

deco magazine

88 02-2019 ENGLISH

TORNOS

*Conquer the dental
market with
the SwissNano 7*

8

*Knowing how to
convey knowledge
and expertise*

22

*Richard Moser KG
Präzisionsdrehteile:
Class en masse*

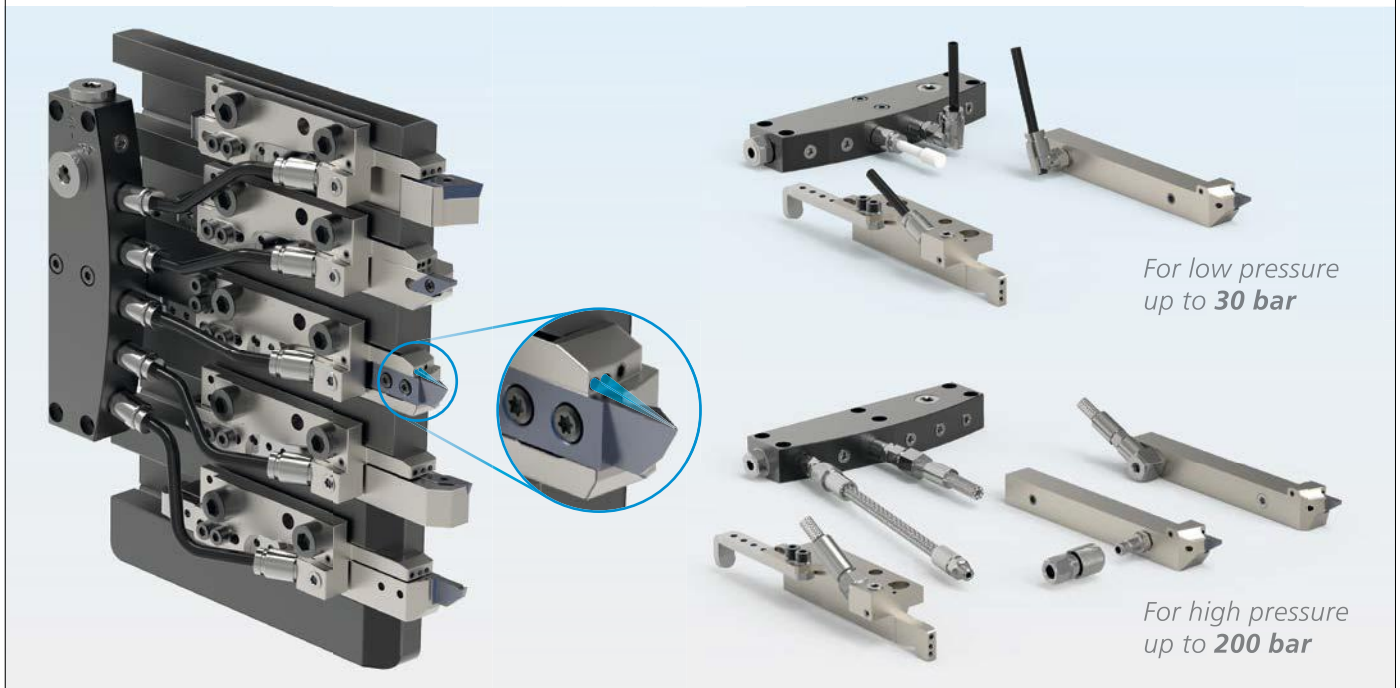
28

*Almadec and
Precisteel:
Speed, serviceability,
efficiency*

42

UTILIS
multidec[®]
swiss type tools

BOOST YOUR PRODUCTIVITY



The multidec[®]-LUB clamping wedge directs the coolant precisely onto the cutting edge of the tool. The flexible stop allows tool changes to be made safely and quickly.

future since 1915

UTILIS[®]
Tooling for High Technology

■ **Utilis AG, Precision Tools**

Kreuzlingerstrasse 22, CH-8555 Müllheim, Switzerland
Phone +41 52 762 62 62, Fax +41 52 762 62 00
info@utilis.com, www.utilis.com



The instructors at the Tornos Academy are always at the cutting edge, ready to convey their knowledge and expertise.

IMPRESSUM

Circulation

17'000 copies

Available in

French / German / English /
Italian / Spanish / Portuguese for
Brazil / Chinese

Publisher

TORNOS SA
Rue Industrielle 111
CH-2740 Moutier
www.tornos.com
Phone +41 (0)32 494 44 44

Editing Manager

Brice Renggli
renggli.b@tornos.com

Publishing advisor

Pierre-Yves Kohler

Graphic & Desktop Publishing

Claude Mayerat
CH-2830 Courrendlin
Phone +41 (0)79 689 28 45

Printer

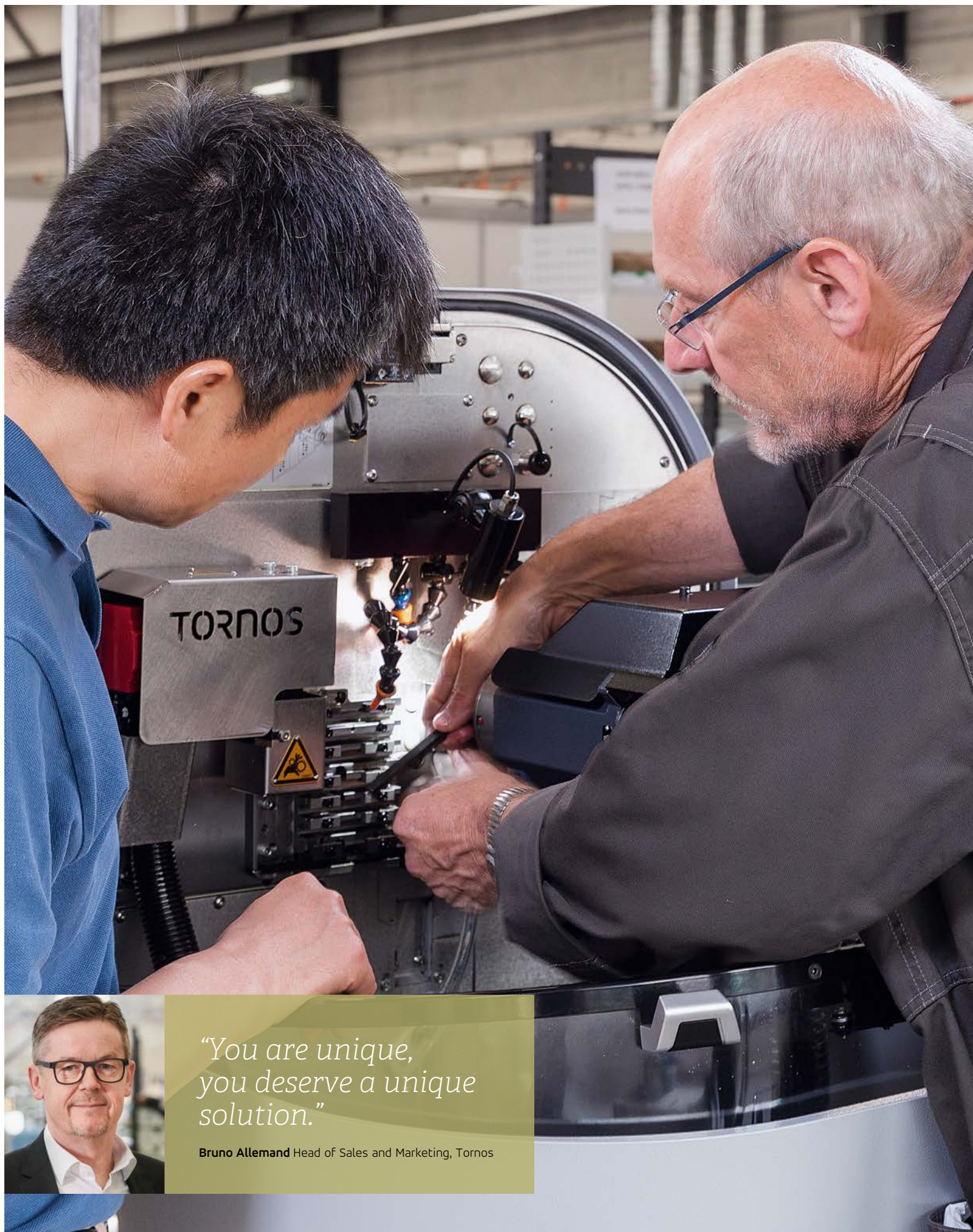
AVD GOLDACH AG
CH-9403 Goldach
Phone +41 (0)71 844 94 44

Contact

decomag@tornos.com
www.decomag.ch

SUMMARY

- 4 Editorial – Meeting our customers' expectations
- 8 Conquer the dental market with the SwissNano 7
- 14 Services upgrade: Thoroughly tested safety and functionality
- 22 Knowing how to convey knowledge and expertise
- 28 Richard Moser KG Präzisionsdrehteile: Class en masse
- 36 Vilardell-Purtí – An expert in precision
- 42 Almadec and Precisteel: Speed, serviceability, efficiency
- 46 Laguna Co Ltd: Famous Saint-Petersburg plant Laguna invested in Tornos Swiss GT 13 – ergonomic, flexible and versatile



TORNOS

*"You are unique,
you deserve a unique
solution."*

Bruno Allemand Head of Sales and Marketing, Tornos

Meeting our customers' expectations

Bruno Allemand Head of Sales and Marketing, Tornos

Several years ago, Tornos took a major shift in direction, deciding to offer its customers a brand-new and unique experience: the Tornos experience. As a result, we have a distinctly different way of presenting our brand at technology fairs and technical trade shows. This is because over time, our machines have become shining examples of precision and ergonomics; and we happily showcase them during our public events, people are and always have been our prime concern.

At Tornos, we want to offer a pioneering perspective and an attentive service. When customers arrive at Tornos with an idea, however vague, they leave with a genuine project. We offer you customised solutions that are primarily designed to produce the parts you need. But our work does not stop there. Thanks to our experience that spans over a hundred years, we can help you leverage the full potential from your machine, opening up new markets for you.

Training to enhance performance

This is the main task of the trainers at the Tornos Academy. Created last year to provide a targeted and highly effective solution to the requirements of our future customers while also offering new solutions to existing Tornos machine owners, the Tornos Academy is a real machine-tool school. Depending on the module chosen, you can learn how to master a given process, either at our Swiss headquarters in Moutier, in one of our international subsidiaries or directly where you are. The course

mapped out by our trainers leads you into a world of rich and varied opportunities from Tornos! Discover more on page 22.

The SwissNano 7 – the star of the dental industry

Speaking of new markets, it is important to recognise the fact that the world is constantly changing. What was on-trend yesterday is not necessarily popular today. One area of continual growth, which sometimes causes alarm, is that of health-related issues, as a result of our growing, ageing population. For Tornos, this is another opportunity to stand out from the competition and take the lead. This is practically the case already in the medical sector, as our latest arrival – the SwissNano 7 – met with instant success upon its market launch, by mainly targeting the dental sector. In fact, this machine has proved itself as the perfect partner for all work relating to the manufacture of dental implants in particular. Take its modular machining area for example; this is perfectly suited to such operations. The SwissNano 7 pre-figures the machining of tomorrow. It is a powerful and ergonomic machine. Compact, with a small footprint, it is also easy to use. Hyper-connected, it fits seamlessly into the existing machine fleet; it offers a smart solution and can even be remote controlled thanks to our TISIS software.

For each Tornos machine, whether it is the SwissNano 7 or another machine, we aim to offer a bespoke solution, developed for a specific customer, avoiding the pitfalls of generalisation. You are

unique, you deserve a unique solution. This is why our engineers work hard every day on specific developments, tailored to your requirements. You can find out more in our article on page 14 that will explain in more detail how we can customise our machines at any time to enable you to benefit from our technology and expertise.

A warm welcome from our Customer Centres

Tornos is always at your service, and now our doors are opening even wider for you thanks to our new Customer Centres. Last year, Shanghai was the first location in the spotlight when it opened a Tornos customer centre including a showroom and workshop designed to welcome customers into an environment conducive to innovation and competition.

Thanks to our success in China, we are now rolling out this model in the USA, with a new Customer Centre opening in Des Plaines, Chicago, on 1 May.

This wave of renewal has also reached our headquarters in Moutier as, since the start of 2019, we can now welcome customers to our new reception rooms and our lobby now has a new and improved design. Our administrative offices are also currently being refurbished along with our factories, which will soon be housed under the one roof in Moutier. We look forward to welcoming you to one of our official inaugurations. Until then, you are warmly invited to visit us at our site; if you prefer to wait until autumn, we look forward to seeing you at EMO Hanover 2019. Our next issue of decomagazine will be dedicated to this unmissable event, so stay tuned... Meanwhile, we hope you enjoy reading this issue!

J. A. M.

US customers discover MultiSwiss technology at the inauguration of the Customer Center in Chicago.



starrag

 **bumotec**

Our expertise :
Machining solutions for small complex parts
produced in one single shot



Challenge us on machining
tough and complex raw materials
such as ceramics, cobalt chrome,
titanium, medical peek,

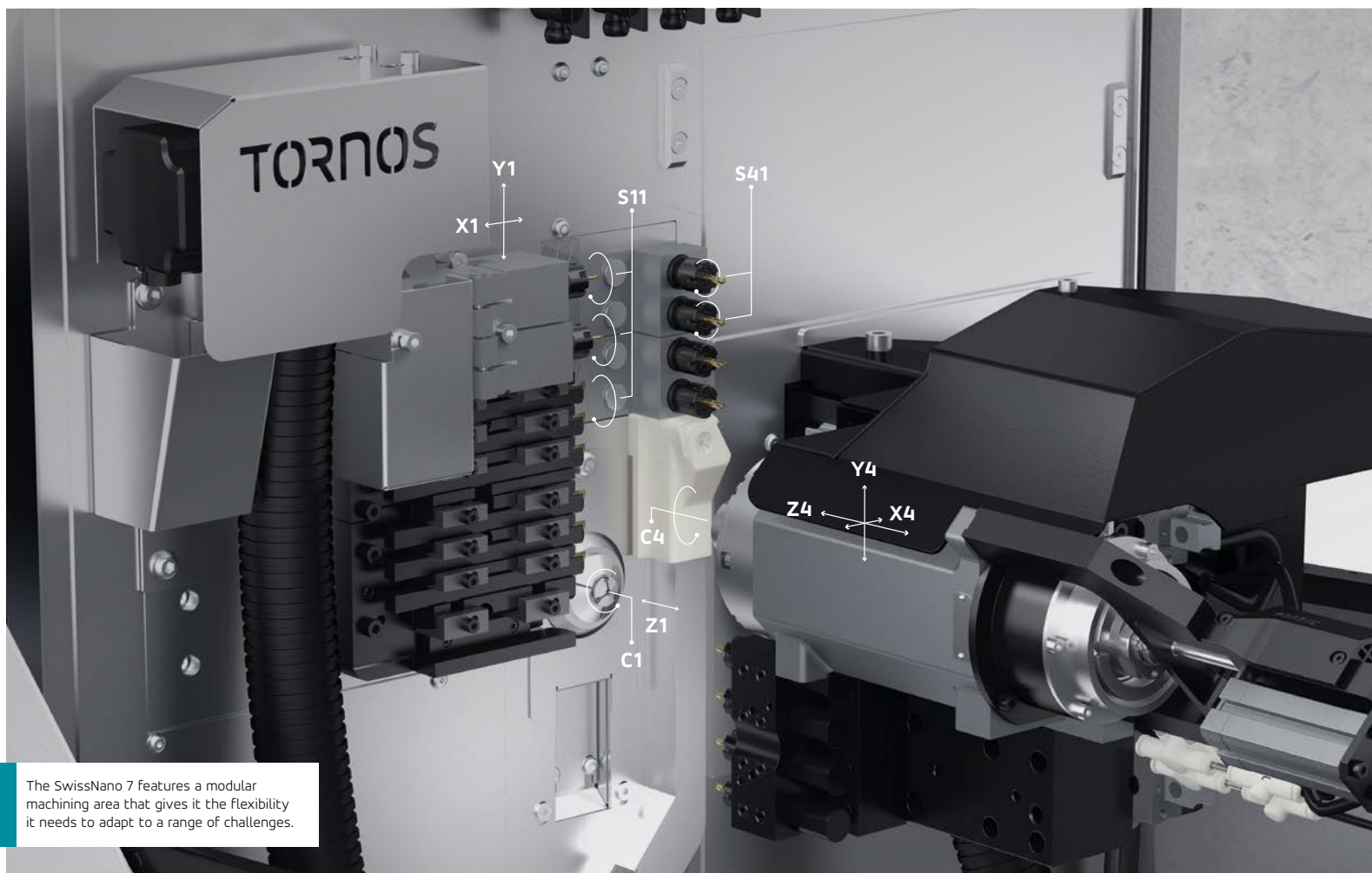


**Highest machine reliability
ensuring ultra high precision
and repeatability in production**

<4μm

Engineering precisely what you value

For more information:
vudadmin@starrag.com
www.starrag.com



The SwissNano 7 features a modular machining area that gives it the flexibility it needs to adapt to a range of challenges.

Conquer the dental market with the SwissNano 7

Compact, versatile and accurate, the SwissNano offers multiple benefits.

TORNOS

Tornos SA
Industrielle 111
CH-2740 Moutier
Switzerland
Tel. +41 32 494 44 44
contact@tornos.com
tornos.com

Equipped with a modular machining area, it is ideal for a wide range of applications. Whether it is watchmaking, connectivity, medical or dental work, the machine offers a solution to meet every need. Yet, as efficient as it may be, it is often its size that really makes it stand out. Read on to find out how the SwissNano excels in the dental sector.

SwissNano 7

The SwissNano 7 uses the same concept as the SwissNano 4, with the two machines featuring the same kinematics. Supremely ergonomic, the key feature of the SwissNano 7 is its counter spindle mounted on 3-axes that incorporates a second tool system. This configuration allows the counter spindle to be centred quickly and accurately. Once the workpieces have been clamped, the counter spindle is ready for counter-operation machining. The counter spindle then transports the workpiece to the third tool system, which features four positions, including two driven either mechanically or at high frequency for micro-milling operations (e.g. special 6-lobe or Torx® shapes).

The main tool system can house three driven tools such as axial milling cutters. However, these can be replaced with a thread whirling attachment. This uses two positions, which means self-tapping threads can be created using a milling tool holder.

In addition to the above tooling, the machine can also be equipped with seven turning tools. In this configuration, the machine offers excellent capabilities for machining dental implants. The machine has a symmetrical structure that guarantees excellent dimensional stability from the very first part. The machining area is ideal for a wide range of requirements, regardless of the challenge, the SwissNano 7 will meet it. The machine can be equipped with an optional high-pressure unit that can be fitted at the rear of the bar feeder.

More compact than ever

In addition to its exceptional performance, the SwissNano 7 is so compact that ten machines can fit into a 9-metre-long space. This small footprint, combined with low energy consumption (thanks to optimised motor power) makes the SwissNano 7 the ideal partner for boosting your production output per square metre. More than ten SwissNano 7 machines can be aligned with a high-pressure unit and their 3 m bar feeder in a space of approximately 36 m². The ultra-quiet machine guarantees a pleasant working environment and emits very little heat, thereby safeguarding precision in the production hall.

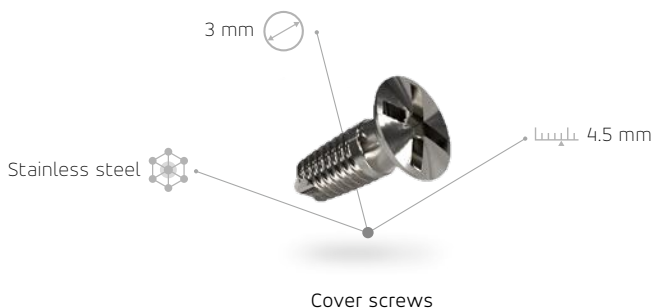
TISIS and TISIS CAM

The SwissNano 7 can be programmed using Tornos' TISIS and TISIS CAM software. As a computer-aided manufacturing solution, TISIS CAM was specially developed to help Tornos customers tackle complex operations. At the same time, it reduces start-up time significantly. When coupled with TISIS, it is the perfect solution for efficiently programming and optimising parts.

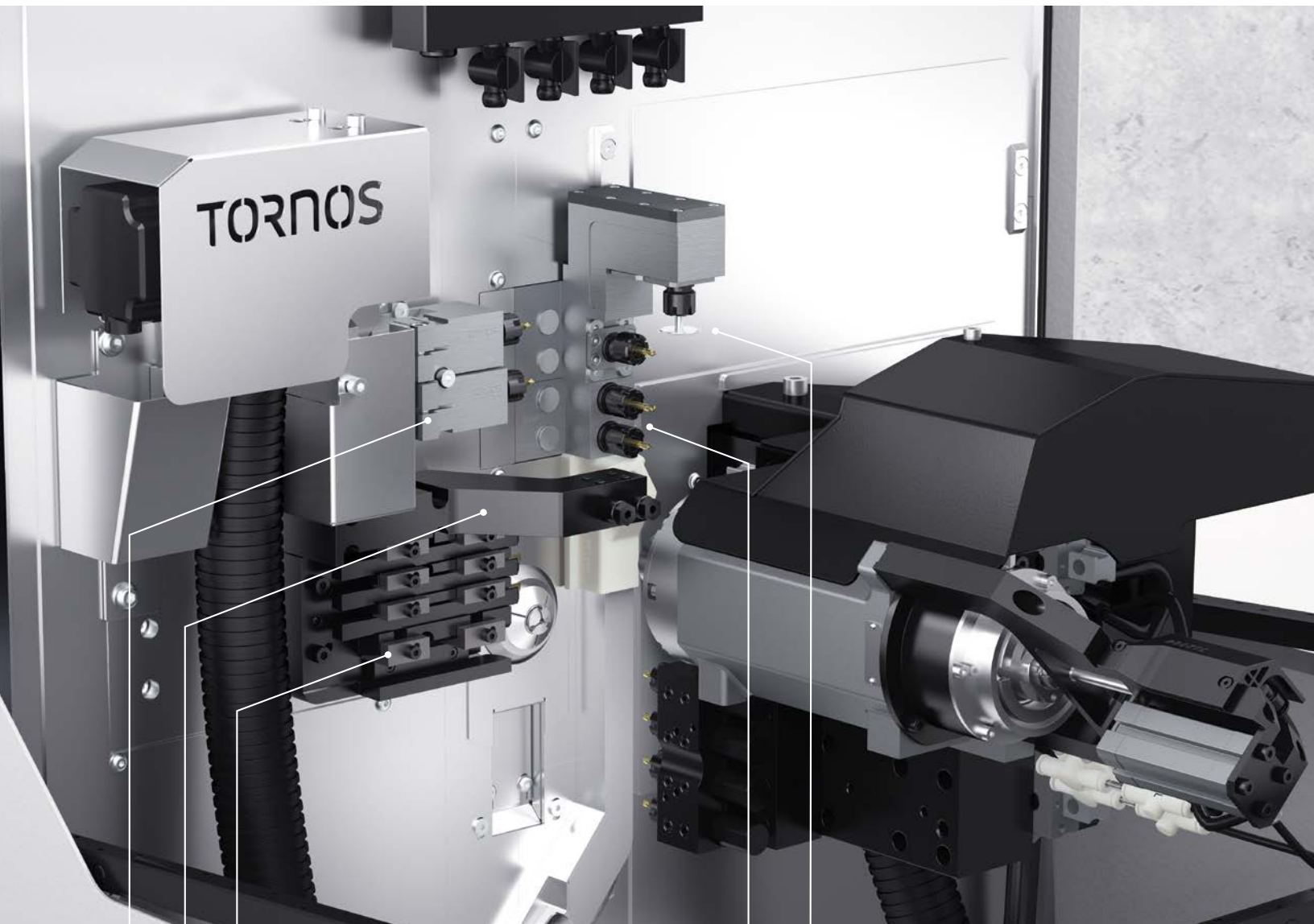
TISIS CAM is especially useful when it comes to exploiting the full potential of the SwissNano. Easy to use and access, the software enables machines to be optimally managed and programmed. The cycle time can be very easily optimised using the Gantt chart. The time for each operation is visible in the program margin on the screen for easy programming. Part family management that is common in the dental sector can be made much simpler. The operations library allows basic operations to be stored and then copied and pasted into the program. These can then simply be modified as required. The machine can also produce parts by varying certain parameters, for example a screw with a different length.

SwissNano carousel

The machine can easily produce part families. However, the workpieces must be efficiently sorted to enable this. For this purpose, Tornos has designed a solution with a workpiece carousel that can be used on both the SwissNano 7 and the SwissNano 4.



Two high-frequency counter-operation spindles can be fitted for machining special shapes.



Dental configuration

Plate for
4 turning tools

Holder for
2 front tools

2 cross drilling/
milling spindles



Front tools



Cross drilling/milling

This option was created by the special developments team. Tornos has its own department for customising machines to meet customer requirements. The department is made up of engineers specialised in creating custom solutions. They can respond to all kinds of requests whether it's for new tool holders, oil mist extractors or customised automation cells.

The carousel can be adapted to suit the part specifications and dimensions. There are four bucket versions:

- 4-bucket XL version with 100 ml part recovery capacity per bucket.
This version also has a 25 ml sampling area integrated in the bucket.
- 4-bucket version with 48 ml part recovery capacity per bucket.
- 6-bucket version with 26 ml part recovery capacity per bucket.
- 12-bucket version with 12 ml part recovery capacity per bucket.

Recovery of the part from the counter spindle can be easily adapted as required. Small parts are difficult to produce when extremely high precision is required during machining. Once produced, it must be possible to remove the part from the machine without damaging it. In some cases, a simple oil stream may be sufficient, and this solution is highly compatible with the carousel. Alternately, the carousel may need to be adapted with a vacuum system. Tornos offers a highly efficient and economical proprietary vacuum system for small parts. Our team can assist you in

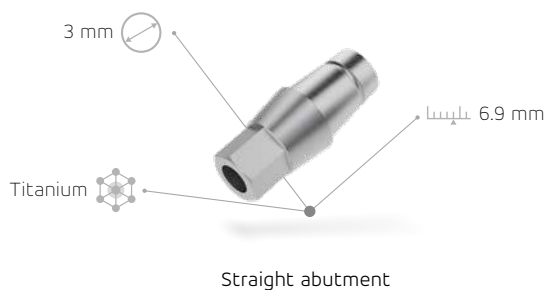


choosing the right system, guaranteeing you the best value for money based on your experience and the part conditions.

The carousel integrates seamlessly into the enclosure of the SwissNano range and can be adapted to existing machines. The buckets are numerically controlled and this option facilitates batch checking. It also enables workpiece sorting based on characteristics (for producing parts families).

Want to find out more about the SwissNano 7 or the carousel? Get in touch now!

[tornos.com](https://www.tornos.com)



LOGIQMILL
ISCAR CHESS LINES

Miniature Sized 90° Endmill Line **Nano Master**



NANMILL
NANO ENDMILL

**Smallest Indexable Insert
Combined with Small Diameter
Multi-Toothed Endmill
for 90° Shoulder Milling**

**MACHINING IN DUSTRY 4.0
INTELLIGENTLY**

Member IMC Group
ISCAR
www.iscar.ch

High-performance internal threading tool includes neck grinding in a single clamping within tight tolerances. Ground on the NEW **GrindSmart®630XW** equipped with linear motors.

The smart choice.



ROLLOMATIC®

www.rollomaticsa.com info@rollomatic.ch



TORNOS

TORNOS

The experts in the Tornos services department are on hand to advise customers throughout the life cycle of the machines.

SERVICES UPGRADE:

Thoroughly tested
 safety and
 functionality

Irrespective of the machine, there is nothing like the quality of the manufacturer. Tornos therefore offers a comprehensive range of services and products to enable its customers to maintain the competitiveness of their production equipment. Whatever their needs, Tornos is always available to provide the required equipment and solutions.

TORNOS

Tornos SA
 Industrielle 111
 CH-2740 Moutier
 Switzerland
 Tel. +41 32 494 44 44
contact@tornos.com
tornos.com

Not only does Tornos offer appropriate accessories but its overhaul service team is also willing to analyze the customers' machines. Matthias Damman, Head of Tornos Services, declares: "Even if your machine has more than 100,000 hours on its meter, we are able to revitalize it and bring it back to an as-new condition. We can revamp it with the equipment required to enhance its performance and reach absolute dimensional accuracy."

Buying accessories is just as challenging as buying a new machine. It's all about finding the accessories that best match the requirements and the production means. The Tornos specialists are prepared to help the machine users by providing them with the best advice available.



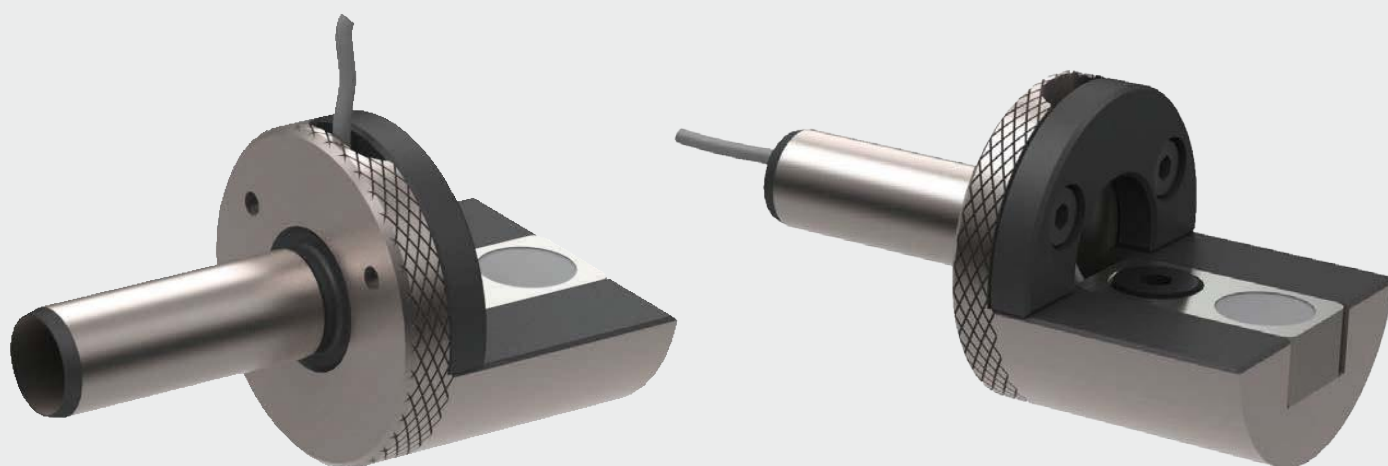
WIBEMO
OUTILLAGE DE PRÉCISION
1967 - 2017

MOWIDEC-TT

CENTERING SYSTEM
MAKES YOUR LIFE EASIER!

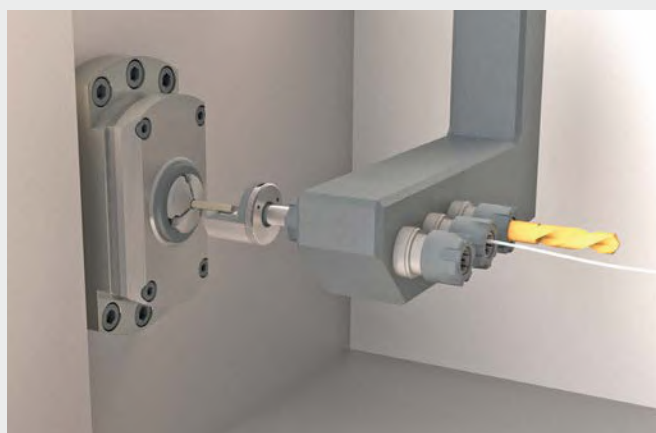
NEW OPTION

CENTERING OF TOOL HOLDERS



ACCURATE – EASY – FAST

VIDEO ► www.wibemo-mowidec.ch



Let's now look at some of the units offered:

Central lubrication system

Among the solutions offered, there is a central lubrication system for the Deco type machine. It makes work much easier and hence more comfortable.

In fact, the lubrication both of the axes and of the ball screws tends to get a bit tedious and thus to be forgotten or neglected. This system now eliminates any manual intervention for lubrication and saves valuable time.

Automatic lubrication system

'Well-considered' lubrication will cut the production cost by effectively reducing maintenance and repair. It saves lubricant and extends the service life of the mechanical parts; the operational safety of the machine is thus enhanced. Using only the amount of lubricant that is strictly necessary for proper functioning will implicate significant savings and productivity gains.

Oil that is kept clean

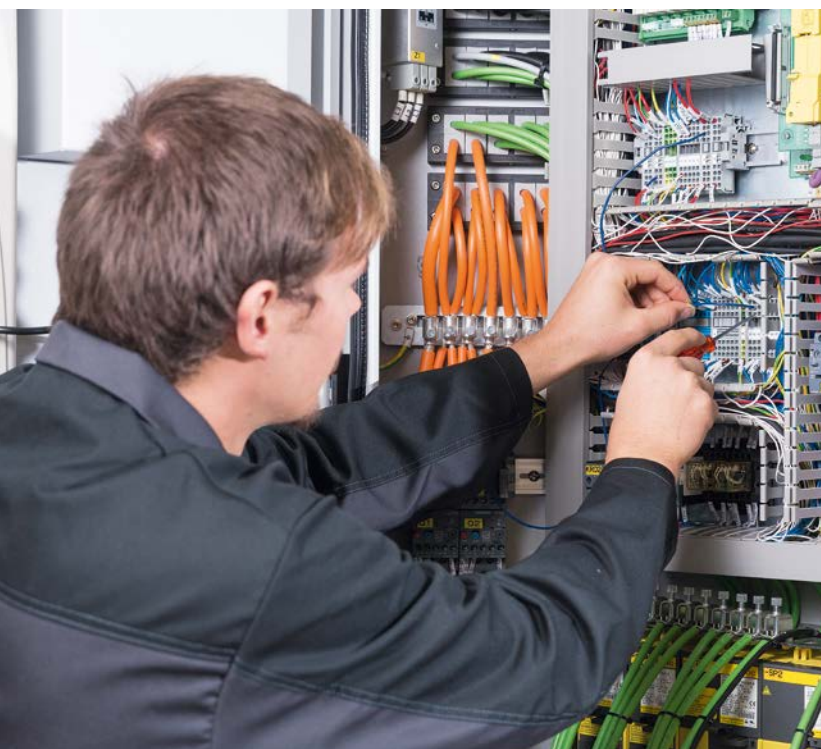
Similarly, the pinpoint coolant supply is one of the machining parameters having direct impact on productivity and machine downtimes. In this regard,

Tornos offers a compact and efficient solution - the Fluid Manager. This device includes an additional 500 liter tank and hydrostatic paper filter. It can come equipped with up to two high-pressure pumps. An oil/water heat exchanger is provided as well. Depending on the plant configuration, the device can be connected to a centralized water network via its interface while a water chiller can be added if necessary. The unit continuously filters the entire cutting oil of the machine. Cleaning is minimized, the tool life is extended and the surface finish is improved.

This technology proves to be a compact and efficient solution for bar turning where heavily soiled oils can be optimally treated.

Oil mist filtration systems

Any oil mist that can develop particularly during roughing or when working with high-pressure pumps must be extracted. In fact, the air quality is one of the most important factors to be taken into account in order to guarantee a clean, healthy and safe working environment. Tornos offers a full range of oil mist filtration systems that are able to meet any demands. The extractors are based on the centrifugal principle. A ventilator sucks in the mist and directs it towards



the post-filtration system that can be either mechanical or electrostatic. Depending on the machine, the extraction capacity is between 400 and 2,500 m³/h.

The machines by the Swiss manufacturer can be equipped with a large variety of accessories, the most important elements of which are described below. Chip management is a recurring topic that every responsible manufacturer should be particularly aware of.

Chip management and control of chip formation

"We developed a new cutting technology, which is both universal and highly effective and enables virtually all part geometries to be machined from the most varied types of materials," Matthias Damman declares and makes clear that his solution is able to cope with every demand. Thanks to the Active Chip Breaker, chips are broken in a controlled manner, thus eliminating machine downtime caused by the accumulation of chips.



This system offers immediate control of the formation of chips in any type of material, including materials that are difficult to machine such as Inconel®, cobalt-chrome, non-ferrous materials, plastics, stainless steels as well as titanium and titanium alloys.

Continuous chip disposal

The use of an appropriate chip disposal system for the materials to be machined and the machining

process to be used is indispensable. One of the systems offered is the chip conveyor that can cope with all types of chips no matter how tough they are.

Further upgrades such as an LDC screen, LED lamps or even a better enclosure can be provided as well. Actually, everything is possible and Tornos is able to completely revamp an old machine according to the customer's requirements and wishes. "Our service department will be pleased to advise you and, where required, to elaborate a tailored solution for your specific problem and for the goals you want to achieve with your Tornos machine," Matthias Damman concludes.

Tornos develops technologically advanced and customized CNC automation solutions that offer added value for the customers. The company's mission and pronounced objective is to meet the productivity requirements. Tornos' customers, users and partners are the direct beneficiaries of this expertise that enables them to boost their competitiveness.

If you want to learn more about the possibilities of machine upgrades, do not hesitate to contact Tornos.

tornos.com



3-position guide bush: a most interesting solution to meet the market challenges

3-position guide bushes are self-adjusting bushes. Even if they are not widely known, they are able to adapt themselves to the exact bar tolerance (between h9 and h11) at the machining position. The beneficiary is the customer who can save both time and money.

The three-position guide bush can automatically guide the bars and close and open as desired by the user. It is of particular interest for those tasks where the material price balloons. In case of expensive materials, cost savings will be substantial.

Considering the challenges you have to face in the market today, this solution can be delivered promptly. The 3-position guide bush can easily be adjusted and installed on the machine.

The device rotates and has a pneumatic coupling that enables the air pressure at the closing plunger to be changed. The machine will be equipped with a number of solenoid valves and control is done through M codes. M codes can be defined for the bar guiding function as well as for the bush closing and opening functions. The "adjusted" position can be changed using a pressure reducer. The collet is replaced from the front. This guide bush is easy to use and boasts high flexibility. With the guide bush clamped, the machine has a higher rigidity for milling tasks.

This option is already used especially by companies of the medical sector. With the guide bush open, material loading and scrap removal are facilitated whereas in the guiding position, material diameter deviations of up to 0.5 mm can be compensated for without compromising the accuracy. The clamping force can be adjusted depending on the kind of machining to be performed. The clamping length of 50 mm is really exceptional compared to a standard guide bush (25-30 mm) and guarantees a perfect clamping parallelism.

A new patented guide bush has seen the light of the day. Without needing more space than the devices available in the market, the three-position guide bush from Tornos stands out by its ability to guide bars with a diameter of up to 32 mm (compared to 25.4 mm) while exerting the same clamping force. In particular, this type of guide bush can handle bars having an irregular surface; such bars do therefore no longer need to be ground which implies significant time savings.

Benefits

- Enables bars with a tolerance of h9 to h11 to be used and therefore makes material procurement easier.
- Eliminates the need of bar grinding.
- Thanks to the pneumatic adjustment of the guiding position, it's no problem to clamp bars having an irregular surface.
- The long clamping length removes potential bar scratching issues. Machining processes involving the Y axis can be carried out without causing vibration or other problems that are usually linked to a conventional guide bush without locking function.
- Pneumatic clamping is the best choice when it comes to handling delicate material that tends to "stick" in the guide bush (e.g. titanium).
- Thanks to the clamping length, the bar can be retracted (45 mm) after a pre-machining process without impairing the bar retention capability. This feature is especially used for the machining of bone screws.
- Bar feeding: the bar can be clamped and unclamped by means of the guide bush and retract and advance with the aid of spindle and Z1-axis. Therefore, the bar can be fed without being supported by a tool holder.

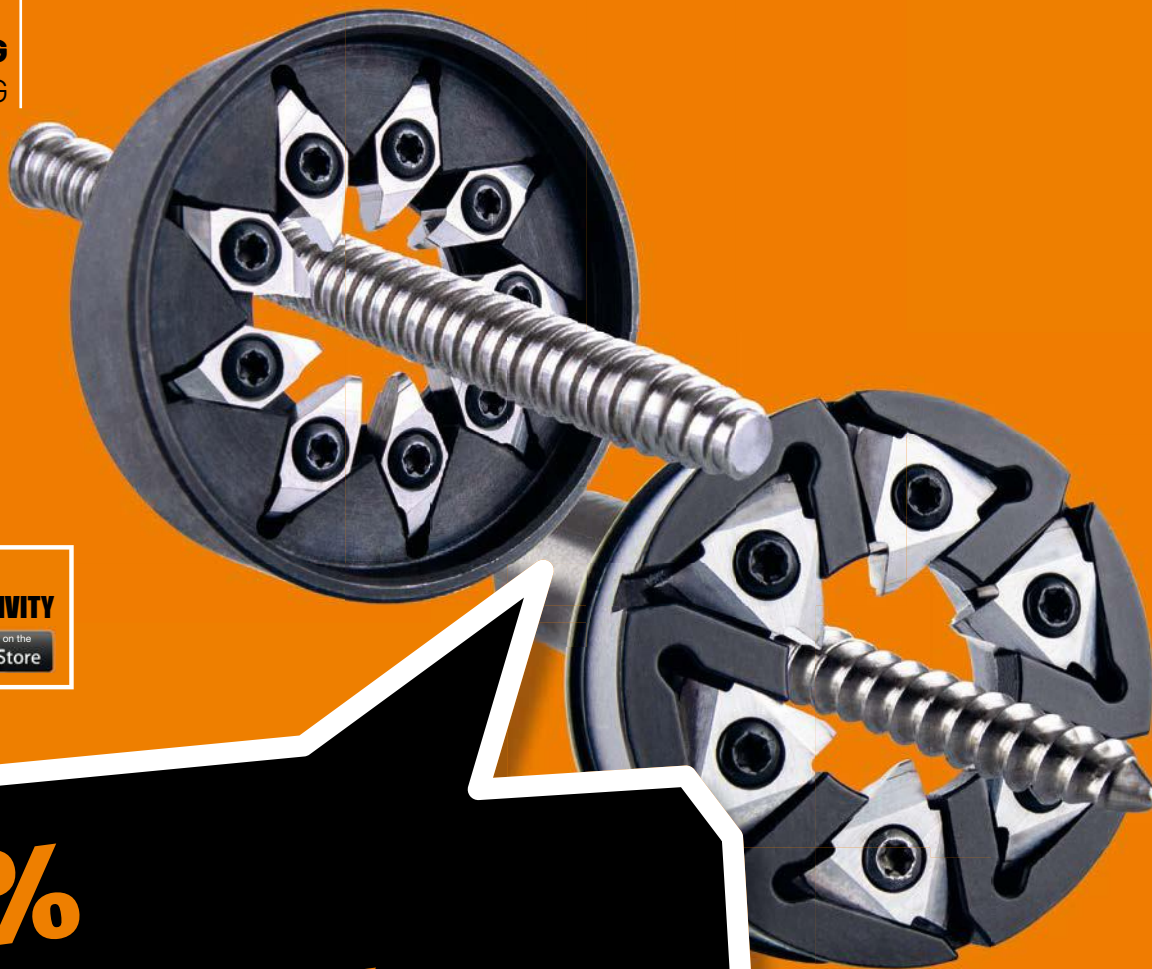
Technical specifications

- Bar capacity: 5 to 32 mm
- Max. speed: 8,000 rpm
- Collets used: special C42 double-taper collet by Dünner
- Max. clamping force at 5 bar: 1462N
- Adjustment and programming: by means of M functions – open / close / adjust (guiding)
- Pressure adjustment: by means of a pressure reducer (1 to 5 bar)

Compatibility: Sigma 20 / Sigma 32 / Swiss ST 26 / Deco 20 / Deco 26 / EvoDeco 20 / EvoDeco 32 / SwissDeco

In addition, a similar system is already available for EvoDeco 16 machines and will be offered soon for CT 20 machines as well.

THREAD WHIRLING WITH SCHWANOG



DOWNLOAD THE APP NOW:
SCHWANOG PRODUCTIVITY



-36 %
“**MAKES EVERY
BOSS SMILE!**”

Unnecessarily high part costs are our natural enemies. With our 6, 9, and 12 cutter thread whirling systems we successfully lower part costs to an absolute minimum in every project.

Make your boss smile:

- ❑ Up to 40% in part cost reduction
- ❑ Significant increase in tool life
- ❑ Maximum precision and surface finish quality

By the way:

We offer the ideal solution
for any application!



SCHWANOG

www.schwanog.com



"What I enjoy most is dealing with people. It's literally part of my DNA to exchange views and impart knowledge and I find this very enriching and inspiring."
 Laurent Glauser, Tornos Academy.



"In a training course, you will meet a whole gamut of characters. You must find the right niche to make sure anyone can benefit from the training and find room for improvement." Thierry Frund, Tornos Academy.

Knowing how to convey *knowledge and expertise*

In trying to constantly provide customers with the highest-quality service available, the Tornos managers decided last year to thoroughly review the company's training and application concepts.

That's how the Tornos Academy came into being established.

A few months after it had been established, the four current instructors at the headquarters in Moutier have agreed to share their experience both in the field and in the classroom. Let us introduce you to four enthusiasts and their experiences.

TORNOS

Tornos SA
Industrielle 111
CH-2740 Moutier
Switzerland
Tel. +41 32 494 44 44
contact@tornos.com
tornos.com

In addition to customer training and application courses, Tornos now offers new services that are aiming at getting various machining processes under control. With these training courses, the company wants to address issues for both new and existing customers. The services offered will encourage customers to try new things, for instance, to enter new markets they didn't dare to take on in the past. Adriano Spada, Thierry Frund, Simon Lovis and Laurent Glauser guide manufacturers step by step through the acquisition process for such new processes.

Adriano Spada

Adriano Spada joined the Tornos Academy at the beginning of 2019. By accepting the job as a Tornos training manager, he took up a new challenge. For someone passionate about mechanics, it's a motivation to permanently move forward by learning new

things. Incidentally, he doesn't hesitate to leave his comfort zone when necessary to advance and make progress.

"Throughout my professional career, I have always set myself clear goals and I have succeeded in achieving them. The same applies to the training program we offer. I say as I do, but this is also true the other way round, I do as I say. In doing so, I'm paving the way for our customers who want to unleash the full potential of their machines." After 4 years of apprenticeship and a stay at the Tech in Fribourg, Adriano Spada became workshop manager at the age of 24. From one job to the other, he quite naturally accepted more and more responsibility while continuously strengthening his interpersonal relationships. "For me, the working atmosphere is essential. We must be coherent – not only in the relationship with our customers, but also among our team. We are working well as a team and we are striving for maximum efficiency to enable our customers to learn and create new opportunities."

Liberty-loving as he is, Adriano Spada enjoys sailing and the thrill of riding his Harley. Between the two extremes of voluntary solitude and strong relationships, he finds the perfect balance. And this is just how he perceives the Tornos Academy: while he is the guide and scout and leads the way, each trainee is given the liberty to develop his full potential.

Thierry Frund

Thierry Frund has already been working as an instructor for Tornos for several years. Having a passion for mechanics, the instructor who is responsible for the courses offered by Tornos, enjoys setting out to discover and conquer new territories. As an ardent voyager, he loves going on tour with a simple backpack and exploring new horizons. He describes himself as curious in the true sense of the word, which is more of a quality than a deficit. It is this persistent interest in everything that surrounds him that guides him in everyday life and enables him to constantly improve himself.

And what's his secret for providing optimum training? Accepting people as they are. "In a training course, you will meet a whole gamut of characters. You must find the right niche to make sure anyone can benefit from the training and find room for improvement. At the first sight, some people appear to be more difficult than others, they have more questions than others and cast doubt on certain

operations and processes. That isn't always a problem in itself, since this is just where the principal challenge resides - to be ready to respond to the trainees and to assist them in becoming independent and secure when it comes to executing their tasks."

The passion of Thierry Frund is contagious. He knows how to captivate his audience and to show what he is capable of in the field. However, he hasn't always been dreaming of becoming an instructor. "I loved my job, just as I loved working hands-on, advancing right to the heart of the machine and understanding how it works. That's what I love, what I like, what I'm living for and what makes me advance." His fascination for his job encouraged him to impart his passion to others, and that's what he is doing almost every day with an infectious enthusiasm.

Simon Lovis

The professional career of Simon Lovis is closely connected to the development of Tornos. After having changed from Moutier to Courrendlin, he finally returned to the Tornos headquarters when Gilbert Berdat asked him to become an instructor at the apprentice training center. With the arrival of numerical controls, he got the opportunity to become a customer trainer and he assists and listens to customers in order to jointly find the optimum niche and the proper knack to get various machining processes under control. In this ever-changing environment, products are changing and you are forced to adapt perpetually.

"However, there is one thing that really doesn't change – the interaction with people. I love exchanging views and sharing my knowledge. Incidentally, that's why I decided early on to improve my language skills. At first, I learned German by way of evening classes, followed by English and Italian." As a passionate bird-watcher, he travels much to pursue his hobby and he enjoys discovering new landscapes and the nature he is so fond of. "It's just like the seasons, this job is anything but monotonous and time flies." Even if his decision to do an apprenticeship in this field was based rather on reason than on the heart, today, he is almost looking back emotionally on the path he has taken and the road he has traveled. At that time, the field of mechanics provided many opportunities and was a business with a bright future. This is actually still true, even if society is constantly developing. Today, few people opt for a job in order to practice it throughout their full

professional career. And what's the thing he particularly likes about his job? It's the possibility to proceed from theory to practice within a few hours and thus to demonstrate that classroom explanations can really be put into practice on the machines. "Vast preliminary preparations are required and substantial information must be communicated. Yes, this may be stressful sometimes; little by little, I get my bearings though." And the fact that he always returns to work with a smile on his face shows his satisfaction with having done a good job.

Laurent Glauser

After joining the Tornos training team less than two years ago, Laurent Glauser decided to tackle this new challenge just as if he were skiing - with vigor and enthusiasm. Having been a certified skiing instructor at the skiing school in Wengen for more than 27 years, it's his credo to share the things he loves with others. "What I enjoy most is dealing with

people. It's literally part of my DNA to exchange views and impart knowledge and I find this very enriching and inspiring."

Laurent Glauser grew up at the birthplace of the bar turning industry, in Court. From his early childhood, he has proved to be more the hands-on type than the intellectual type. He spent most of his leisure time after school building small-scale models or fixing bikes. So, it's no wonder that he became a precision engineer. After having spent 20 years in the bar-turning industry, he felt like doing other things while remaining in the same field. He likes to promote a product by advancing to the heart of the machine.

"When practicing, you get the best instructions. Skiing works the same way. When I was 5 years old, my parents put me on skis for the first time in the Alps. It goes without saying that I have been addicted to mountains and sports ever since. However, I feel a passion for training and imparting my skills as well." Asked about what he likes in particular at Tornos, he says that no two days are the same. "We meet people

The team from the Tornos Academy in Moutier (left to right): Laurent Glauser (trainer), Adriano Spada (head of training), Thierry Frund (trainer), Olivier Rammelaere (Marketing Intelligence Manager responsible for the Tornos Academy project), and Simon Lovis (trainer).



from all over the world and that's really enriching. Even if it's my job to teach them certain subjects, I learn from them as well. I constantly improve by communicating with them. In fact, my biggest concern is that I don't keep pace with the technological progress since everything is developing so quickly today. It is therefore essential to keep up to date and to keep yourself informed."

Tailor-made training...

The instructors at the Tornos Academy are always at the cutting edge, ready to convey their knowledge and expertise. Focused on respecting and listening to others, each of them has his own perspective, personality, background and professional career. Together they are the face of the new Tornos Academy. They are willing to provide anyone interested with a targeted and tailor-made training package that enables them to respond to the needs and expectations of customers. It also opens up new perspectives and

opportunities unexplored so far. Learning to see, learning to understand and maybe even learning to learn – this is a mission that lives up to the goals of this training.

... for our unique customers

For Tornos, every single customer deserves particular attention at all times. That's why the company promotes dialog and exchange of views and customizes its training courses with the needs of the customers in mind.

Our subsidiaries can also offer specific services adapted to the market and segments of each end user. The respective training is provided both at our sites and at our customers' facilities. We will be pleased to introduce further Tornos Academy instructors to you in future editions of the decomagazine.

tornos.com



serge meister  **sa**
PRECISION CARBIDE TOOLS



www.meister-sa.ch



**Fabrique de burins
de décolletage**

**Hartmetall Drehstähle
Hersteller**

**Manufacturer of carbide
tools for lathes**



SARL BINETRUY FRERES - 3, rue des Essarts - BP 43 - F - 25130 VILLERS LE LAC
Tél. : + 33 3 81 68 02 21 - Fax : + 33 3 81 68 04 66 - cardur@binetruy-freres.com - www.binetruy-freres.com

Tungsten carbide and diamond precision tools

DIXI
polytool



DIXI POLYTOOL S.A.
Av. du Technicum 37
CH-2400 Le Locle

Tél. +41 (0)32 933 54 44
Fax +41 (0)32 931 89 16

dixipoly@dixi.ch



Enjoy Swiss Precision

www.dixipolytool.com



Quality awareness and quality assurance are top priorities at Moser.

MULTISPINDLE TECHNOLOGY PUT TO OPTIMUM USE

Class en masse

What is it that distinguishes the German Mittelstand?

A visit to Richard Moser KG Präzisionsdrehteile in the Swabian municipality of Bubsheim answers this question more illustratively than many a research study. It is by no means coincidence that this German success story is tightly interwoven with the Swiss lathe manufacturer Tornos.



Richard Moser KG
Präzisionsdrehteile
Königsheimer Straße 11
78585 Bubsheim
Germany
Tel. +49 7429 9315-0
Fax +49 7429 9315-50
info@moser-drehteile.de
moser-drehteile.de

"If you want to be successful on the Heuberg, the stronghold of the turning industry, you have to be better than everyone else." This is the attitude that drives Richard Moser, Managing Director of Richard Moser KG Präzisionsdrehteile. When he took over the family business in 1993, he had four employees and ten machines. Working for his company today are 140 specialists and 100 lathes, 50 of which are multispindle stations. There are many reasons for this incredible growth. For one thing, Moser has consistently employed the newest technologies from the very beginning. It would seem that it's in his blood. His father and his uncle were among the first to bring multispindle technology onto the Heuberg. Shaped by the lessons learned, Richard Moser is at the very forefront of this field. Complex workpieces in demanding materials of superlative quality produced on a mass scale – these are his strengths. They are what the team and machine inventory of Moser Präzisionsdrehteile are geared towards. A sense of pride resonates when Enrico Barbagallo, a young project planner at Moser, explains: "We manufacture



Michael Hauser, CEO of Tornos (left), and Bruno Allemand, Head of Sales and Marketing at Tornos (right), pictured at the ceremonial handover of the 300th MultiSwiss 6 x 16 to Sandra and Richard Moser.

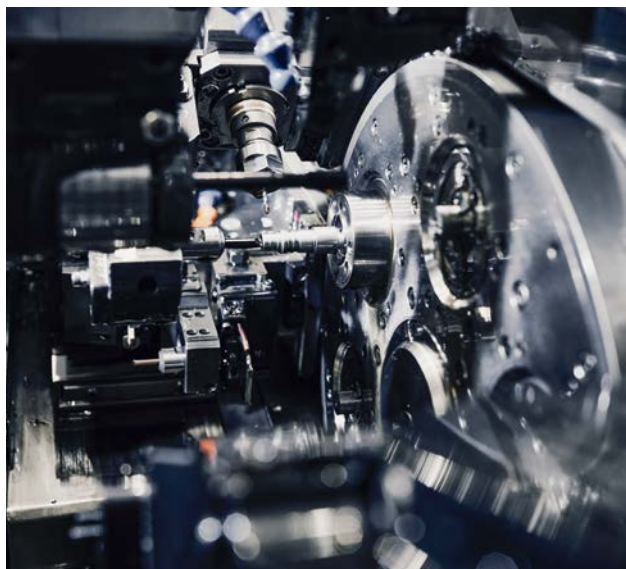


“We manufacture parts on our multispindles that hardly anyone else would dare attempt.”

parts on our multispindles that hardly anyone else would dare attempt.” The automotive industry, one of Moser’s main customer bases, is currently in search of new high-strength materials to optimise parts for the engine management system. “That’s why we are increasingly processing high-alloy steels costing sometimes up to 18,000 euros per tonne,” Enrico Barbagallo further elaborates. The make-ready stage in particular calls for a great deal of intuition. This is where the experience and flexibility of the young team come fully into play. “When we’re hot-pressed, we can make a multispindle ready in two to three hours.” For initial samples, the multispindles at Moser are even set up for 100 parts, while, in series production, the multispindles are worth prepping for quantities of even 20,000 parts. This speed and flexibility is what customers appreciate and has been integral to their keeping faith with the company for many years.

ASKMO is the magic word

Briefly returning to our initial question, one of the qualities that distinguish Richard Moser is entrepreneurial courage. To emphasise this, he remarks: “I have the advantage that, with the exception of my wife, Sandra, who is actively involved in the company, I don’t have to ask anyone for permission or seek the agreement of this or that committee.” For this reason, often enormous investment decisions are made in a short time and in unconventional ways. Like at the turn of the millennium, for example. Industry 4.0 wasn’t even born when Sandra and Richard Moser decided that they would need a new ERP system. Instead of settling for the existing solutions of major software providers, they had their own system programmed, employed IT experts and, today, are profiting from a system unlike any other. As all



Even with all the latest developments in technology available, Richard Moser still favours the cam-type SAS 16 from Tornos.

machines are linked to the system, Moser always has an up-to-date overview of each and every production job. The hardware equipment of all the machines alone cost around half a million euros. ASKMO supplies up-to-date information on production times, machine capacity utilisation and production quantities. In the flow of goods, the production status of the goods is clear to see at any time, which means that every employee can immediately provide the customer with information about the status of their order. All documents and the current production drawing are stored in the system; the initial samples, 8D reports, APQP and process flows are similarly integrated. "Even while skiing back in 2004, I could check my mobile phone to see whether all machines were running," Richard Moser reflects happily. Another benefit of ASKMO is that it always keeps pace with the growth of the company. As the programming is kept in-house, additional features and modifications can be implemented at any time.

A permanent connection

Ever since his father and uncle purchased the first Tornos multispindle turning machine – an AS 14 – in 1968, there has been a close partner relationship between Moser and the Swiss lathe manufacturer. Even today, Richard Moser is still fascinated by its successor model, the SAS 16, and regrets that these machines are no longer being made. "This quality, productivity and reliability is so rare to find these days." He is delighted, however, that, with the MultiDeco and the new Multiswiss, Tornos has been

able to continue with tradition. These machines are almost as productive as the SAS but, of course, they are fundamentally more versatile. Richard Moser is particularly keen on the MultiSwiss. He saw it for the first time at the EMO in 2011 and purchased one there and then, making him the first customer. A few weeks ago, he took delivery of the 300th machine of this type that Tornos has made, expanding his inventory to include 15 MultiSwiss machines so far. Richard Moser has already ordered his next three and, by doing so, continues to contribute to the triumphant success of this model.

Making its mark on the market

The MultiSwiss is a genuine revolution in the multispindle segment and has stamped its mark on the market. It was launched in 2011, when multispindle technology was still considered highly complex, and is known today for its first-class ergonomics and machining performance. Conceived as a solution to bridge the gap between multispindle and single-spindle turning machines, the MultiSwiss 6x16 features six spindles. The spindle drum is positioned by means of torque motor technology. The cycle times of this speedy solution rival those of cam-controlled multispindle automatic turning machines.

Thanks to its hydrostatic mounts, the MultiSwiss achieves outstanding finishes (Ra 0.15) and extremely smooth running performance even with materials that are difficult to machine. It is also distinguished by its generous tool package. Unlike some other



"If you want to be successful on the Heuberg, the stronghold of the turning industry, you have to be better than everyone else." This is the attitude that drives Richard Moser, Managing Director of Richard Moser KG Präzisionsdrehteile.





machinists, Richard Moser also finds the compactness of the machine with its 1.5 m bar stock to be the perfect size.

Above all, however, you don't need to be an expert in multispindle turning machines to program the MultiSwiss 6x16. Set-up and start-up are a breeze and it is easy to program like six machines with two linear axes. This user-friendliness and perfect ergonomics is what Enrico Barbagallo finds so attractive, but Sandra Moser does see one small downside: "Those who work on the MultiSwiss for the first time tend to prefer not to work on any other machine afterwards."

No fear of the future

The turned parts industry currently faces some major challenges. Geopolitical upheavals, the radical change in the automotive industry, new technologies and the economic downturn are also leaving their mark in this sector. Rather than moan and groan, however, Richard Moser reveals further virtues of the German Mittelstand. Strong technical understanding, vision and optimism. In an era when some competitors are reining in their spending, Moser is consistently investing in improvements to his processes and workflows. Thanks to a special energy efficiency programme, he expects to make appreciable savings over the next few years. To this end, for example, the cooling of the machines has been coupled to their capacity utilisation, the heating/cooling circuit closed and a photovoltaic system installed on the roof. Another

measure involves integrating upstream and downstream processes, such as hardening, coating, etc., into the firm's own value creation chain. In addition, there have been investments in a residual contamination testing laboratory and in several cleanrooms. As a result, the company is in a position to fulfil specific customer requirements. These are strengths appreciated by customers outside Germany, too, and Moser also currently supplies a large number of customers in Europe and further afield. Even a Chinese business belongs to the customer base for workpieces made in Bubsheim. He had tried to establish production in China a few months ago, but ultimately stayed with Moser. This reinforces the validity of Richard Moser's strategy and proves him right. He will continue his chosen path of running a high-tech company with flat hierarchies and courageous, forward-looking decisions. Tornos, for sure, will be one partner standing by his side.

moser-drehteile.de

Pinces et embouts Zangen und Endstücke Collets and end pieces

for

LNS, TRAUB, FMB, IEMCA, CUCCHI
TORNOS, BECHLER, PETERMANN



ANDRÉ FREI ET FILS SA

Rue des Gorges 26
Tél. +41 32 497 71 30
www.frei-andre.ch

CH-2738 Court
Fax +41 32 497 71 35



From left: Jordi Roy (general manager of Vilardell Purti), Isaac Acrich (general manager of Tornos Technologies Ibérica), Xavier Palau (technical director at Vilardell Purti) and Wifred Latorre (sales manager for Catalonia and Levante).

VILARDELL-PURTÍ:

An expert in precision

Vilardell-Purtí is a global leader in the field of high-precision turning.

Vilardell Purtí

Vilardell Purtí, S.A.
 Polígon Industrial Santa Anna, 1
 Carretera Navarcles, 107
 08251 Santpedor, Barcelona (Spain)
 Phone +34 938 272 720
vpsa@vilardellpurti.com
vilardellpurti.com

AVINENT
 SCIENCE AND TECHNOLOGY

The company specializes in the production of precision parts with a high added value. The enterprise is headquartered in Catalonia, not far from Barcelona, and comprises two divisions, the Medical Division and the Industrial Division. Here, we present the Industrial Division.

According to Jordi Roy Torras, Manager of the Industrial Division, Vilardell has specialized in the production of highly complex parts for some time. "This is our core competence that we have developed year after year and part by part." Vilardell is a company that has been built on profound know-how and particularly on a highly skilled staff.

"Our staff is our human capital and it is very important to us," Jordi Roy Torras explains. "Almost every day, we are faced with new challenges. Even with the best machines, we wouldn't be able to tackle these challenges, if we had not such a strong team! Our customers know that they can count on us and on our expertise when it comes to meeting any machining challenges. We have to keep our minds open and focus on innovation as one of our key

“The machine is really doing well and the fact that it is equipped with a container comprising all peripherals is a key advantage for us.”



Tornos and Vilardell Purti – a long-standing collaboration.

values. Each and every one of us has to remain innovative irrespective of his or her position or function within the company, that's essential for our business. We are determined to provide our customers with comprehensive service and are collaborating closely with them. We try to understand their needs and provide advice to jointly optimize the machining processes. Over time, we have gathered a profound expertise in our key markets and are able to efficiently advise our customers in various fields, be it in the automobile or the aerospace industry or in any other industrial sector requiring precision-turned parts.”

Ever-increasing specialization

“The focus on high added-value products will, going forward, require us to integrate new technologies, such as grinding between centres and electrochemical deburring. We also pay special attention to quality”. Vilardell holds ISO 9001 and IATF 16949 certification. Vilardell values the key importance of the environment. This is demonstrated by the fact that our company has also held ISO 14001 certification for many years and we are proud of our eco-friendly use of resources.

Vilardell has an ISO Class 8 cleanroom that is provided with appropriate equipment to carry out the cleaning tests in accordance with the ISO standards and with the specific customer's specifications.

A long-standing collaboration with Tornos

Vilardell employs a staff of 165 and boasts an impressive inventory of equipment. The company owns a large number of Tornos machines. In terms of mechanical technology, Vilardell still has a small number of single-spindle cam machines (T-4, R-10 and MS7) and a large number of multi-spindle machines (AS 14, SAS 16 and SAS 16 DC). In terms of numerical control machines, the company's fleet includes the Deco 10, Deco 13, Deco 20, Sigma 20 and EvoDeco 16 models.

Just recently, Vilardell purchased a MultiSwiss 6x16 machine

What made Vilardell opt for this machine?

“The choice was driven by rational motivation since, in terms of technical specifications, the machine is simply the best in the market. However, we had also to consider the restricted space in our plant. The MultiSwiss boasts the best footprint and is definitely the most compact machine in the market. At first sight, this small footprint may seem to be trivial. However, it makes the difference. The machine is really doing well and the fact that it is equipped with a container comprising all peripherals is a key advantage for us. The machine works irreproachably and the peripherals are very well integrated.”



Vilardell Purti develops its own monitoring solutions.

"We are extremely satisfied with the machine performance. The hydrostatic features work wonders and we are able to achieve an excellent surface finish whereas the tool wear is well below the wear of conventional machines. In addition, the machine boasts excellent ergonomic features. The operator can really enter the machining area without difficulty. The tools can easily be installed in the machine without the need for the operator to lean into the machining area and machine set-up can be realized in no time. The MultiSwiss does not only offer excellent performance but also a high ease of operation. Thanks to its high productivity, the machine enables us to multiply our



performance per square meter while guaranteeing an outstanding part quality both in terms of precision and surface finish."

It should also be noted that the collaboration with Tornos Iberica is excellent and that their service stands out for its high responsiveness. "This really is a combination that pays off for us."

vilardellpurti.com

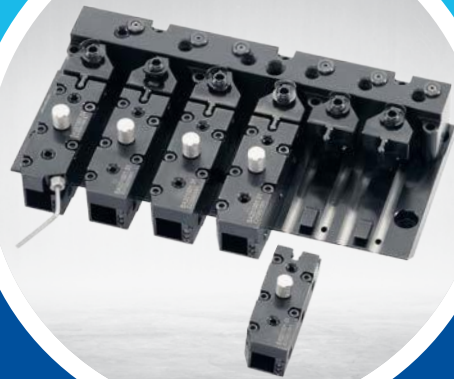
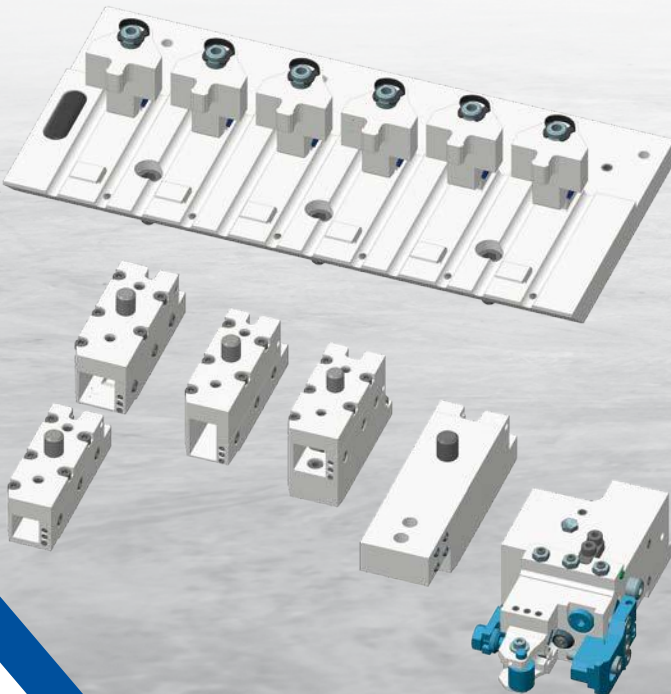
MAXIMUM
PRECISION

MINIMAL
SETUP COSTS

ELIMINATE
UNPRODUCTIVE
SET-UP TIMES!



For your swiss-type automatic lathe: One base holder –
different quick-change holders / variety of machining options



THE GWS-TOOLING SYSTEM FOR "SWISS TYPE" MACHINES!

System based changeover

- Precise positioning and highest repeatability due to proven GWS-column guide
- Pre-settable off the machine
- Quick changeable
- GWS-tool holder can be used for various machine types
- Integrated targeted coolant supply
- Standard shank tools applicable independently of cutting insert supplier

www.goeltenbodt.com



More? Scan me!

www.dunner.ch sales@dunner.ch

DunnAir made by DUNNER

Ajustement précis de la force de serrage grâce à la clé Micrograd™



Precise adjustment of the clamping force with the Micrograd™ Dial Wrench

Rigidité améliorée grâce à une force de serrage appliquée plus proche du point d'utilisation



Improved rigidity due to applied clamping force closer to point of use

Pince normale ou avec grande ouverture en standard et sans changement de douille de 0.2 à 10mm



Regular or over-grip collet as standard and without changing the sleeve for any size 0.2 - 10mm

Batteement après reprise inférieur à 5 µm



Concentricity guaranteed to 5 µm (.0002")



MASA
MICROCONIC

MASATOOL.COM

Exclusive distributor for Switzerland and Europe*

DUNNER

www.dunner.ch - sales@dunner.ch - +41 32 312 00 70

* Except DE & GB

Scan to download the e-catalog





Stefano Buonpane and James Kiener (back) with their Swissnano machines, perfectly suited to the demands of the watchmaking industry.

ALMADEC AND PRECISTEEL:

Speed, serviceability, efficiency

Almadec was founded at the end of November 2018 as a newcomer in the bar-turning world by Stefano Buonpane in Brügg, Switzerland. Annexed to the premises of Buonpane's first company named Precisteel; Almadec is gradually being built around two SwissNano 4 machines. In fact, the Managing Director decided to establish the new company by centering its production on the precision and reliability of Tornos machines that are known and recognized for their efficiency, stability and outstanding agility.



Almadec Sàrl
Moosweg 1
CH – 2555 Brügg
Tel: +41 32 374 45 00
info@almadec.ch
almadec.ch

A passionate designer, an experienced bar turner

Almadec is first and foremost the story of passion – the passion of Stefano Buonpane for mechanics in general and for high-precision engineering in particular. He grew up in Biel/Bienne, he is descendant of a Neapolitan family and knows to welcome his customers in a way that is typical for this region, with warmth and professionalism. Always attentive to his customers, Stefano Buonpane understands them, listens to them and responds to their needs. And it is this state of mind that led him to establish his first company, Precisteel, in 2005.

"After having gained experience for 10 years with ETA, I decided to go into business for myself. In the beginning, I was alone. Today, we are a strong team comprising about fifteen employees that is working day in and day out in various target segments." Precisteel mainly produces parts for industrial machines, for the connector business and for watchmaking. Especially for the latter target market, Stefano Buonpane decided to invest in new machines and to

“These machines have an excellent reputation. When I bought them, I already knew that I made a good investment.”

purchase SwissNano 4 machines. A Deco 10 machine has also been ordered to make sure that in terms of technical capabilities nothing is left to be desired by the customers. Another CNC machine finally rounds off the machine inventory. “These machines have an excellent reputation. When I bought them, I already knew that I made a good investment. My customers often request various special parts that we can now manufacture on these machines. And I am intent on continuing along this successful path.”

Premises with state-of-the-art equipment

Almadec's spacious premises in Moosweg 1 in Brügg, Switzerland are geared to accommodate an even larger machine inventory and the brand-new equipment can cope with the upcoming demands. “We make suggestions and conduct a feasibility study. There is no challenge that can frighten us.”

Stefano Buonpane is characterized by a strong entrepreneurial spirit. He has built his family-run business by his own hands. The job order production of mechanical high-precision components is his profession and that of his two companies, Precisteel and Almadec. He makes his know-how available to the customers and his motivated staff is all able to set machines for complex workpieces, from prototypes to large batches. He is a strong partner as regards any machining tasks at hand, be it turning, milling, cylindrical grinding, drilling, internal and external grinding and finishing or even assembly.

Almadec's origins

How did he conceive the name of his new company? The name is composed of the two initial letters of the first names of his two sons, Alessio and Mattia, followed by the three initial letters of the French word



At Almadec, Stefano Buonpane is focused firmly on the future... and maybe, one day, his children will take the reins!

for bar turning – décolletage. “I founded this company based on the vision of its future and its permanence. Precisteel is a family-owned enterprise, and the same is true for Almadec. And it's an important asset I am intending to invest in.”

As a side note, Stefano Buonpane even decided to personalize his new Tornos machines by giving them the names of his two sons. So, in black letters on gray background, the enclosures of the machines are labeled with the forenames Alessio and Mattia, respectively.

Even if his sons are still very young, he very much hopes that they will succeed him down this road. For now, he is building and conceiving a company according to his own wishes day after day. “Little by little, I'm going to complement my staff; just recently, I hired an experienced bar turner who had worked in the watchmaking business before. The forecast is favorable and we are all making progress by doing our best every day.”

Stefano Buonpane has every reason to be confident. 13 years of experience with Precisteel enable him to lay solid foundations for Almadec – the latter being a name that soon could earn a reputation and its stripes especially in the watchmaking sector, thanks to powerful high-precision machines from Tornos.

almadec.ch

ST200

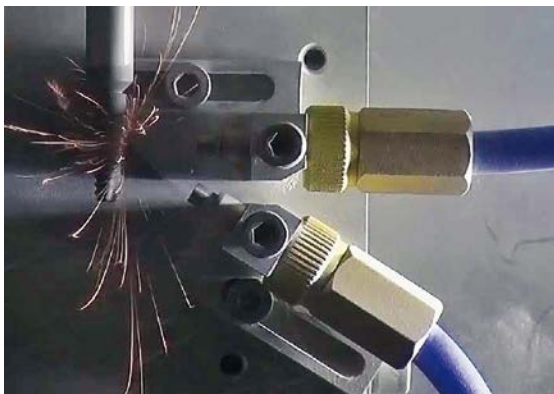
PROGRAMMABLE SAND BLASTER

The ST200 system is an innovative solution for medical screws and dental implants texturing using abrasive media blasting.

The machine's operation is fully automated and programmable, using a friendly and easy-to-use touch screen interface.

With an intense and precise blasting, the machine gives excellent results, with minimal blasting material usage.

The machine's operation is very quiet and has an advanced air filtration system, which guarantees very clean and quiet operation. This makes the machine suitable, not only for industrial spaces, but for office spaces as well.



Machine Video:
www.rotenberg-is.com/ST200/



The project to install the Swiss GT 13 machine at Laguna was undertaken by Politek Co Ltd., the Tornos distributor in Russia.

LAGUNA CO LTD:

*Famous Saint-Petersburg plant Laguna
invested in Tornos Swiss GT 13*

ergonomic, flexible and versatile

Almost 21 years ago Laguna was founded in Saint-Petersburg, Russia, as a manufacturer of small workpieces. It now has more than 100 machine tools that include 25 Tornos swiss type lathes. In its very beginning based on the technical knowledge of talented Russian engineer-rationalizer Yuriy Lutskiy and administrative skills of Klavdiya Antonova, the company has become one of Russia's largest manufacturers of small parts. Remaining deeply loyal to its roots, Laguna has unparalleled expertise in manufacturing complicated and high precision parts.

**Politek Co Ltd.**

Head Office
40/2 Slavy prospect
192238 Saint-Petersburg
Russia
Tel. +7 812 335 4805
+7 800 511 4805
info@politek-service.ru
politek-service.ru

**Laguna Co Ltd.**

Head Office + Saint-Petersburg Plant
28 Bolshoy Samsonievsky prospect
194044 Saint-Petersburg
Russia
Tel. +7 (0) 812 933 3954
+7 (0) 812 380 7316
lagunamet@sp.ru
laguna.sp.ru

With its manufacturing site and headquarters in Saint-Petersburg, Russia, Laguna produces thousands of small workpieces every month. Committed to a culture of quality assured engineering excellence, Laguna invested in modern technology to support its customers and to extend company's opportunities. Part of its investment strategy has seen the arrival of a Tornos Swiss GT 13.

The advanced technical features and six-axis kinematics make Swiss GT 13 ideal for the most complex parts on the market and provides Laguna with the required flexibility. Laguna can manufacture everything from connectors through to bolts, screws and much more for the electronics, instrumentation & control, automotive, aerospace, medical, transport and telecommunications sectors.

The project engineering

The project has been implemented by Politek Co Ltd., the Tornos dealer in Russia. Politek has provided engineering solutions, training and full-service support to Laguna plant. Being innovative and dedicated quality control company, Politek has got its own service support methodology Politek Service Support 2.1 and with regard to equipment maintenance and service Politek applied SOP procedures with Laguna engineers.



With up to 30 tools, including 12 rotating tools, the Swiss GT 13 is equipped with three motors (two on the platten and one for counter operation) to drive numerous rotating tools. A modular position is available to accommodate the addition of advanced tooling. The rotating tool holders on the rear platten and the counter operation station are easily exchangeable. This feature allowed Laguna operators to significantly reduce setup times for a large range of workpieces.

Tornos increases productivity 4 times

The Tornos Swiss GT 13 helps Laguna to substantially increase the company's productivity. Thanks to machine rigidity and high coolant pressure, Laguna increased its productivity 4 times during the machining of dental instruments.

The quality benefits

The Tornos Swiss GT 13 allows the company to save precious seconds, but also ensures the highest quality and precision $\varnothing 1.6 (-0,005)$ during the machining stainless steel at Laguna. Such quality standards are valued considerably at the plant.



“Thanks to machine rigidity and high coolant pressure, Laguna increased its productivity 4 times during the machining of dental instruments.”

Tornos helped Laguna to boost efficiency on short rigid parts of uncalibrated material (ab. h12) and long parts with little diameters. Swiss GT machines can be converted to run without a guide bush in less than 15 minutes.

TISIS software improves production efficiency

The TISIS communication and programming software enables real-time process monitoring and can help write code, and points out any coding errors, reduces the risk of collisions and the resulting stop-pages. TISIS can display program in an easy-to-read Gantt diagram, making it easy to see the critical path and react quickly to optimise the process.

laguna.sp.ru

The Tornos Swiss GT 13 on site at Laguna Co. Ltd., Saint Petersburg, Russia.





Filières à rouler
Canons de guidage
Filières à moleter
Filières à galeter
Canons 3 positions



Thread rolling dies
Guide bushes
Knurling dies
Burnishing dies
Guide bush 3 positions

Gewinderolleisen
Führungsbüchsen
Rändel
Glattwalzeisen
Führungsbüchsen 3 Positionen

Harold Habegger SA
 Fabrique de machines
 Outillage
 Route de Chaluët 5/9
 CH 2738 Court
 +41 32 497 97 55
contact@habegger-sa.com
www.habegger-sa.com



HAROLD
HABEGGER

APPLITEC

APPLITEC

SWISS TOOLING

NEW

- High performance geometries
- Carbide grades
- CERMET grades
- VC-13 size
- Holders with integrated coolant supply



ISO-Line

WWW.APPLITEC-TOOLS.COM

TORNOS

A Tornos SwissNano 7 machine is shown in a gym setting. The machine is white and black, with a control panel on the left side. It is surrounded by gym equipment, including a punching bag hanging from the ceiling and a barbell on the floor. The background is a textured wall with a warm, orange glow. The machine has a transparent protective cover over the cutting area, and the brand name 'TORNOS' and 'SwissNano' are visible on the front panel.

*Someone has been
working out*

SwissNano 7