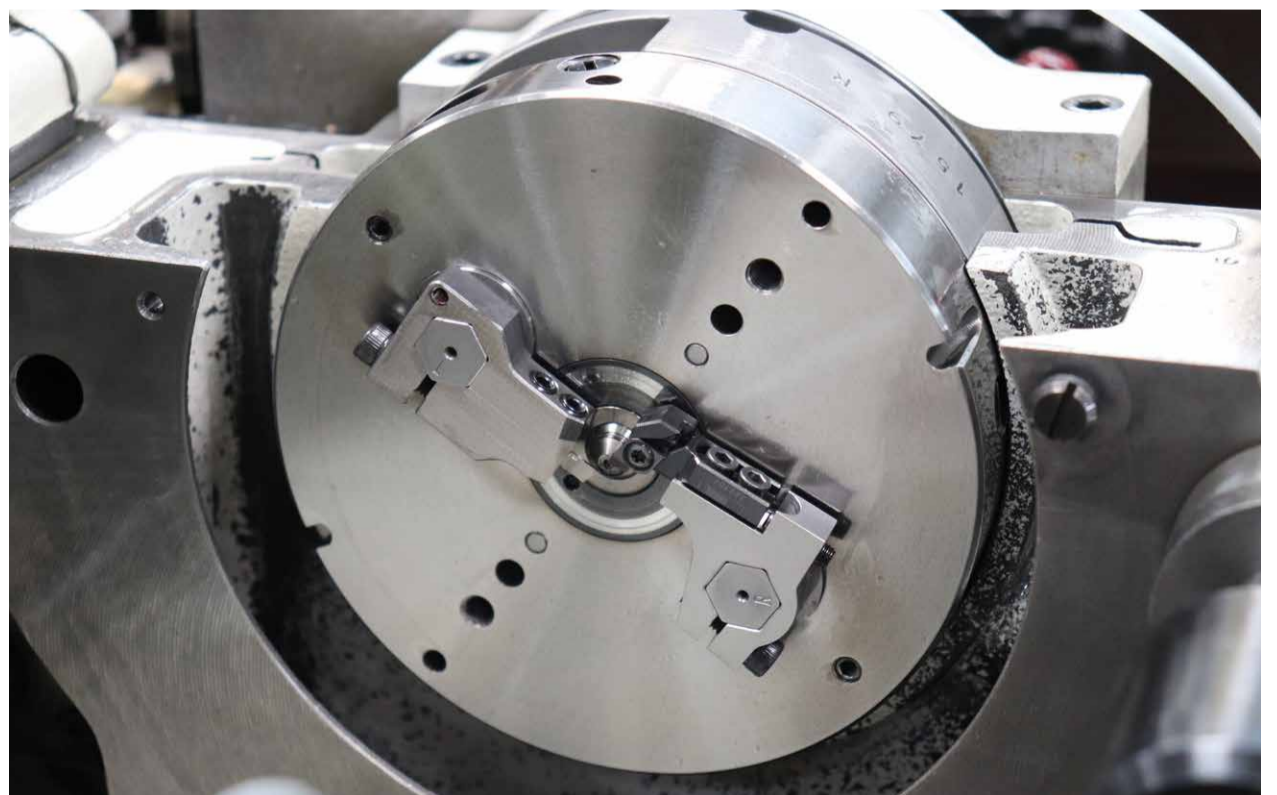
THE SCHWANOG ESCOMATIC® SYSTEM!

To produce micro-turned parts, our customers often use ESCOMATIC® machines. That is why we have implemented the wishes of many customers. In addition to the insertable grooving tools for all machine types, we have also expanded our range to include the appropriate holders. This now includes all holders from the cam type D2, D4, D5 and D6 machines, to the new D2/ D5 CNC and NM machines.

For some machines, the head needs to be converted to a hexagonal shaft, but this conversion is technically simple and involves little effort.

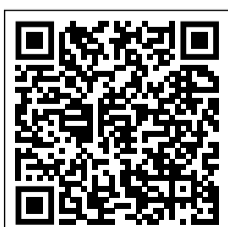
Tests with three different turned parts in three different materials have shown that there are fundamental benefits under all general conditions, resulting in tool cost savings of 57 % to 97 %.

Particularly interesting for applications with high-strength materials: The tougher the material to be machined, the higher the tool cost savings.



Some advantages:

- Enormous tool cost reduction of up to 97%
- Highest repeatability, eliminates the need for separate adjustment during tool changeovers
- Significant time savings when changing tools
- Substantially lower downtime costs due to fewer tool changes
- Complete solutions for the entire series of ESCO machines



Here you can find the complete test results

Ceremony at Schwanog in Villingen-Schwenningen:

CELEBRATING THE 10 YEARS ANNIVERSARY!

At a small ceremony, Clemens Guentert thanked seven long-term employees for their devotion, loyalty, and performance. We would like to introduce the employees who were honored:

Karl-Joachim Dreßler

Process Optimizer

After his training as a toolmaker, Mr. Dressler worked as a CNC milling operator in the production of individual parts. This was followed by further training to become an industrial foreman. Following that, he was initially responsible for Schrader valve support for product relocations abroad. He then worked for a turned parts manufacturer and was responsible for production control and Schrader valves. This was followed by employment as an application engineer at grinding machine manufacturer Haas. For the past ten years, Mr. Dressler has been responsible for the development and optimization of production processes at Schwanog. He enriches our entire team with his comprehensive and valuable wealth of experience and is now indispensable at Schwanog.

Marco Rais

Design Engineer

Marco Rais is 33 years old and started his career at Schwanog as a tool grinder on Haas grinding machines. After six years he undertook further training to become a foreman, which he successfully completed. Today Marco Rais works as a design engineer at Schwanog and is a valuable addition to the design team.

Andreas Kienzler

Head of the Design Department

Andreas Kienzler is 34 years old. After his training and experience as an industrial mechanic, he continued his training as a technician during the years 2010-2012. After six years as a Design Engineer at Schwanog, he was promoted to lead the Schwanog design department in 2018. With his technical expertise, Mr. Kienzler leads his 10-member team with enthusiasm and commitment.

Sandra Bergold

Machine Setter, Haas Grinding Center

At 38, Sandra Bergold is the best example of how retraining for your dream job can be worthwhile. This is because, after her training as an industrial clerk, she retrained as an industrial mechanic with subsequent jobs as a CNC milling operator and tool grinder before joining the Schwanog team in 2012.

Karolina Iwers

Controlling

After completing her apprenticeship, Karolina Iwers worked in purchasing. In 2011, she completed further training as a foreign language correspondent. After the first few years in internal sales at Schwanog, Karolina Iwers, who is now 35, underwent training as a business economist and switched then to controlling. As a real numbers' juggler, she always keeps an eye on all business matters.



Left to right: Claudia Cengic, Karolina Iwers, Clemens Güntert, Karl-Joachim Dreßler, Marco Rais, Andreas Kienzler, missing in the photo: Stefanie Springer and Sandra Bergold

Stefanie Springer

Design Engineer

Stefanie Springer is 33 years old and initially completed an apprenticeship, with subsequent employment as a metal-cutting mechanic. She went on for further training and graduated as a technician, before starting in 2012 at Schwanog as a tool designer. Ms. Springer is currently on maternity leave to devote her attention entirely to her 1-year-old daughter.

Claudia Cengic

Assembly

At 49, Claudia Cengic is an experienced employee. After training as a metal worker, she was responsible for incoming goods and quality control at her training center for mechanical engineering. After various jobs, including sales and purchasing, Claudia Cengic moved to Schwanog, initially in warehouse management, and since 2019 in assembly. With her prudent way of working, she has everything under control.

In intensive dialogue with customers and interested parties:

SUCCESSFUL PARTICIPATION IN INTERNATIONAL TRADE SHOWS!

It is finally trade show time again. We were able to successfully participate in the first two international trade shows AMB and IMTS with our highly motivated and enthusiastic trade show team.

Due to the practically simultaneous scheduling of the trade shows AMB in Stuttgart and IMTS in Chicago, the implementation was a particular challenge in terms of logistics and manpower, but our team mastered the challenge with great aplomb. We would like to offer warm thanks to our trade show team for their excellent presentations.

In tandem with the training topic on page 3 of this News, we were also represented for the first time at the "Jobs for Future", a trade show for jobs, apprenticeships, further education, and studies, held in Villingen-Schwenningen. Above all, our visitors appreciated the direct contact and exchange with our apprentice team to find out everything about Schwanog, up close and personal.



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