

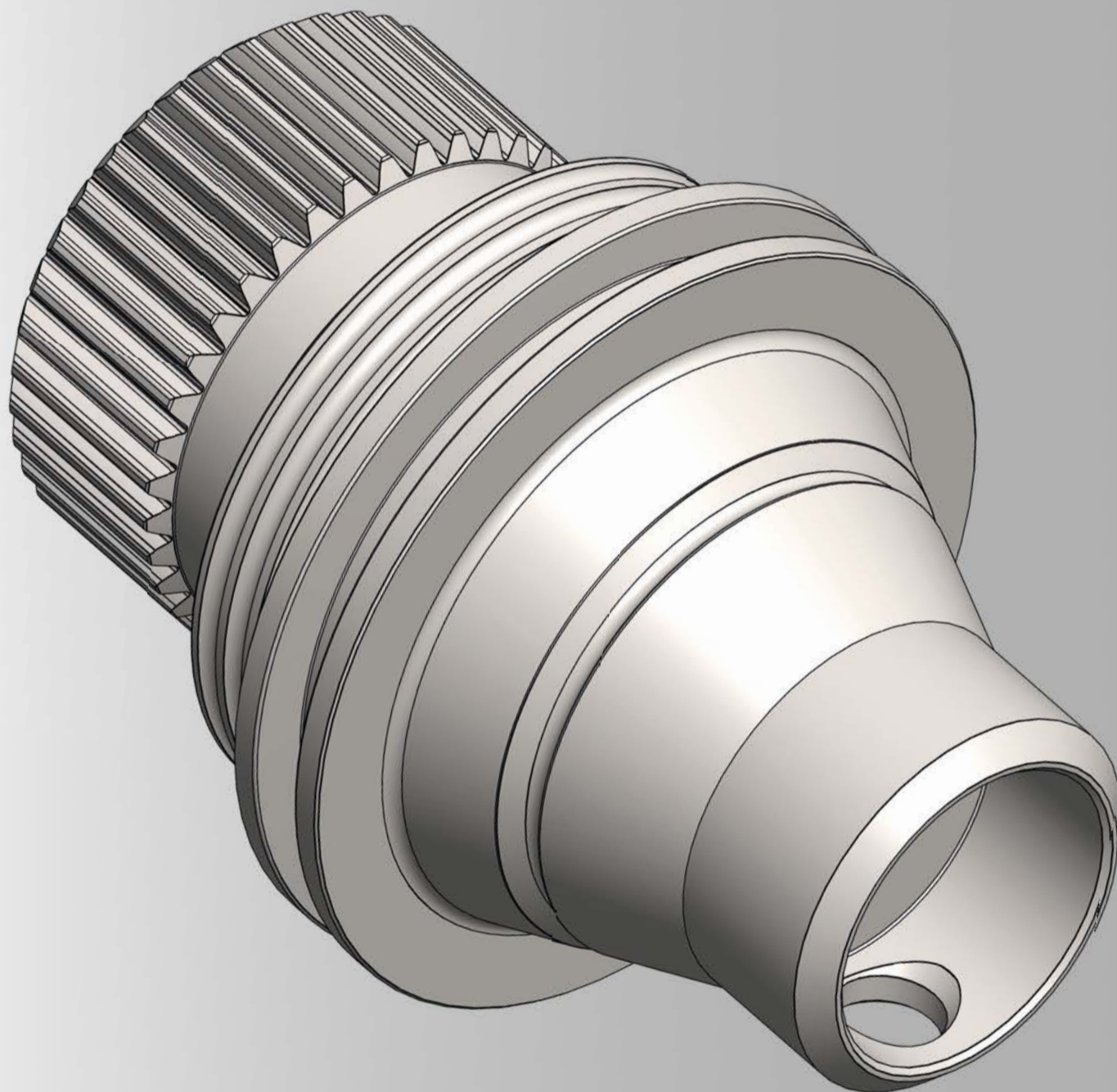
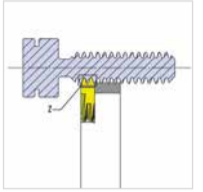
NEWS.

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

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Process optimization made easy:

**WITH COMPLETE
TOOL DESIGN FROM
SCHWANOG!**

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EDITORIAL:

Dear business partners,

Along with our team and because of your trust, we were able to successfully get through another year full of major challenges. We would like to take this opportunity to thank you very much for that.

The front page of the fourth issue of this year's News focuses on the complete tool design of turned parts as a service, with which we can make your process optimization easier. On page 2 you will find quite a few examples of the most important technical parameters.

In our first webinar we expanded our range of services and are happy about the successful debut. It was quite successful both in terms of content and technology. If you were unable to attend, you can find a short summary of the content and some information about our next webinar on page 3.

Our team continues to grow at all our locations, so we are pleased to be able to give you a brief portrait of our new employees on page 3 of this issue.

In today's technical topic on page 4, we would like to draw your attention to chasing as an efficient way of machining threads. With Schwanog, all options are open to you, whether chasing with a roughing tooth or chasing special threads.

In our trade show preview we show an overview of our most significant trade show appearances in 2023 and we look forward to welcoming you again as our guests.

Finally, we wish you a relaxing holiday season and all success in the New Year.

Clémens Güntert
Clémens Güntert
Managing director

Competent support from Schwanog:

COMPLETE TOOL DESIGN FOR YOUR TURNED PARTS!

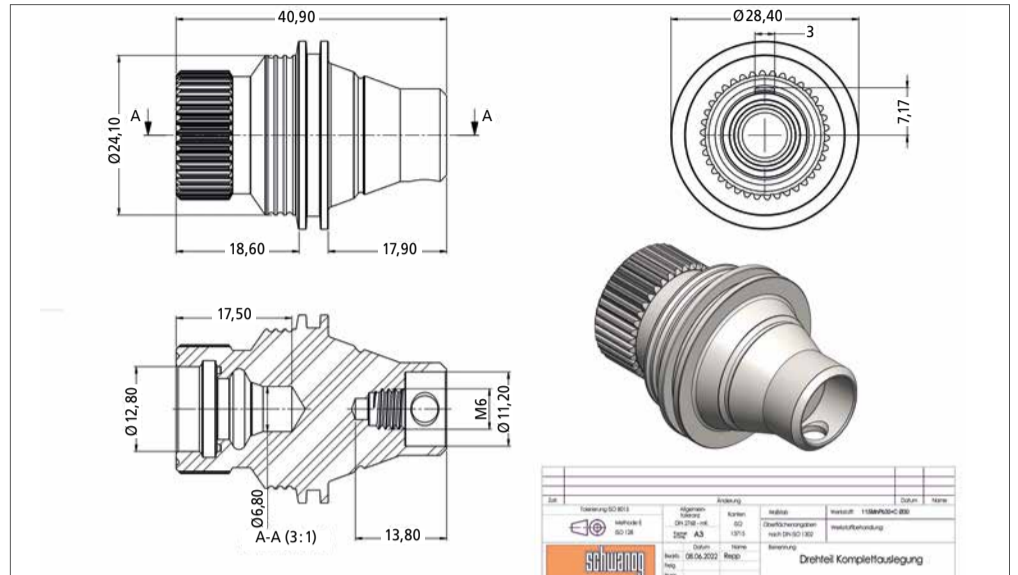
Manufacturers of turned parts who, for example, expand their range of parts or open new industries are often pleased to have competent support for tool design.

We have recognized these customer needs and have developed comprehensive services to meet them. We offer you our support for the complete tool design for turned parts. This includes both single and multi-spindle automatic lathes, as well as all manufacturing operations.

The fastest way to get support: Simply send us your part drawing and information on the technical requirements, such as machine and holder type.

Based on this, you will receive a complete process description of the tool design from us along with a sketch and a detailed quotation for the Schwanog tools.

Use the service of the complete tool design by our experienced experts!



<p>Turned Part: Material: 16 MnCr5 (5115)</p>	<p>ROUGHING OD 1ST SIDE Tool: Type PWP-5 b = 15,6 mm Cutting data: Cutting speed (Vc) = 120 m/min Feed (f) = 0,2 mm/Rev.</p>	<p>FINISHING OD 1ST SIDE Tool: Type PWP 22x5x26,5 Cutting data: Cutting speed (Vc) = 100 m/min Feed (f) = 0,1 mm/Rev.</p>	<p>FORM DRILLING Tool: Solid carbide Ø10x70 2 Flutes w. i.c. Cutting data: Spindle speed (n) = 2000 mm/min Feed (vf) = 200 mm/min Feed (f) = 0,1 mm/Rev.</p>	<p>FINISH DRILLING / COUNTERSINKING Tool: Type PWP-BO 22x5x26,5 Cutting data: Spindle speed (n) = 1600 mm/min Feed (f) = 0,1 mm/Rev.</p>	
	<p>MILLING ID RECESS Tool: Solid carbide Ø8x70 3 Flutes Cutting data: Spindle speed (n) = 4000 mm/min constant Cutting speed (Vc) = 95 m/min Feed (vf) = 300 mm/min</p>	<p>MILLING OD SERRATION Tool: Solid carbide Ø12x78 5 Flutes Cutting data: Spindle speed (n) = 2800 mm/min constant Cutting speed (Vc) = 105 m/min Feed (f) = 0,22 mm/Rev. Feed (vf) = 616 mm/min</p>	<p>FINISHING ID GROOVE Tool: Type WSI Ø6x50 Cutting data: Cutting speed (Vc) = 60 m/min constant Feed (f) = 0,02 mm/Rev.</p>	<p>BROACHING ID GROOVE Tool: Solid carbide Ø8x49 1 Flute Cutting data: Feed 0.08mm / Stroke Cutting speed (Vc) = 10 m/min</p>	<p>FINISHING OD 2ND SIDE Tool: Type PWP 22x5x26,5 Cutting data: Cutting speed (Vc) = 100 m/min Feed (f) = 0,1 mm/Rev.</p>
	<p>FINISHING 3 OD GROOVES Tool: Type WEP 23,60x16 3S Cutting data: Cutting speed (Vc) = 80 m/min Feed (f) = 0,06 mm/Rev.</p>	<p>SKIVING OD 2ND SIDE Tool: Type PWP 19x5x26,5 Cutting data: Cutting speed (Vc) = 50 m/min Feed (f) = 0,25 mm/Rev.</p>	<p>FORM DRILLING BACK SIDE Tool: Solid carbide Ø12x80 2 Flutes Cutting data: Spindle speed (n) = 2300 mm/min constant Feed (f) = 0,06 mm/Rev.</p>	<p>THREAD MILLING M6 ID THREAD BACK SIDE Tool: Solid carbide Ø5x80 3 Flutes Cutting data: Spindle speed (n) = 5000 mm/min constant Cutting speed (Vc) = 80 m/min Feed (vf) = 275 mm/min</p>	<p>FORM DRILLING CROSS HOLE & CHAMFER BACK SIDE Tool: Solid carbide Ø8x60 2 Flutes Cutting data: Spindle speed (n) = 4000 mm/min constant Cutting speed (Vc) = 50 m/min Feed (f) = 0,05 mm/Rev.</p>

Topic: Thread Whirling with High Participation:

FIRST SCHWANOG WEBINAR A TOTAL SUCCESS!



Whether for high-tech applications in orthopedics and orthodontics, or for parts such as worm gears and other micro components, maximum precision and durability are always required. With our products for thread whirling, we offer our customers optimal solutions at maximum productivity. However, the need for knowledge is often particularly great when it comes to technical details.

In our first webinar on thread whirling, held on October 20th, our expert Ralf Lang looked at all aspects of thread whirling in a comprehensive way.

The questions asked after the webinar made it clear how important the topic for our customers is. At the same time, the customers provided us with information about future requirements and other possible applications for integrating thread whirling into the manufacturing processes.

We would like to thank the participants of our first webinar for their tremendous response and positive feedback.

The next webinar will take place on March 9th, 2023, with the topic "Form drilling with insertable drills and solid carbide drills", to which we will send out invitations in a timely manner.

Thread whirling webinar summary:

- Explanation of procedures
- Application of whirling
- Schwanog thread whirling
- Whirling process on the machine
- Tool design
- Requirements and opportunities
- Thread types that can be thread-whirled
- Schwanog's vast experience with examples of solutions for special applications

Reinforcement for the international Schwanog locations:

WELCOME TO THE TEAM!

Today we would like to introduce our new employees who have been strengthening our teams at various locations worldwide. We are very pleased that all our new employees approach their tasks with great joy and motivation and are already well integrated into their teams.



Amanda Allen
Schwanog USA

Amanda has been part of the Schwanog Team USA since May of 2022 and provides support primarily in the areas of customer service.

Amanda is 35 years old and the happy mother of a wonderful, lively daughter. In her spare time, she volunteers at a non-profit charity that benefits terminally ill and underprivileged children.



Rene Riemann
Schwanog Germany

Rene is 28 years old and has been working in technical sales as an application engineer since February 2021.

After his training as a metal-cutting mechanic on lathes and several years of experience as a machine operator on cam-controlled multi-spindle machines, he continued his training and graduated as technician in the field of mechanical engineering. His hobbies are fishing, motor sports, and snowboarding.



Achim Rakowski
Schwanog Germany

Achim has been employed as a design engineer at Schwanog since 2021. He is 39 years old and has extensive experience. His training as an industrial mechanic for equipment and fine mechanics was followed by working as a skilled worker in the field of special machines, jigs, and fixtures, as a designer for cutting tools, and as a wire-cutting machine operator.

In 2022 he was able to successfully complete his online degree as a technical specialist. He spends his free time hiking and travelling.



Tobias Rothbauer
Schwanog Germany

Tobias has been working as a design engineer at Schwanog since July 2021.

He is 31 years old and after his training as an industrial mechanic and initial experience in the design of equipment at his apprenticeship company, after further training he graduated as technician. His hobbies include mountain biking and hiking.



Jessica Zhao
Schwanog China

Jessica Zhao started working at Schwanog China in October 2022. She is 41 years old and graduated from Shandong Here Transportation College.

She will be responsible for medical applications, primarily our thread whirling tools as well as customer-specific milling tools. In her free time, she enjoys dancing and travelling.

Reducing Costs: Manufacturing threads efficiently

CHASING OF THREADS WITH SCHWANOG TOOLS!

When producing threads, chasing opens the possibility of reducing costs and optimizing processes. With Schwanog, all options are open to you, whether chasing with a roughing tooth or special chasers for special threads.

Chasing with a roughing tooth:

The principle is simple. The roughing tooth does the main work, while the finishing tooth only finishes the profile, with minimum material removal.

A requirement for use, is that the tool run out is sufficient so that the thread is fully formed. As a result, significantly longer tool life and an improved surface finish quality on the thread can be achieved.

Chasing of Special Threads:

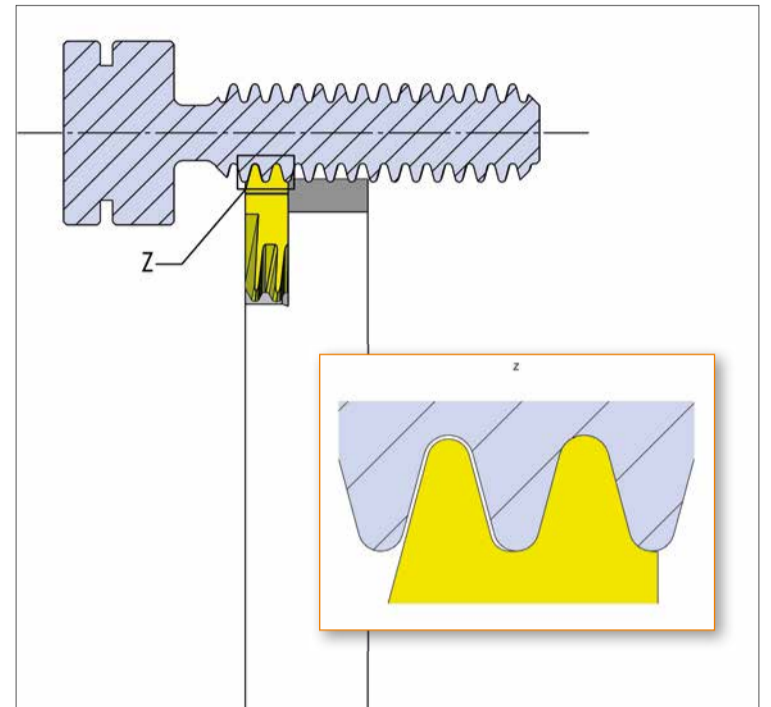
No pitch is too steep, no start too much. When standard tools reach their limits, Schwanog's special chasers show what they're made of.

The applications are practically limitless, whether round and semi-round threads, triangular threads, wood threads, trapezoidal and buttress threads, internal or external threads.

The advantages:

- Manufacture of single and multi-start threads
- Realization of different thread leads
- All holder types and sizes available

Talk to us about your challenges and we will solve them for you.



Chasing with roughing tooth

Happy Holidays and a Happy New Year!

This year as well we were all challenged to a particularly high degree. This once again showed how important personal exchange and togetherness with family and friends is.

On behalf of all Schwanog employees, we wish you a peaceful Christmas and a Happy 2023!

We look forward to supporting you again in the next year.

Your Schwanog team

Participation in International Trade Shows:

TRADE SHOW PREVIEW 2023!

Next year our trade show teams will again be participating in numerous international trade shows. Make a note of the trade show dates now. We will inform you about booth locations in a timely manner.

<p>Germany</p> <p>Jobs for Future March 2nd - 4th, 2023 Villingen-Schwenningen</p> <p>INTEC March 7th - 10th, 2023 Leipzig</p> <p>Turning and Cutting Days, March 29th - 31st, 2023 Villingen-Schwenningen</p> <p>EMO September 18th - 23rd, 2023 Hanover</p>	<p>France</p> <p>Global Industry March 7th - 10th, 2023 Lyon</p>	<p>USA</p> <p>PMTS, April 18th - 20th, 2023 Cleveland, Ohio, Hall A, Booth 4006</p> <p>EASTEC, May 16th - 18th, 2023 West Springfield, MA, Building 5, Booth 5045</p> <p>SOUTHTEC, October 24th - 26th, 2023 Greenville, SC, Hall 1, Booth 1441</p>
<p>Italy</p> <p>FORNITORE OFFRESI February 9th - 10th 2023 Hall B, Booth 278, Milan</p>	<p>Mexico</p> <p>FITMA June 20th - 22nd, 2023 Mexico City, Halls AC, Booth 1125</p>	



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