

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

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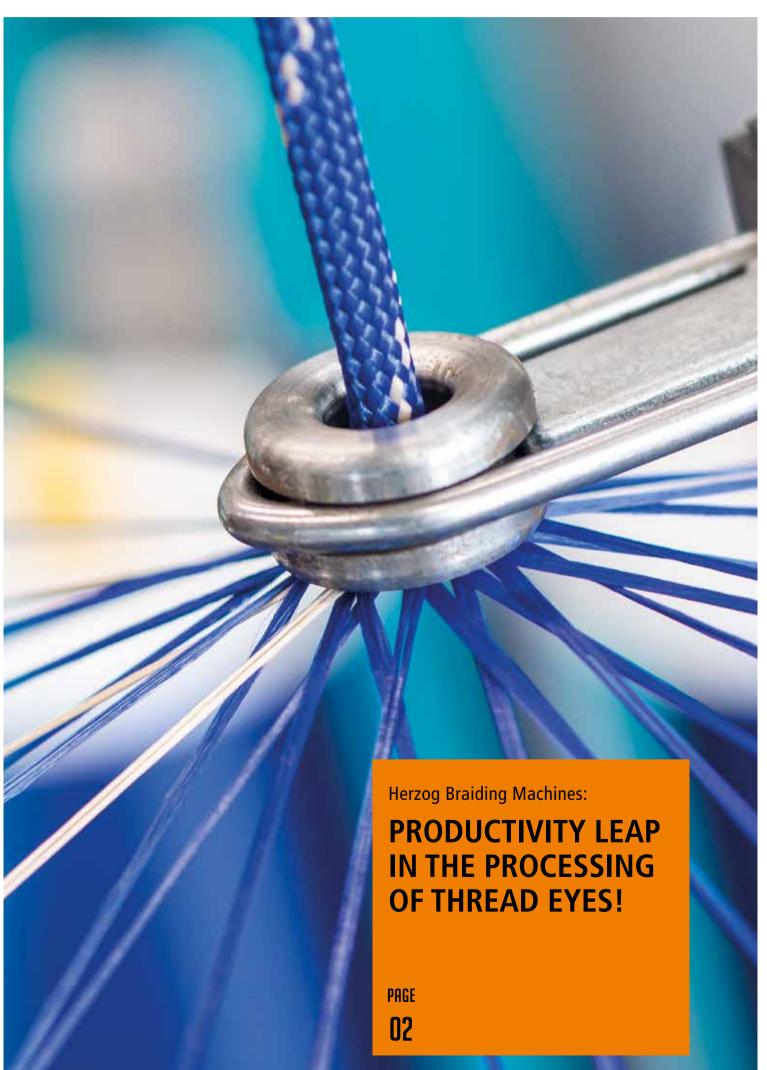
Schwanog can broach oval forms: Manufacture of complex oval forms with Schwanog broaching tools...



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International Management Meeting: The managing directors of the Schwanog production sites met in Obereschach...







EDITORIAL:

Dear business partner,

In this current issue of Schwanog News we would like to present you with interesting and exciting news about product applications, customers, our team and much more. On page 2, we would like to draw your attention to our customer Herzog Braiding Machines and the corresponding project report. The report describes how we have reduced the machining time by more than 48%. This is a good example of how productivity can be improved with Schwanog solutions. Immediately following this, we report on the same page about the production of complex oval outer forms using our insertable broaching tools, providing double-digit unit-cost savings.

What's happening at our foreign subsidiaries? The foreign subsidiaries have grown tremendously. In France, for example, we have currently further strengthened our production and administration team. The topic "Process Optimization in Growth Phases" was also on our agenda at the Global Management Meeting in Obereschach. Both reports can be found on page 3 of this News.

The efficient machining of radial holes from inside and outside without leaving burrs was a challenge to Dominique Rossetto in a recent project in France. This was solved in an impressive way with a multi-tool. You can read the complete application report on page 4.

And now I hope you will find many new impulses in this year's 2nd edition of the Schwanog News.

We look forward to your challenging enquires and wish you great success!

Clemens Güntert

Managing director



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Productivity leap in the machining of thread eyes

HERZOG BRAIDING MASCHINES FROM OLDENBURG IS PASSIONATE ABOUT THEIR SCHWANOG SOLUTION!

The company Herzog GmbH in Oldenburg represents almost 160 years of development and production of top quality braiding and winding machines. Now in its fifth generation, the 150 employee family-owned company is constantly setting new standards in braiding and winding technology. Innovative drive and quality "Made in Germany" are the defining pillars of value for the Oldenburg-based company.

Whether the development of the first branching braider or the construction of the world's largest braiding machine - the long-established company relies on its own ingenuity and is today the world market leader in the field of braiding and winding machines. Natural fibers, synthetic fibers and high-tech yarns and wires are processed on over 170,000 machines sold to date, in all the major textile markets world-wide.

Braiding machines for a wide variety of applications.

Herzog braiding machines are used for a wide variety of applications. Braids are needed that withstand the great forces of nature in fishing and seafaring applications. In the area of sports and leisure, braids are needed when climbing or parachuting. The safety of life and limb often depends upon braided material. Braids are applied in the textile industry as shoe sewing threads or cords. Braided rope made of polyester or HMPE fibers are also increasingly used in the offshore sector and are excellent for their task. High-tech solutions are also being produced on Herzog braiding machines for use in medical technology, aircraft construction, in the automotive industry and for space travel.

Our own production facilities set the highest demands.

Our production places the highest demands on supplier partners in order to constantly increase productivity and tool life. A good example of this is the cooperation with Schwanog in the manufacture of thread eyes, a small but crucial precision part of a braiding machine. Klaus Rosenfeld, technical sales representative at Schwanog was asked to significantly improve productivity and tool life by optimizing the tools. After an analysis of the current situation the Schwanog team has come up with a solution that has completely satisfied Waldemar W., production manager at Herzog.

At Herzog everybody was highly impressed with the Schwanog solution, especially while we were able to eliminate an entire tool from the current process. And in terms of tooling costs, production



From left to right: Waldemar W., Klaus Rosenfeld and Andres W.

manager Waldemar W. was thrilled as the Schwanog insertable form drill with its enormous performance and prolonged tool life as it does not cost more than the solid carbide form drill previously used.

Together, they agreed to concretize further applications for Schwanog tool solutions. Klaus Rosenfeld is pleased about all this positive feedback and moving on highly motivated to his next assignment.

"Regarding Schwanog and Mr. Rosenfeld's work, I am excited about the professional analysis, the finding of application solutions and its implementation, which have enormous impacts on productivity."

Waldemar W., Production Manager at Herzog

Previous Process

Until now, thread eyes were manufactured in the three steps, pre-drilling, back and front countersinking and contour drilling.

Cycle-time: 68 seconds

Tool life of solid carbide drill: 260 thread eyes

Schwanog solution

Schwanog recommended reducing the process to 2 steps, pre-drilling and contour drilling using the Schwanog insertable form drill. This resulted in a significant cost savings within all parameters.

Cycle time: 35 seconds

Reduction of 48.5%

Tool life: 1.600 thread eyes Increase of 615%

Setup time: Reduction of 33%



Schwanog can also broach oval forms

MANUFACTURE OF COMPLEX PROFILES WITH SCHWANOG BROACHING TOOLS!

Ordinary machining is not difficult; but manufacturing extraordinary complex geometries on lathes requires know-how and the right tooling solutions. Schwanog offers both, and combines these solutions with highest economy and process reliability.

A current example is the manufacture of an external oval profile with Schwanog form tools. The external form will be split into two broaching tools and broached one after the other. The precision part can be completely manufactured on one lathe. Thus, an additional machine or further process can be omitted. This example led to an impressive unit cost saving of 18.5%!

Again, this example is a further encouragement for our customers to send their part drawing as from this point on we take over the analysis, make a tool recommendation and estimate the possible unit-cost savings.







What are you waiting for? Cutting costs is our job!

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Boost in Sales and Production

SCHWANOG FRANCE WITH EVEN MORE POWER IN THE STARTING BLOCKS!

Business in France continues to develop very positively, not least because of the outstanding service and dedication of the employees in the Schwanog team. However for Dominique Rossetto the status quo simply means regression and so he continually works to selectively expand his team in terms of quality and quantity. We are very pleased to introduce you to Céline Guido, Ugur Altun and Nathalie Morabito, our three new employees.

Céline Guido Administration

Céline Guido is 37 and has more than 15 years of sales experience. Her main focus has always been on sales and customer service. At Schwanog, Céline handles all administrative tasks such as entering orders and quotations, creating delivery notes and invoicing, entering purchase orders and much more.

She is loves animals and is a proud owner of a gorgeous dog. In her free time she likes to go to the movies, cooking with passion, and loves gardening.



Ugur is 23 and comes to Schwanog with top qualifications. After graduating from high school with a focus on technical sciences and administration, he has spent the last three years in the turned parts industry. Therefore he understands the business very well from the customer side and knows how important it is to optimize productivity and reduce unit-costs. Ugur can now make full use of this experience as a machine operator.

In his youth, Ugur wrestled on the national wrestling team, from 2011 to 2014. He has now traded wrestling for bodybuilding. So, when it comes to handling the work, Schwanog is well prepared!



From left to right: Nathalie Morabito, Ugur Altun and Céline Guido

Nathalie Morabito Administration

Nathalie is 49 and most recently spent 8 years working for a machine manufacturer in their administration and customer service department. At Schwanog, she works on the same team as Céline Guido, in order processing, working together to ensure that their complementary skills are applied optimally. Additionally, the more important focus of her work is arranging and keeping timeous delivery deadlines, in accordance with customer agreements.

Nathalie most enjoys spending her free time with her family and her three children. She likes going to the movies and reading books.

Focus topic: Process Optimization in Growth Phases

GLOBAL MANAGEMENT MEETING IN OBERESCHACH!



From left to right: Dominique Rossetto, Clemens Güntert, Holger Johannsen, and Gökay Dumlupinar

The Schwanog Global Management Meeting was held this year from April 15th -17th in Obereschach. The main focus was on organizational topics to further optimize processes at production sites. In particular, strong growth at all locations warranted special attention.

With regards to these developments, further investments were discussed and approved. The training of employees from the subsidiaries at the headquarters in Germany was also discussed and approved.

Data security within the company was also on the agenda of the 2-day meeting. Discussions on quality management took up a substantial amount of time. The documentation of process flows and the expansion of the process handbook, Viflow, was specifically discussed. Another important point was the coordination of marketing activities with Schwanog Germany and extensions such as the Schwanog App, the website, social media and SEO activities in foreign markets.

The extensive program was completed in all respects and so Clemens Güntert and his executives were completely satisfied with the achievements.

"In our two-day workshop, we were once again able to set the important course for process optimization within our companies at home and abroad."

Clemens Güntert, Managing Director

Change in customer support of the Czech market

LUDVIK SOCHOR GOES INTO WELL-DESERVED RETIREMENT!

During the TAJMAC-ZPS customer days which took place in Zlin on April 25th and 26th, 2019 we again welcomed numerous customers to our booth, especially from the Czech Republic. At this time we took the opportunity to personally announce the retirement of our long-standing sales representative Dipl. Ing. Ludvik Sochor.



Clemens Güntert (left), Ludvik Sochor (right)

Ludvik Sochor took over responsibility for the Czech market for Schwanog in 2006 and has done a first-class job over the years. We would like to thank Mr. Sochor and wish him happiness and health for his well-deserved retirement which he began on June 1st, 2019.

During the Schwanog Sales meeting held from June 14th to 15th, 2019 in Obereschach, Ludvik Sochor was given an official farewell, and handed a large gift basket. In the evening, Mr. Sochor's farewell was celebrated with the sales staff at a leisurely dinner event. Vladimir Hrib will take over his duties. Mr. Hrib is 44 and has always focused on metalworking and tool technology throughout his professional career.

After his initial experience as a metalworker, he worked as a setter and programmer of CNC machines. After this, he worked as an operations technologist for 10 years, where he was able to apply his experience and skills optimally.

Vladimir Hrib is married, has three daughters



Vladimir Hrib

and prefers to spend his free time with his hobbies beekeeping, motorcycling and gardening.

Company Run Villingen-Schwenningen

SCHWANOG AGAIN IN THE STARTING BLOCKS!

Also at this year's company run, Schwanog was back in the starting blocks with a total of 14 employees, who had fun on the 5.5 km long running track.



Made with just one highly efficient tool

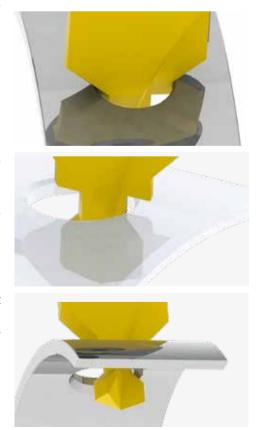
RADIAL DRILLING WITHOUT BURR, INSIDE AND OUTSIDE!

Again and again we receive reports of success from our international locations with customer applications that involve both complex and relatively simple process steps. Our team has again solved a customer request in an impressive way in the following case.

The project concerned a tube with several bore holes. Previously a drill was used for machining, then the drilled hole was chamfered and finally a deburring tool was used in the third step from both inside and outside the tube. Schwanog analyzed the machining processes and developed a solution that combines all process steps in a single tool. So now the wall of the tube is drilled through and chamfered. Then the tube is re-positioned in one pass and also chamfered from the inside through a circular interpolation.

The solution here is that the holes are burr-free and no longer need to be reworked. Drilling, chamfering and deburring with just one insertable tool.

This solution is a good example of how intelligent solutions from Schwanog can achieve vast unit-cost reduction with maximum process reliability and quality.



Spring Trade Shows with High Attendance

SCHWANOG PRESENTS ITSELF AT INTERNATIONAL TRADE SHOWS!



This year, the first international spring trade shows in Europe were once again characterized by a large number of interested visitors. Schwanog was present at the Dreh and Spantagen in Germany, the Tajmac ZPS in the Czech Republic, Mach-Tech in Poland, Global Industries in France, and PMTS in the USA. We were present at the BIA Brescia Industrial Exhibition in collaboration with our Italian Representation UBR.

Many trade show visitors came to our booth with solid projects so discussions could be very specific. Two trends were apparent: Solutions using Schwanog form drills are playing an increasingly important role and tooling solutions with multiple functions are in high demand.



We attribute this also to the best practice examples, which we publish continuously in the media.

In this respect, we look back with pleasure on the trade shows and thank all visitors and our trade shows teams for their commitment.

We cordially invite you to the EMO 2019, which will take place from September 16th to 21st, 2019 in Hanover:



Schwanog Hall: 5 Booth: C 47



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