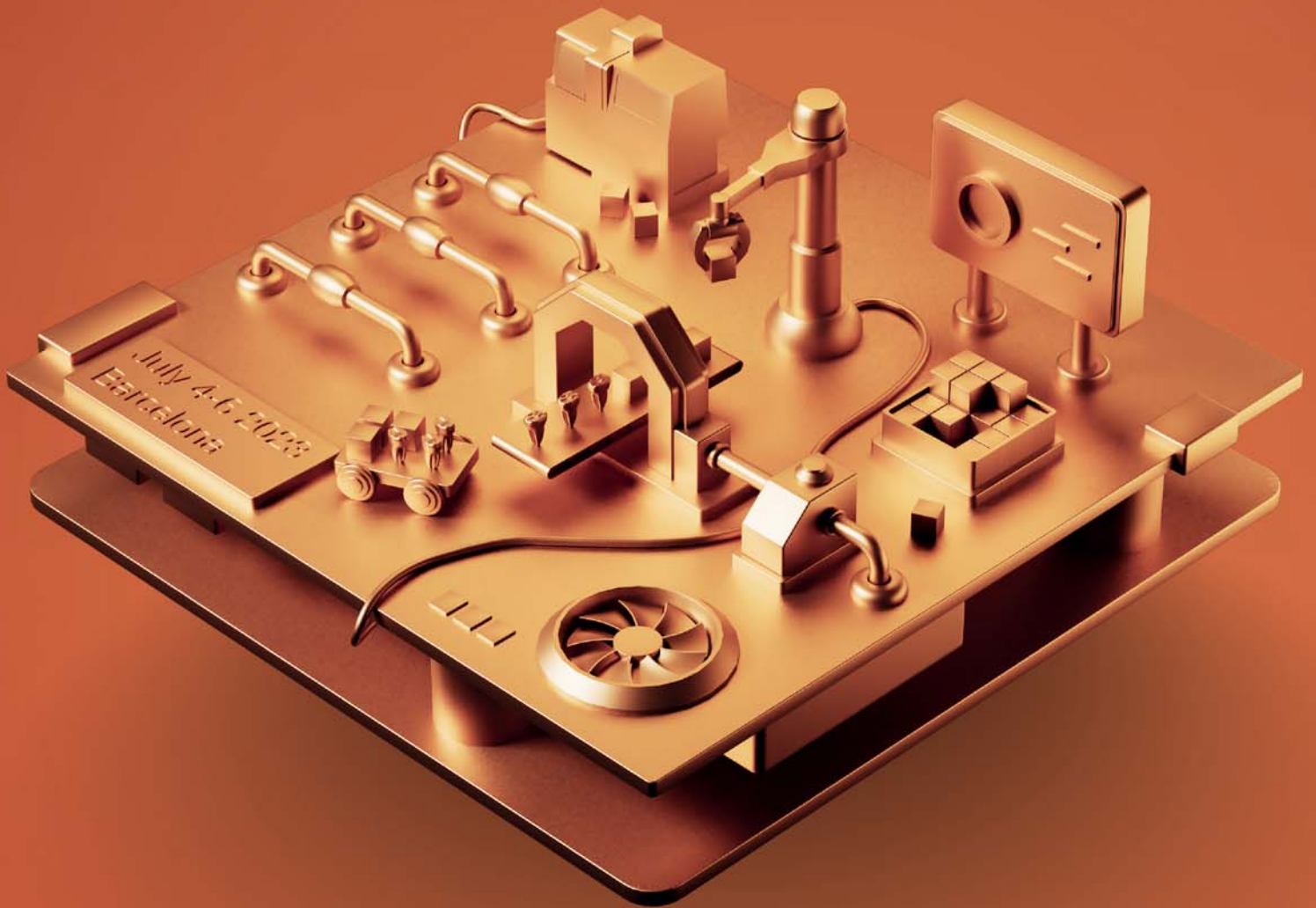


deco magazine

104 02-2023 ENGLISH



*On the path to
perfection*

12

*The mini factory
of the future*

26

*SICPL and Tornos:
A shared passion
for precision and
perfectly finished
products*

36

*MultiSwiss 6x16:
The future
of multispindle
machining*

44

UTILIS
multidec[®]
swiss type tools

multidec[®]-MICRO TOOLS

UTILIS **u-drill** | UTILIS **u-mill** | UTILIS **u-hexalob**

**THE DRILLING AND MILLING SOLUTION FOR
YOUR MICRO-MACHINING**



SCAN ME!

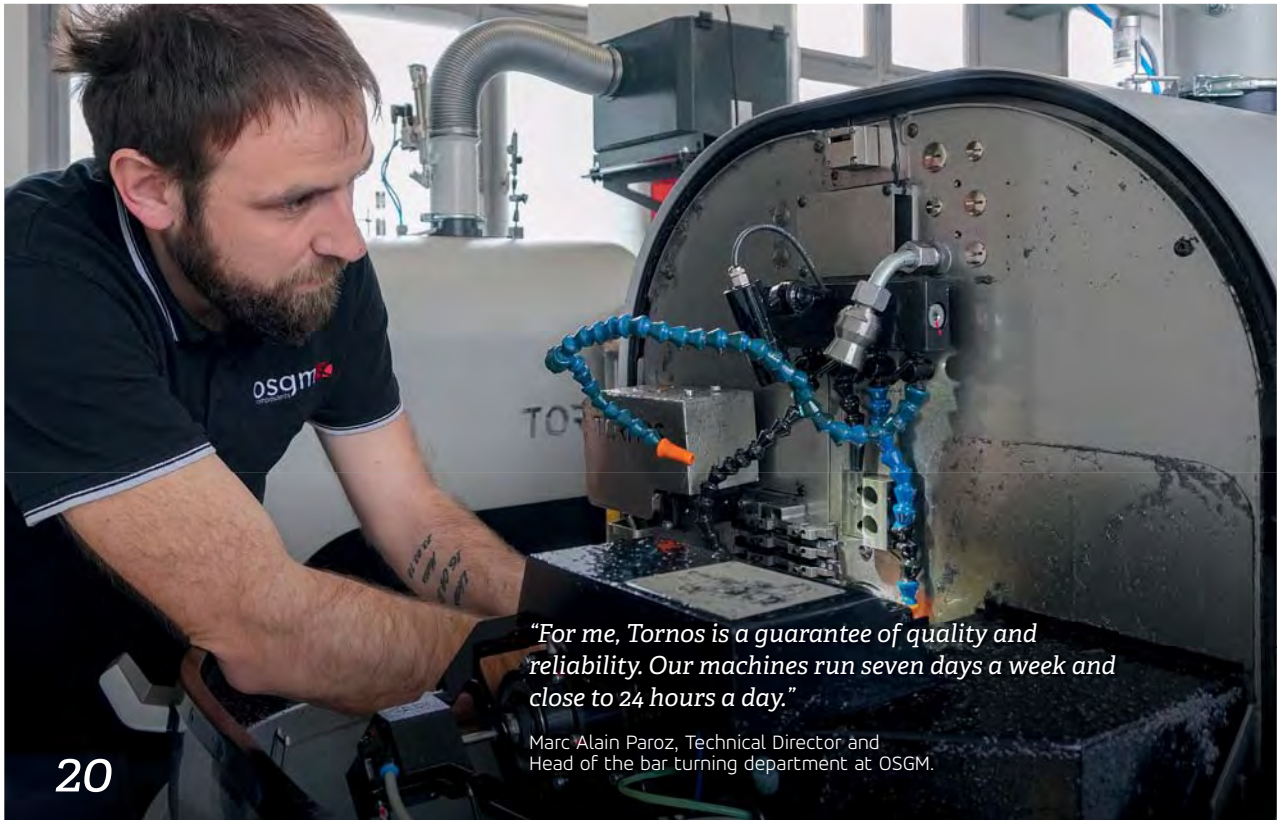
And find out more about
multidec[®]-MICRO TOOLS.

future since 1915

■ 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

UTILIS[®]
Tooling for High Technology



"For me, Tornos is a guarantee of quality and reliability. Our machines run seven days a week and close to 24 hours a day."

Marc Alain Paroz, Technical Director and Head of the bar turning department at OSGM.

20

IMPRESSUM

Circulation

17'000 copies

Available in

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

Publisher

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

Technical Writer and Publishing Advisor

Brice Renggli
renggli.b@tornos.com

Editing Manager

Céline Smith
smith.c@tornos.com

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

© 2023 Tornos Group.
All rights reserved. No part of this publication may be reproduced without the prior written permission of the publisher.

SUMMARY

- 4 *Editorial – Highly competitive markets where Tornos can do well*
- 8 *The SwissNano features unique kinematics: Compact, precise and productive*
- 12 *Tornos turning-milling centre ensures unique precision: On the path to perfection*
- 20 *OSGM Composants and Tornos: Driven by precision, passion and production and linked by mutual trust and respect*
- 26 *The mini factory of the future*
- 32 *Sales and services combined for the ultimate customer experience*
- 36 *SICPL and Tornos: A shared passion for precision and perfectly finished products*
- 40 *When it comes to sustainability, Tornos associates with the best*
- 44 *Tornos MultiSwiss 6x16: The future of multispindle machining*

TORNOS

Tornos Technologies (Thailand) Co., Ltd.
บริษัท ทอร์โนส เทคโนโลยี (ไทยแลนด์) จำกัด
18/3 ซอยอุดมสุข 31 แขวงบางจาก เขตพระโขนง กรุงเทพมหานคร 10260

18/3

TORNOS

TORNOS



“Thailand’s economic contribution to the machine tool market may not be well known, however it is an important market.”

Darren Way General Manager of Tornos Technologies Asia (TTAS) region

Highly competitive markets where Tornos can do well

Darren Way General Manager of Tornos Technologies Asia (TTAS) region

It is not easy to take stock after 25 years of activity within the company. However, one constant is learning and that has become apparent over the years. I have learnt a lot on the job and I'm still learning.

I have been working on Swiss Type and Multispindle machines since 1990 for a customer of Tornos in the UK. In 1998, I had the opportunity to join Tornos as an Applications/Service engineer as a member of the Jump team of after-sales service technicians that worked all over the world. Very quickly I became involved in markets such as Japan, Korea, SE Asia and China. Since 2001, I have been based in Asia to be closer to our customers.

In 2007, we established Tornos SA Thailand Representative Office in Bangkok, and built up a team of engineers to provide local technical support to our customers in Thailand as well as the rest of Southeast Asia and India. Our team of qualified engineers have always worked to find solutions to produce challenging parts and to provide technical support to our customers. Since then, the team has expanded and we have established technical teams in India and Malaysia.

Thailand's economic contribution to the machine tool market may not be well known, however it is an important market. Thailand is, in fact, a hub for a number of automotive manufacturers, who produce

and export passenger vehicles to Southeast Asia and further afar. Other Industries that are also well represented in Thailand include the Medical, Electronics, and Micromechanics.

In my opinion, Thailand is a barometer of the global economic situation and is the manufacturing hub for South East Asia. The markets are constantly evolving, and as I have seen in my 25 years with Tornos in Asia, it is necessary to not only adapt to the markets' evolution, but also to know how to anticipate its evolution. Tornos and our products have evolved significantly over the years both in terms of capability and precision, with the introduction of the MultiSwiss, SwissNano and SwissDECO machines, these products are further complemented by the Swiss DT and GT range. The software developments from Tornos enhance our products still further that provides our customers with a user-friendly interface with Industry 4.0 capabilities.

With the opening of our Customer Center in Bangkok in 2019, Tornos reaffirmed its presence in Thailand and as a regional hub has enabled the team that I lead, to continue to expand into the Asia Pacific region.

In India, as General Manager, I manage a very competent team in a very competitive market in a vast country that is continuously growing and

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

“Thanks to our presence and regional experience, every day we help to improve Tornos’ visibility throughout Asia Pacific.”

developing. Here too, understanding the customs and local practices are an important part of the daily tools that we use to respond to the many varied requests that we receive.

Thanks to our presence and regional experience, every day we help to improve Tornos’ visibility throughout the Asia Pacific region. In this way, Tornos maintains a close relationship with its customers by offering them the local assistance and support that they expect.

From his early days to the present, Darren Way still has the same passion for machine tools. He is a fervent ambassador in Asia.





The SwissNano is specially designed for machining very small parts with the highest precision requirements. It is proving to be extremely efficient.

*The SwissNano features
unique kinematics*

Compact, precise and productive

High-precision machining of tiny and complex parts present extreme challenges for both operators and machine tools. Tornos' SwissNano range of sliding head machines is easy to use, space-saving and unbeatable in terms of precision.

TORNOS

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

The SwissNano was developed for machining very small parts with the highest precision requirements. The kinematics of the SwissNano enables the production of a wide range of parts, from simple to complex. For example, up to two-thirds of a watch's parts as well as dental components that require an excellent surface finish can be processed on the machine. It's not just for watchmaking, but any application that requires the highest level of quality and precision.

The kinematics were developed with a particular focus on maximum balance and excellent thermal control to quickly reach the optimal operating temperature. These sliding head machines enable users to increase their productivity in micro-mechanics by up to 85%. The SwissNano range is available with working diameters of 4, 7 and 10 mm and it is primarily suited to machining parts for medical and dental technology, as well as for electronics and micromechanics. Another key advantage is the machines' small footprint.

They are probably the only machines on the market where the operator can face the guide bush.”

For example, the SwissNano 7 is very compact. It is just 3 metres long and 1 metre wide - and this also includes the high-pressure pump. That means ten machines can be housed in a company occupying less than 80 m². This makes the SwissNano the smallest high-pressure machine available on the market, with the capability to meet even the most complex challenges. Its groundbreaking kinematics and up to 8 tools with four live tools – for rear-face machining, mean that turning, drilling, milling, deburring and pre- and post-processing can be carried out in a single operation.

Optimal thermal control

Thermal properties with short control loops are what make the SwissNano range so successful. The machine's cast iron base allows its temperature fluctuations to be managed. Even under difficult conditions, such as when the machine is cold, the SwissNano stabilises thermally within five minutes. This means that these machines are already working very productively from the very first parts with a low scrap rate. In addition, they are equipped with optimised spindle motors with an integrated cooling circuit, which is characterised by their low heat generation.

Dimensional quality and productivity

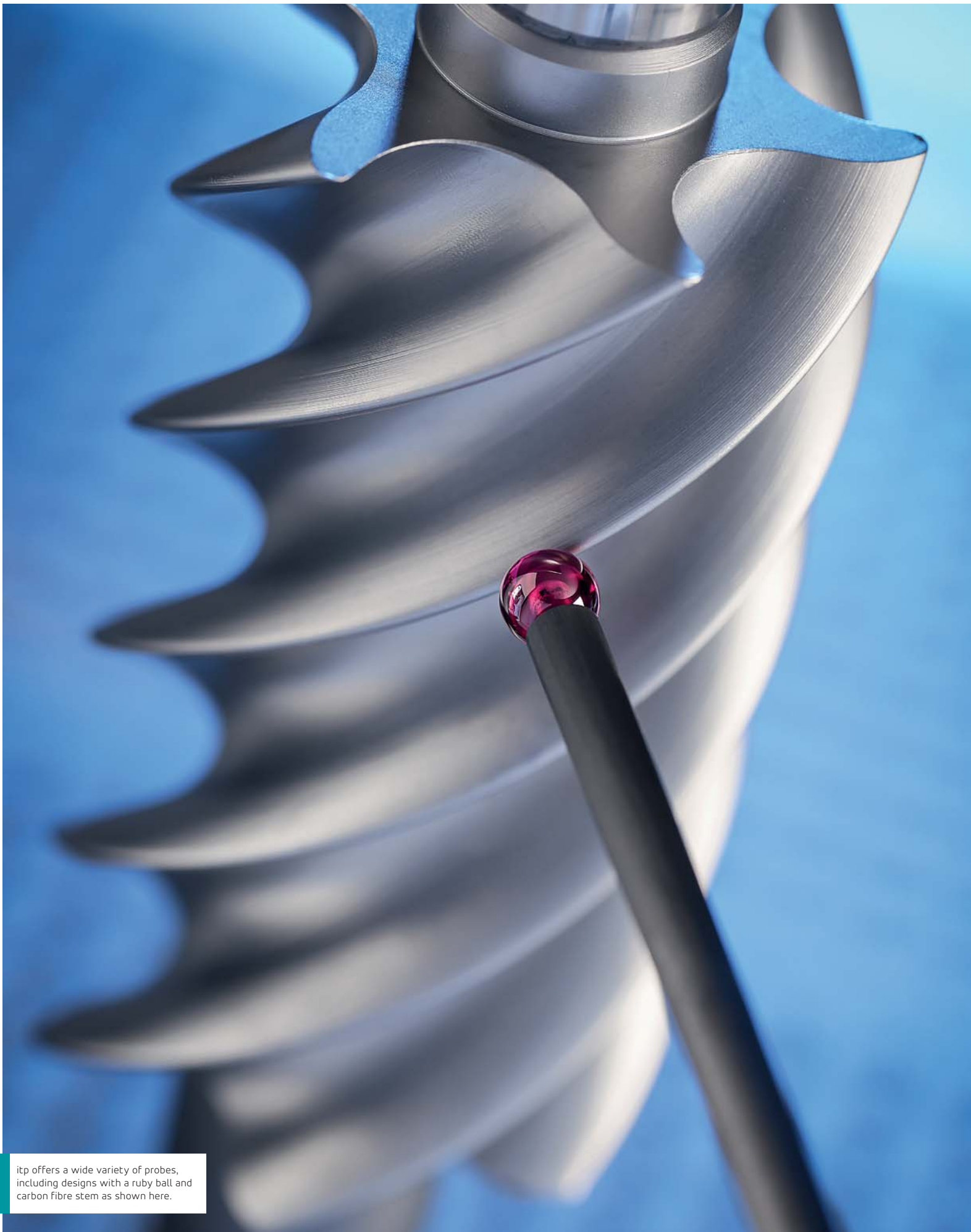
Another advantage of these machines is their high rigidity. Within the manufacturing industry, SwissNanos are noted for their dimensional quality and productivity. Thanks to the small footprint, specific tooling and kinematics, they offer better productivity than some of the more complex and expensive machines. In particular, their precision and low scrap rate allow for considerable savings that can often exceed 30 %.

Ergonomically perfect

SwissNano series machines are very easy to operate and set up. They offer optimum accessibility and, thanks to innovative solutions, maximum user comfort and absolute operating safety. They are probably the only machines on the market where the operator can face the guide bush. They can be used either with a fixed or powered guide bush or with no guide bush. This means the production changeover can be done in a few minutes with no time-consuming assembly required. The vacuum parts-removal system is another smart solution. Micro-precision parts, in particular, are at risk of being damaged during discharging. On request, SwissNano machines can be equipped with a vacuum discharge system and a carousel for sorting the parts and statistical tracking. The machines can be adapted for all types of workpieces and the part outfeed, which is located in the machining area, can be adjusted to the requirements of the parts in question. The Active Chip Breaker Plus software developed by Tornos is also available as an option on these machines. It enables controlled chip evacuation and prevents chip build-up. This further increases process reliability and contributes to the unbeatable productivity of the SwissNano series.

tornos.com





itp offers a wide variety of probes, including designs with a ruby ball and carbon fibre stem as shown here.

*Tornos turning-milling centre
ensures unique precision*

On the path to perfection

Several manufacturers in the field of measurement technology have settled in the vicinity of the Völklingen Ironworks World Cultural Heritage Site in Germany. One such manufacturer is itp, which specialises in the production of precision probing elements, accessories and clamping technology. To be able to economically produce the extraordinary quality for which the company stands, it recently invested in a SwissDECO turning-milling centre from the Swiss manufacturer Tornos.



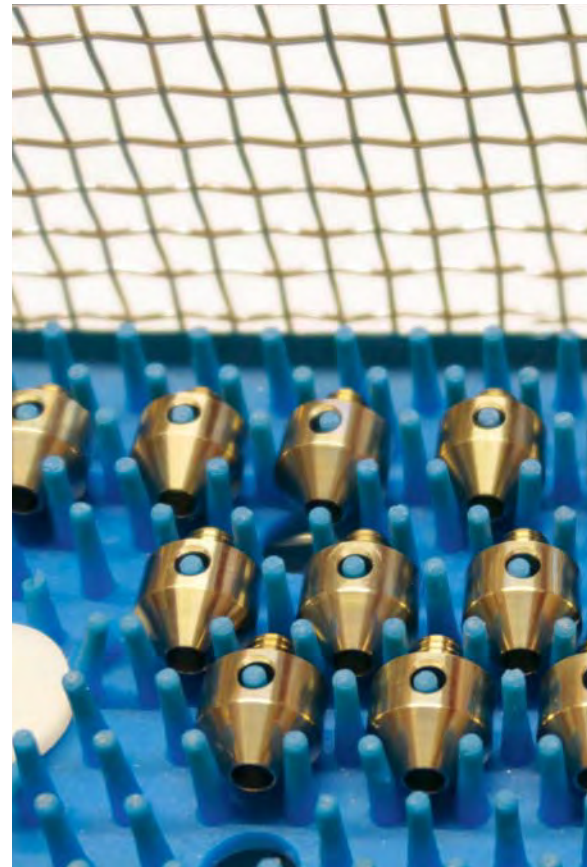
itp GmbH
Rathausstr. 75 – 79
66333 Völklingen
Germany
Tel. +49 (0) 6898 85091-0
itp@taster.de
taster.de

“If you want to measure precision, you need even more precise measuring systems.” This credo from Frank Breidenich, the Managing Director, underlines the company's high standards. Ever since itp was founded in 1994 with just four employees, its excellent quality has meant that the company has risen to become the supplier to technologically leading measuring machine manufacturers and users. When Frank Breidenich joined itp three years ago, he added another component to this high-quality standard: Absolute customer focus.

“Our customers produce an almost infinite number of workpieces that differ in terms of materials, geometry, contours and technical subtleties.



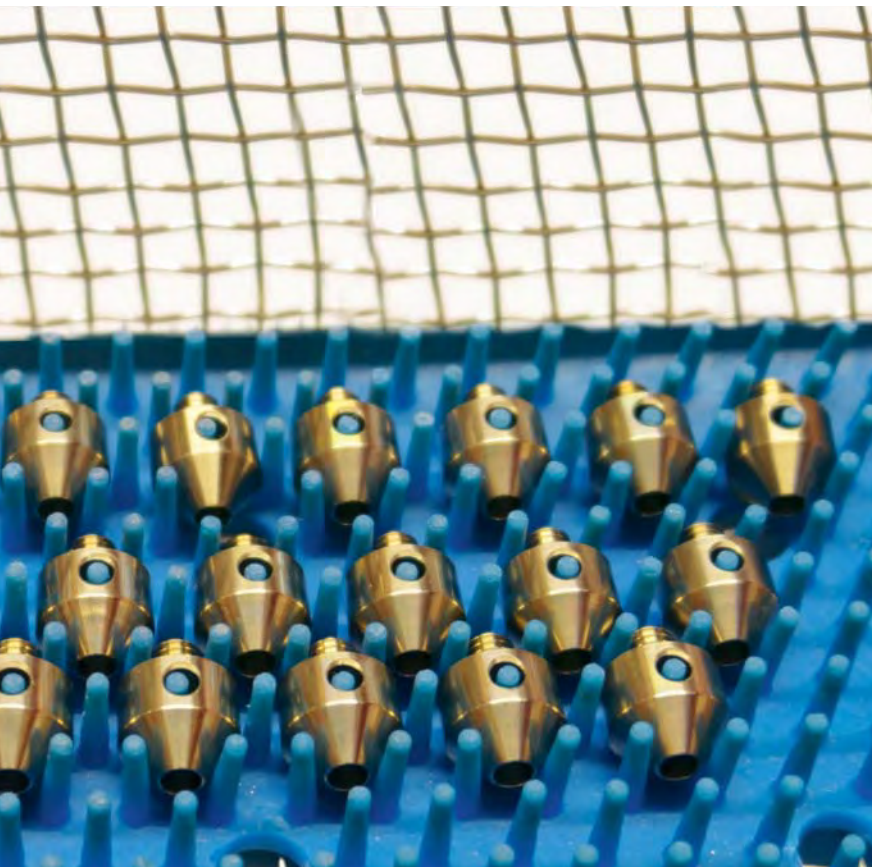
itp Managing Director Frank Breidenich (right), Jerome Kayser, MD of Tornos Technologies Germany (centre), and Artem Starikov (left) in the itp production hall.



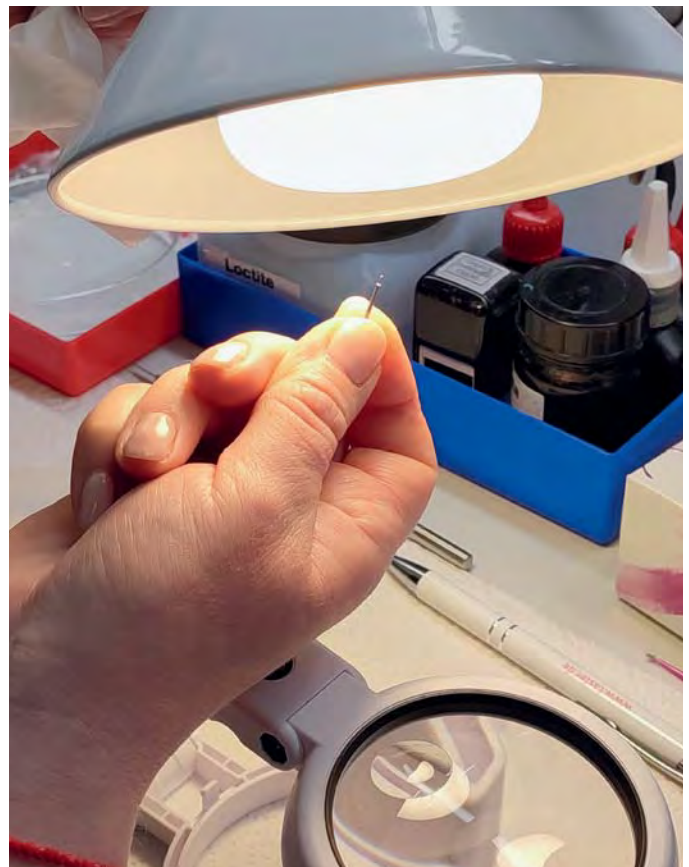
Standard off-the-shelf solutions are not the best way to measure these parts." In this context, measurement technology is playing an increasingly important role in today's production, especially in terms of sustainability. With the right measurement strategy, tolerance deviations can be detected and corrected at an early stage. This reduces waste and therefore contributes to more resource-efficient production. Under the keywords 'customer experience' and 'customer journey', we meet with a customer and their problem, and accompany them throughout the entire process, right up to the delivery and implementation of the finished product.

Design and Engineering handle an average of 15 to 20 customer enquiries per day. The design and

configuration of the probe elements, clamping systems and accessories are defined here. Each order is then produced in-house with the highest possible vertical range of manufacture. It then undergoes the strictest quality controls. Due to this high level of vertical integration, itp does not have to rely on external suppliers and can guarantee an extremely high level of quality and short response times. For 'normal' orders, the company speaks of delivery times in the range of hours; for more complex ones, it speaks of days. To illustrate this, a competitor had offered a delivery time of four months for a multi-functional measuring system whereas itp completed the order within three weeks. Of course, the company benefitted from its long experience and special expert knowledge.



Thanks to Tornos machines, itp's manufacturing achieves high productivity levels with the best quality.



In the itp assembly department, even the smallest balls of 0.15 mm diameter are fitted.

At the leading edge of technology

Each probe is a true marvel of engineering. Depending on the material to be measured, the following question arises: Ruby or diamond ball? As a rule, itp uses polished ruby balls. With titanium and similar soft materials. However, the abrasion would affect the precision and lifetime of the ball. That is why the company resorts to diamond balls here. Another essential criterion is the joint between the ball and the shaft. With the mortice joint, a drilled ball is glued or soldered onto a cylindrically stepped shaft. With the spherical cap joint, a full sphere is connected in a spherical cap on an equally cylindrical shaft. The type of joint plays a major role here. Bonding is suitable for processes with low contact pressure in a clean environment.

Cooling lubricants and aggressive emulsions used in the working area of machines impair the lifetime of bonded probes. itp has therefore developed soldering for these applications and is constantly advancing this technology. To be able to classify these performances, both for bonding and soldering, it is worth taking a look at the dimensions. itp produces probes with balls for which the diameter is 0.15 mm with a shaft size of 0.8 mm has an M1.4 thread. At the top end of the scale, disc probes up to 200 mm are offered. In the case of multi-functional systems, several different probes are applied to a carbon fibre support. This saves weight and reduces measuring times. Thanks to itp's competence and quality, its number of customers has increased rapidly in recent years,



itp is able to deliver special requests with speed and precision.



Components made of high-grade materials such as titanium are machined to a superior quality.

despite Coronavirus. The company now has several thousand 'standard articles' in its range, and around 30 to 40 new products are added every day. The batch sizes vary from one piece to 2000 pieces. To maintain the short delivery times with this variety of parts and variance, a special production strategy is required.

Excellence in manufacturing

Even from the first impression and the atmosphere in the team, you can see that you are in a real high-tech environment. For Frank Breidenich and his team, order and cleanliness have top priorities. He emphasises: "You should only allow your company to grow once you are properly set up for that growth. We used Coronavirus as an opportunity to realign our organisation. We have invested in the team, in software, in our processes and procedures, and have therefore almost doubled our productivity per unit

area. To this end, we have added a SwissDECO 36 B to our stock of Tornos machines and have therefore become even more powerful. With its B-axis, this machine is a high-end turning/milling centre that is amazingly fast and precise. It is easy to program and quick to set up. The latter is a decisive advantage for us as a manufacturer of small quantities with a large variance."

In this context, itp has also adapted its product range and reduced the number of variants somewhat. "We now produce more standardised basic bodies, which are finished in a final touch on our Tornos Swiss DT to suit the customer's specific requirements. We are very much taking our cue from Formula 1 here. This industry has minimised conversion and changeover times by using appropriate devices."

For Frank Breidenich, close and trusting cooperation as equals is important. "We work closely with our customers and seek the best solution together with them. However, this is exactly what I also expect from our suppliers." This is one of the particular strengths of Tornos. The company not only produces the most precise machines but has also acquired in-depth application knowledge over the years, which it is happy to share with its customers. But itp is not satisfied with what it has achieved and asks itself almost daily, what can we do even better? The company draws on the expertise of machines and tool suppliers with the aim of optimising processes. Consideration is currently being given to replacing the grinding process for small titanium pins with hard turning. With the SwissNano 10, Tornos has an impressive solution here, which we will be happy to report on in a future issue.

taster.de

FOCUS ON PRODUCTIVITY



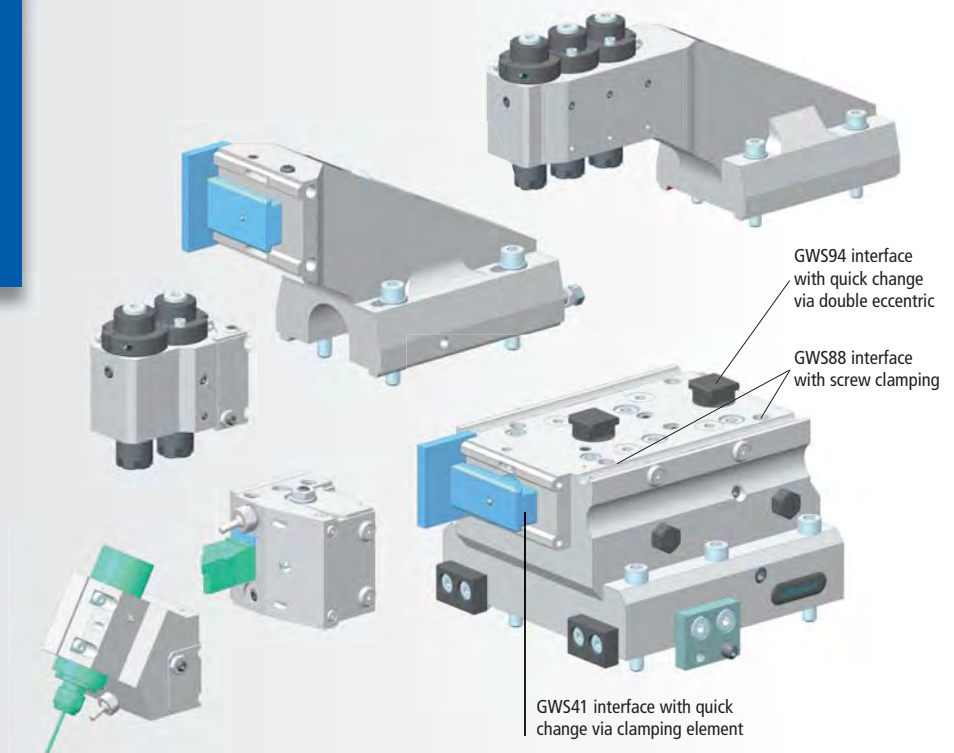
www.goeltenbodt.com



THE GWS-TOOLING SYSTEM:
INNOVATION MADE BY GÖLTENBODT!

Changing with system

- Highest flexibility thanks to GWS interfaces for different clamping options
- Quick change
- Repeatability better than 0,01 mm
- Flexible and specific coolant transfer (without additional coolant hoses)



DUNNER

SWISS TOOLING PRODUCER

De nouvelles matières à décolleter ?

Nous avons toujours de nouvelles solutions à vous proposer.

*Neue Werkstoffe, die auf Ihrer Langdrehmaschine bearbeitet werden sollen?
Wir haben immer neue Lösungen für Sie.*



Depuis toujours, une seule motivation : votre réussite.

www.dunner.ch



Marc Alain Paroz has been passionate about his profession for many years and works exclusively on Tornos machines.

*OSGM Composants and Tornos:
Driven by precision, passion and production*

and linked by mutual trust and respect

OSGM Composants SA is a Swiss company specialising in the manufacture of small and large runs of complex, high-precision micro components. A highly dynamic company that is relatively new to the market, it has already enjoyed great success in the field of micro-machining. The company's two sites are in Tavannes, which houses its bar turning operations, and Grenchen, where its head office is located.



OSGM Composants SA
Lebernstrasse 63
2540 Grenchen – Switzerland
Tel. +41 (0) 32 644 31 40

Route de Pierre Pertuis 6
2710 Tavannes – Switzerland
Tel. +41 (0) 32 501 52 00
info@osgm.ch
osgm.ch

The OSGM site in Tavannes, situated just off the main thoroughfare, is practically a street-side business that is unrivalled in the manufacture of pinions and other components, primarily for the watch-making industry. “Our passion and long experience in micro-technology constantly drive us to surpass ourselves, and give us an edge in responding to the specific needs of each customer,” explains Marc Alain Paroz, Technical Director and Head of the bar turning department at OSGM.

“Our range of services includes high-precision machining of micro components in the field of bar turning, hobbing and rolling. Our state-of-the-art

infrastructure enables each of our services to combine punctuality with outstanding quality and that's why we place great emphasis on continuous improvement. This plays a key role in the success of OSGM Composants SA and makes our company a reliable partner in the industry."

Marc Alain Paroz has always been reliable, just like his Tornos machines that he has chosen with care. "I have always worked on Tornos machines, and in our workshop, we still have several cam-type machines that I still enjoy working on. For me, Tornos is a guarantee of quality and reliability. Our machines run seven days a week and close to 24 hours a day."

At the bar turning factory, located on the first floor at 6 Route de Pierre Pertuis, Marc Alain Paroz is pleased to have placed his trust in the Tornos machines. "We have two SwissNano 4s and one SwissNano 7. They are great machines – ergonomic and efficient, with a small footprint. They can produce both small and large runs. The fact is, when

“At OSGM, customer and employee satisfaction is at the heart of the whole process.”

OSGM Tavannes produces turned parts thanks to the know-how of Marc Alain Paroz, who is pictured here with his former colleague Joan Zurfluh.



I need to mass produce, I usually opt for one of the Tornos cam-type machines that we have in our workshop. I'm used to doing it that way, and it works well."

It has to be said that Marc Alain Paroz knows the Tornos machines perfectly, and always has done. "I learned on Tornos machines and since then I have always worked on Tornos machines. After all these years, I am still fascinated by their technology. I find them pleasing to work with, easy to access and very straightforward in terms of setting up complex parts. For a long time, I was responsible for training apprentices at a company in Tavannes, and I was keen to teach them to become bar turners."

Like Tornos, OSGM Composants SA places great emphasis on the quality of its products. To guarantee this level of quality, the company focuses on qualified personnel, constant optimisation of production facilities and continual investment in internal research and development. Giuseppe Nicotra, Managing

Director of OSGM Composants SA, is convinced that people are the key to any company's success. "At OSGM, customer and employee satisfaction is at the heart of the whole process. All the expertise of OSGM lies with our employees. That is why we are constantly working to create a pleasant and stimulating corporate culture for our staff."

The Swiss company's expertise includes bar turning, hobbing and rolling of high-end micro components. Proud of his machine fleet, Marc Alain Paroz also underscores the importance of bar turning at OSGM. "Bar turning of precision parts is one of OSGM Composants SA's core competencies. It is the first operation on a part that determines all the subsequent machining steps. It must therefore meet the highest quality criteria. The bar turning process has its origins in the watchmaking industry."

"The company uses it primarily to produce high-end precision parts directly from the bar. Thanks to our



many years of experience, our passion for precision and our highly qualified employees, we can produce a wide range of parts, from simple to highly complex. We use state-of-the-art CNC lathes and cam-type machines, all from Tornos. This puts us in a position to meet all customer requirements. Whatever the part, and whatever the challenge, we're up for it," beams Marc Alain Paroz. "When you come to us, you benefit from individualised processes tailored to your needs for special production projects, as well as for small and large runs of the highest quality."

In summary, OSGM Composants SA is a friendly, independent and future-oriented company. "We strive to meet all our customer's needs in a timely manner and offer great agility thanks to our two sites. It's

these things that make all the difference. That is why we place great importance on sustainability. OSGM's entrepreneurial approach and mindset are focused on sustainability and the preservation of living space. This is why we strive to conserve scarce resources, both in the production of high-quality precision parts and in our company infrastructure." To ensure this, the philosophy of OSGM Composants SA focuses on sustainable products, the reuse of materials, responsible disposal and the careful management of all resources.

osgm.ch



serge meister  **sa**

P R E C I S I O N C A R B I D E T O O L S



75 years schwanog

WHO ELSE?

The most elegant way to save up to **40%** on production costs.



schwanog.com



The Mini Factory will be held just a stone throw from the famous Sagrada Família cathedral in Barcelona.

In early July, Tornos Spain will be hosting a spectacular event in the heart of Barcelona

The mini factory of the future

Tornos Spain is making an innovative move, offering select customers the opportunity to participate in an exclusive immersive experience, the Mini Factory. “We realised that, for many years, traditional trade fairs in the machine tool industry have not necessarily been as successful as we might have hoped,” says Arnau Macabies, General Manager of Tornos Spain. “While we enjoy seeing our loyal customers at shows and we are delighted that they make the trip almost every time, it is becoming increasingly difficult to make new contacts in mature markets such as Spain.”

TORNOS

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

With this in mind, Tornos Spain has come up with a concept in collaboration with several partners that is open to customers by invitation only.

The mini factory of the future will allow customers to discover how a part can be produced, from the concept through design, and from the material selection to the manufacture of the part.

In collaboration with its partners, Tornos Spain has decided to go even further and show the finished product, measured, treated and cleaned.

The Mini Factory

Medtech

Barcelona

July 4-6, 2023

Discover your future



PARTNERS

TORNOS

BRIO

ECOCLAN

edeltec

HEXAGON | DESPRIT

leap

HECO

VALBRUNA

Qualites

DISHECO

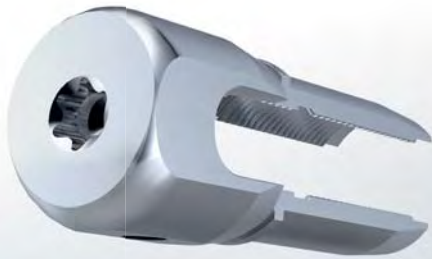
MCVTECH

starrag

SUMEC

GASPA CRANE





To do this, Tornos decided to produce two parts for the MedTech sector. This sector is experiencing huge growth, particularly given the ageing population. Among the many parts that might be created for this vast sector, the examples of an angular abutment for the dental sector and an orthopaedic part are particularly representative. In the mini factory, everything will be completed in real-time, from programming using the Esprit CAM software to machining on Tornos machines (Swiss DT 26/6 HP +

Swiss GT 26B), as well as cleaning and surface treatment. To function, peripherals such as materials, tools, measuring systems and oil are essential. These tangible elements will be supplied by the Tornos partners who are involved with this mini factory of the future.

Located in the heart of Barcelona opposite the Sagrada Familia cathedral, which can be seen from the venue, this factory of the future can respond

WIBEMO

CLAMPING SYSTEMS | MECHANICAL COMPONENTS



EXTENSO™
COLLET



FIT™
COLLET



CROCO™
COLLET



FEED™
COLLET



WIFEX™
COLLET



MOWIDEC-TT™
CENTERING SYSTEM

TECHNICAL ASSISTANCE | SHORT LEAD TIMES | LARGE STOCK OF BLANKS | SINGLE PIECE AND SMALL SERIES



Vibrant and alive, Barcelona will be the setting for this unique event, the 'Mini Factory' by Tornos Spain.



rapidly to the challenges faced by manufacturers today. By discovering the live manufacture of parts, the guest is brought face to face with concrete, tangible elements. This allows customers to better appreciate the possibilities offered by a Tornos machine in a complete environment where all the participating partners play their roles to perfection.

To ensure you receive an invitation to this unique event, visit our website www.theminifactory.in/barcelona or contact Tornos Spain by phone. The mini factory will be live from the 4th to the 6th of July. This unique experience is something never seen before and will bring all the leaders in the MedTech sector together under one roof for the 3-day event.

tornos.com

Discover
the Mini Factory





Recognized by their Tornos-badged car, the after-sales technicians are always ready to intervene when needed.

Sales and services combined for the

ultimate customer experience

Determined to offer its customers the best possible service, at the beginning of this year, Tornos decided to make certain changes in its operations, in particular by linking the after-sales service to sales, extending this to Switzerland to match the situation internationally. Giuseppe Accomando has been appointed Head of Sales & Service Switzerland as of 1st March 2023. This new way of working enables Tornos to offer customers an integrated global service with sales and service technicians that can better understand the situation and take into account the challenges faced by today's manufacturers, providing them with adapted and targeted answers.

TORNOS

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

Giuseppe Accomando has been working for Tornos for more than 18 years and has all the skills necessary to meet his customers' expectations. Having worked in the after-sales service department himself for several years, he knows exactly what to look out for and how to respond in a timely manner to anything that may pose a problem in the event of tool breakage or even a breakdown. He will, of course, be assisted by David Schubnel, who will continue to head up the Swiss after-sales service department and who is also keen to ensure all aspects of the Tornos experience are exemplary.

Tornos after-sales service - a story of trust

The importance of delivering a quality local service

Newly appointed as Head of Tornos Customer Services Switzerland last September, David Schubnel is keen to offer each customer who contacts Tornos a personalised, tailor-made service that meets their expectations. "Tornos has strong roots in the Jura Arc and, as a service provider, my department must be active and responsive in a market that is important for our industry. Things are slowly coming together. I will strengthen our ranks and build a team and, most importantly, a team spirit, with customer satisfaction at the centre of our daily tasks."

David Schubnel, who has a solid background in his field, immediately wanted to be on the ground, alongside his technicians. "I think it is essential to reach out to our customers and involve them more in our overall approach. In six months, I have been lucky enough to meet a good thirty of these customers and I continue to visit them as often as possible, preferably with a member of the sales team, as these two entities cannot exist without each other. When you sell a machine, you are selling a solution, a solution that must work in the long term."

Pleased to describe all the stages of the 'Tornos customer experience', David Schubnel is convinced that each one is important and deserves to be given careful attention. This ranges from installation to the training provided by the Tornos Academy to acquire the necessary knowledge to realise the full potential of the chosen machine and including everything linked to maintenance and any repairs that may be required. "At Tornos, we place great importance on preventive maintenance to ensure that the machine continues to operate without unnecessary wear. With a few simple steps and regular checks, you can extend the life of the machine and make sure you can get the most out of it."



There is always a Tornos expert available on the hotline.

One of the main objectives that the Head of Tornos Customer Services Switzerland has been pursuing since he took up his post is to be more present on the ground and to be available in the region. "I am convinced that delivering a quality local service pays off. By offering customers a quality local service, we also create a relationship of trust which we must, of course, continue to maintain so that it is sustainable."

While David Schubnel makes every effort to have more technicians ready to intervene in the field, he has also revised the rates according to proximity. "After several discussions, it became clear to us that our customers will no longer pay for travel within a 10-kilometre radius. In addition, the Swiss-German region was not well served by us, which sometimes lengthened the waiting times for interventions to be carried out at the customer's premises. With the appointment of a technician dedicated to this vast region, Tornos is strengthening its presence and showing how much the company values its customers in this area."

David Schubnel's winning strategies also include anticipation of client needs and ensuring that the service has better visibility. "We are often seen as

working in the shadows, and only intervening when something goes wrong. But our role is much more important than that. We are committed to understanding our customers' needs. Through preventive maintenance, we can guarantee that the production tool is more efficient and productive. Reacting to needs is good, but anticipating needs is even better." Driven by the same passion and desire to do well, David Schubnel wants to give a human face to the

actions of his technicians in the field. "We are one of the last links in the process, which makes it even more important that we use this to nurture our customer relationships and to distinguish ourselves through excellent after-sales service."

tornos.com

David Schubnel & Giuseppe Accomando.





Mr. P. K. Jain, as a young mechanical engineer, was trained at the Tornos headquarters in Moutier, which has had a major impact on his entire career.

SICPL AND TORNOS

A shared passion

for precision and perfectly finished products

It all began when Mr. P.K. Jain, a young mechanical engineer, began his training at Tornos headquarters in Moutier, and this trip to Switzerland left a lasting impression. Fascinated by the technology developed by the machine tool manufacturer, Jain was thoroughly convinced of the utility and durability of the Tornos machines and was keen to use them in India.



Smith Industrial Corporation Private Limited
 Site-2, Plot Shed A,
 At Harsha Tractors, Loni Road
 Mohan nagar, Ghaziabad
 UP: 201007, India
 Tel. 0120-2984549
contactus@automatworld.com
smithindlcorp.com

Back home in India, Jain decided to set up his own company in Delhi-NCR where Smith Industrial Corporation Ltd. (SICPL) is still headquartered.

"I have deep emotional memories of those few months spent in Switzerland. Thanks to Tornos, I developed a real passion for 'bar turning,'" he said. "Today, at more than 80 years of age, when I have left the reins of the company in the hands of my children and other employees, in whom I have complete confidence, I am extremely grateful to those who welcomed me to Moutier and introduced me to bar turning on Tornos machines."

"I started acquiring Tornos machines on my return from Switzerland and these micro machines are still running at full capacity today, we are extremely satisfied with them."

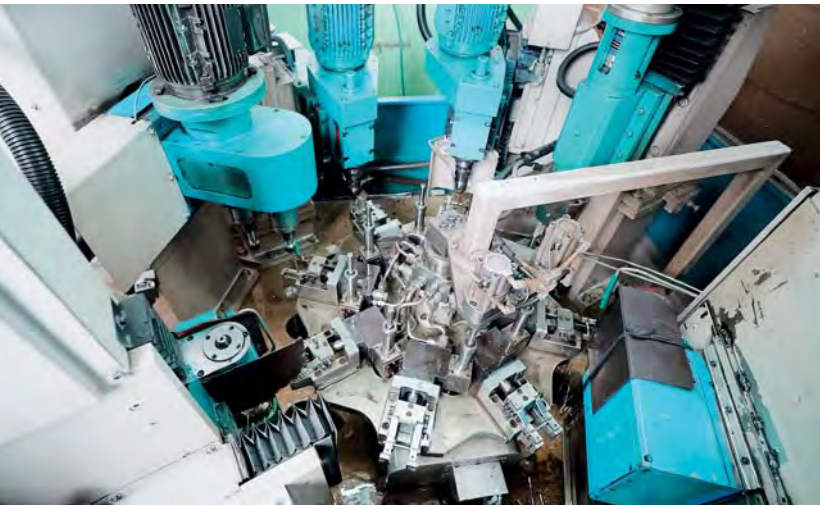
"We are equipped with state-of-the-art, computer numerical control (CNC) machines that allow us to maintain high levels of precision. As previously

“I started acquiring Tornos machines on my return from Switzerland and these micro machines are still running at full capacity today, we are extremely satisfied with them.”



mentioned, these are all Tornos machines, which are both accurate and cost effective for certain types of components. We also have a stamping shop with hydraulic, pneumatic and mechanical processes. Finally, we have special purpose machines (SPMs) in our shops that focus on working with machine manufacturers in India and abroad to design custom machines for specific components. Like any company on our scale, we also have all the auxiliary machinery needed for small operations, surface grinding and achieving various finishes.”

By combining latest technology with modern manufacturing processes, Smith Industrial Corporation is one of the fastest growing engineering companies in the industry. SICPL specializes in manufacturing high-precision components and sub-assemblies for a wide range of industries. With an annual capacity of over a 110 million pieces in sizes ranging from 0.3 to 40 mm in diameter, SICPL is focused on adding value for its customers by manufacturing the finest precision engineering components using high quality raw materials.



Smith Industrial is a solid partner, which relies on the know-how of its employees.



16 949 certification, having implemented a quality management system meeting the rigorous requirements of the International Automotive Task Force (IATF). Enhancing the expertise and potential of its employees and providing them with an optimal and safe professional environment is a key cornerstone of SICPL's success. The company offers its employees continuous training and a clear, merit-based path for career advancement. It also champions gender equality across the entire spectrum, in fact the company's Chief financial officer, is a woman.

What makes SICPL different? The company stands out due to its commitment to quality and fast delivery of custom, high-precision components and subassemblies.

"I have never ceased to pass on my knowledge to my team and thanks to experienced and motivated collaborators & partners, we continue to grow exponentially. We have complete faith in our high development potential, and strive for perfection of the finished products," said Mr. Jain.

Serving demanding clients from diverse sectors such as automotive, electrical, medical and home appliances etc., SICPL manufactures a vast repertoire of components including valves, gauges and 'turned components' used in the manufacture of everyday objects, from garden tools to components for micro-irrigation systems.

SICPL has received numerous awards & certifications for its manufacturing ability including IATF

Designing, innovating and manufacturing the best precision engineering components using high-quality raw materials, advanced technology and structured manufacturing processes at universally affordable prices in all regions of the world is Jain's original vision—a vision that the company continue to pursue even today, thanks mainly to the many Tornos machines that run continuously in SICPL's workshops.

Next steps for the company are digitalization and the Internet of Things (IoT): With digitalization in full swing in India, it is clear that SICPL is ready—and able—to defend its leadership position.

smithindlcorp.com



When it comes to sustainability, it's all about involving employees, so that together we can pull together. In this situation, it's a case of row in the right direction to achieve the set objectives.

When it comes to sustainability,

Tornos associates with the best

In its desire to adopt an even more sustainable approach, Tornos has decided to associate itself with several specialists in the field of sustainability to make the right choices and find appropriate solutions to ensure a paradigm shift for the company. Tornos has now turned to the 2030 Agenda and the 17 Sustainable Development Goals (SDGs) set out by the United Nations as well as the Task Force on Climate-Related Financial Disclosures (TCFD) which constitute the new global and universal reference framework for sustainable development.

TORNOS

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

Through exchanges and various recommendations, Tornos established contact with Ecoparc, a non-political association recognised to be of 'public utility', which gives concrete expression to sustainable development by creating links between the various regional stakeholders. "Today, sustainable development is no longer just a philosophical notion to which one adheres or does not adhere," notes Leila Pamingle, Director of Ecoparc.

"To meet the requirements of the Confederation by 2030, companies need to take certain measures. This is usually much more complex than it sounds, as there are many aspects and different 'angles of attack'. What seems important to us, essential even

“The exciting thing is that there is no turnkey solution. Such a change is only possible with the support of all, and combined efforts from both a collective and individual point of view.”

– is to integrate employees, to involve them in this collaborative project, always bearing in mind the objectives that we want to achieve.”

What Leila Pamingle sees on the ground is that companies are already doing many things right. “In Switzerland, we are not used to celebrating our successes and focusing on what works well. We tend to point out areas for improvement. If we start by affirming the positives, this creates a stronger foundation, enabling us to build on what we have already achieved to improve other aspects.”

As the Director of Ecoparc points out, this is an exercise in raising awareness on the individual and collective levels. Understanding the impact of our actions and their consequences. “It all depends on the level of awareness of the company, as well as the different stress points to which it is subject. The economy is only one of the three pillars of sustainability, but you have to take all three aspects into account, including ecology and everything to do with employees and how they are treated, to make sure that you address the issue as a whole.”

In addition to providing individual support to companies, Ecoparc is also very interested in industrial ecology and the ecological area in which the company or companies are located. “We are all familiar with these former industrial areas that are now virtually abandoned,” explains Leila Pamingle. “We are therefore working to revitalise such areas and to encourage companies to work together in a given ecological area. The whole issue of circularity deserves attention, both within a company and the surrounding industrial area.”



association
Ecoparc

Association Ecoparc
Faubourg du Lac 5
2001 Neuchâtel
Switzerland
Tel. 032 721 11 74
info@ecoparc.ch
ecoparc.ch

Another stumbling block is employee mobility: “Everyone is ready to make changes as long as they don’t upset their habits or personal comfort. However, employee mobility is a crucial issue that often poses problems. In such cases, we work to find shared solutions, both for transport and catering, as well as childcare. We are also conducting mediation work with the municipality.”

In the first instance, we need to move towards more practical solutions that satisfy the majority. “It’s about opening up the spectrum, making everyone want to explore the field of possibilities and get involved. The exciting thing is that there is no turnkey solution. Such a change is only possible with the support of all, and combined efforts from both a collective and individual point of view.”

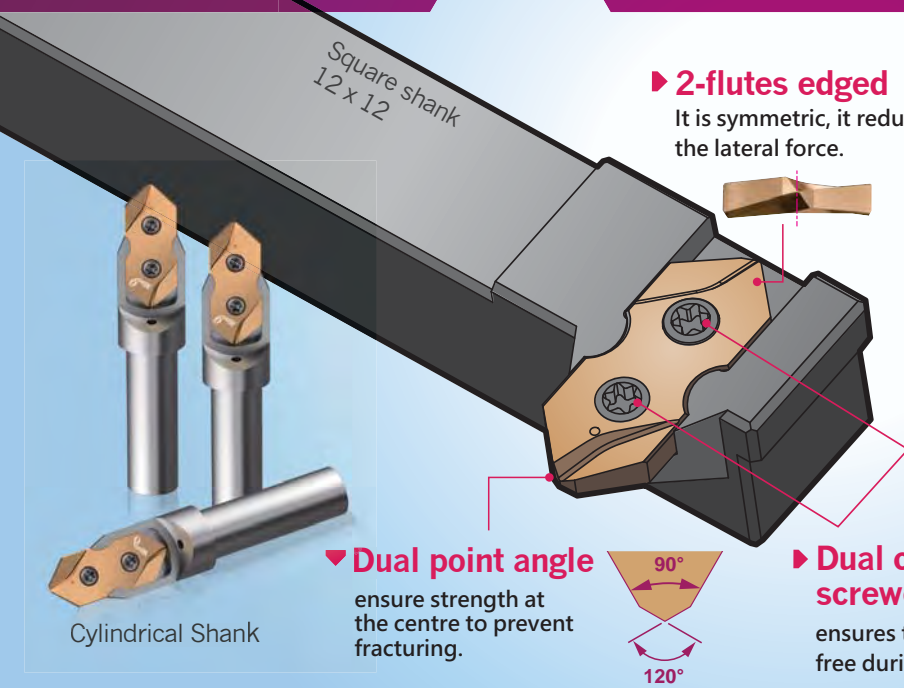
tornos.com



60° / 90° / 120°

ACE Spot Drill

Accuracy! Coolant! Efficiency!



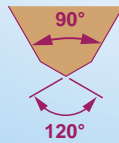
Square shank
12 x 12

▶ 2-flutes edged

It is symmetric, it reduces the lateral force.

▼ Dual point angle

ensure strength at the centre to prevent fracturing.



▶ Dual clamping screwed design

ensures the vibration free during the cutting.

- For high precision spotting.
- Fine surface finishing.
- Ultra-long tool life.
- Excellent repeatability.
- Available diameter Ø6 and Ø8.
- 60° / 90° / 120° inserts can fit on the same holder.

Cylindrical Shank

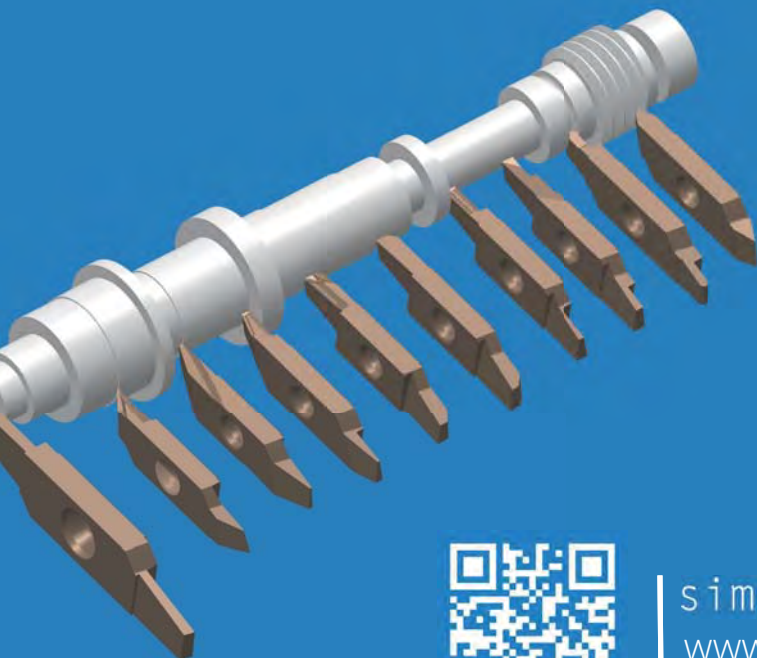


JIMMORE
International Corp.

E-mail: trade@jimmore.com.tw
<https://nine9.jic-tools.com.tw>

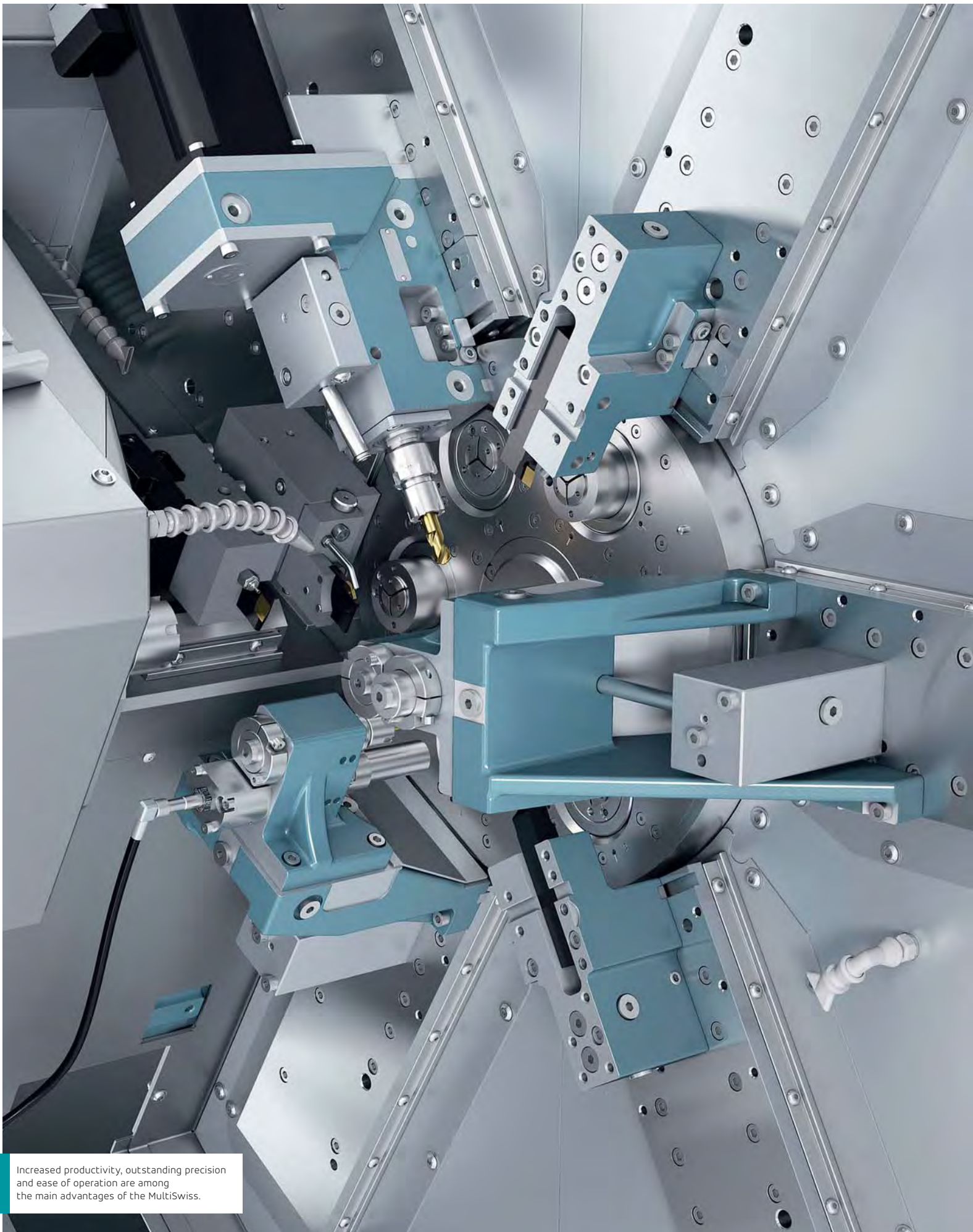
DIAMETAL

Your partner for precision tools and customized service



simply Different
www.diametal.com





Increased productivity, outstanding precision and ease of operation are among the main advantages of the MultiSwiss.

TORNOS MULTISWISS 6x16:

The future of
 multispindle
 machining

The manufacturing industry is constantly evolving, with an increasing demand for precision parts machined quickly and efficiently. To meet this challenge, machine-tool leader Tornos has unveiled its latest revolutionary innovation – the Tornos MultiSwiss 6x16. This versatile multispindle machine offers increased productivity as well as exceptional precision and ease of use, redefining the standards of multispindle machining.

TORNOS

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

The MultiSwiss 6x16 is equipped with 6 main spindles and a counter spindle, enabling it to machine up to 30 parts per minute with a maximum diameter of 16 mm. The MultiSwiss offers unparalleled ergonomics for optimal operator comfort. Its frontal access makes it easy to change configurations and ensures perfect integration of the peripherals. Unlike other machines, the operator can enter the machine instead of bending over it to change the tool holders. This frontal access is user-friendly, ergonomic, secure, innovative and unique on the market.

The machine has vertical carriages that also guarantee exemplary chip removal. The chips fall directly into the conveyor and are easily transported. In addition, cooling is integrated into the carriages to reduce

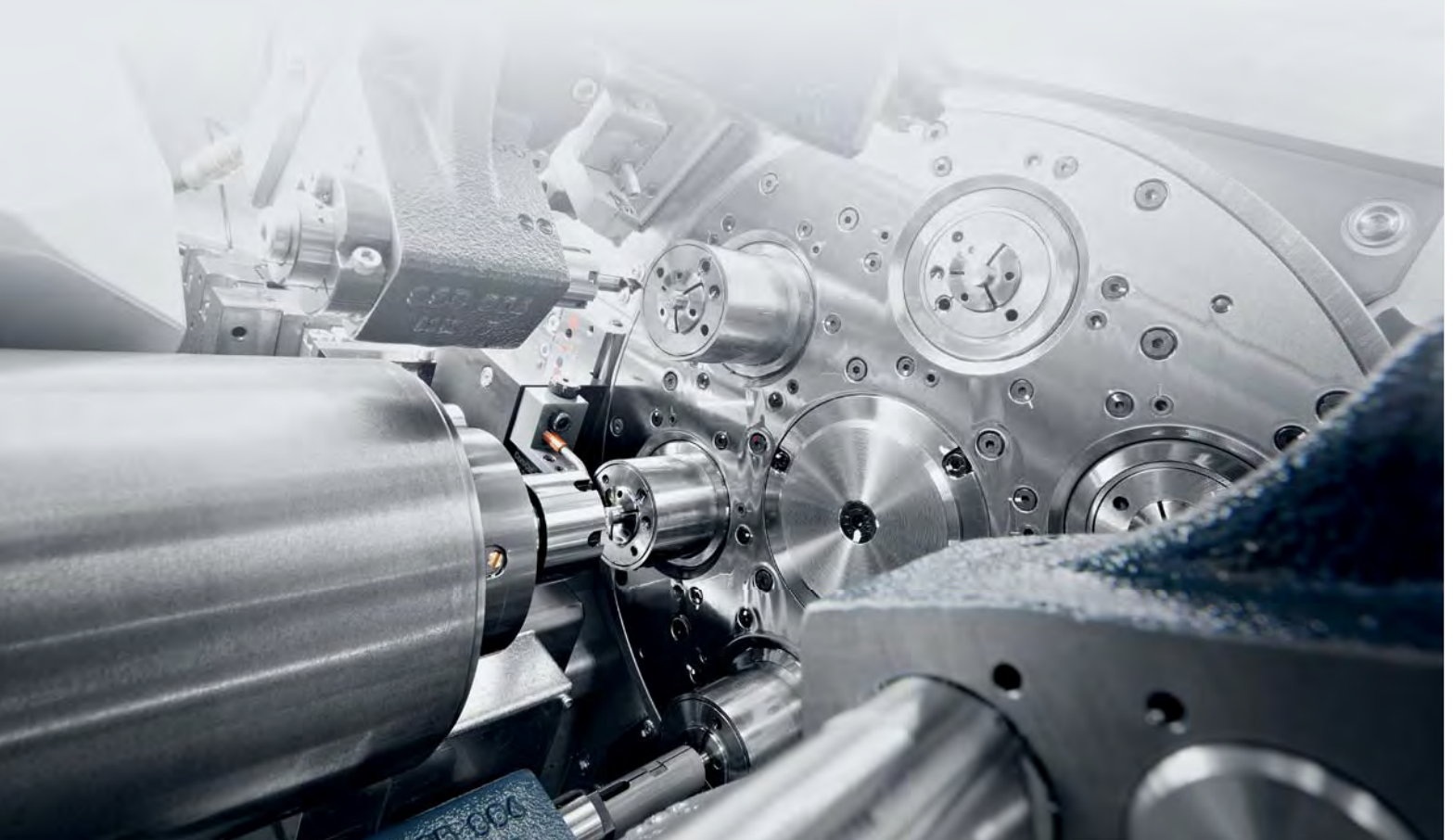
Experience the MultiSwiss live at the HORN Technology Days in Tübingen!

Join us at the HORN Technology Days from 14th to 16th June 2023 in Tübingen! We are delighted to be involved in this event, during which our machine will be machining a component made from eco-brass – a material known to cause machining problems – at an unrivalled quality and rate.

During the Technology Days, you will have the opportunity to experience the MultiSwiss up close and personal. Come and watch our machine in action as it performs precision machining operations with remarkable efficiency. Our team of experts will also be on hand to answer any questions you may have and provide detailed information on the advanced features of the MultiSwiss. Join us for a live demonstration and witness first-hand the



performance and capabilities of this state-of-the-art machine. We look forward to welcoming you and sharing our expertise with you.



the need for pipes, which can be difficult to adjust and cause chips to become trapped. This means that the MultiSwiss is as easy to set up as a single-spindle turning machine, the only difference being the number of collets to be changed.

Extreme flexibility

The MultiSwiss is also highly flexible. It has autonomous speed and positioning for each station, a plug-and-run system for accessories, pre-settable tool holders with integrated cooling, a Y-axis and the option to add a chucker for increased flexibility.

A high degree of precision

In terms of precision, the MultiSwiss offers full thermostability, ensuring that customers get exactly what they order every time. The all-in-one machine concept includes the bar feeder, oil tray and filtration. The ultra-fast barrel indexing is activated by the torque motor and this means there is no loss of time or locking time. As a result, MultiSwiss users can expect reliable production of a wide range of medical and dental parts with tight tolerances, improved part finish and extended tool life thanks to the hydrostatic bearings.

It is one thing to produce perfect high-precision parts, but manufacturers also need to make them affordable. The MultiSwiss offers low tooling costs and requires little intervention, thanks to its highly efficient chip management and disposal. It is extremely compact and this design maximises user productivity per square metre, making the most of the production area.

Intelligent programming

TB-DECO enables users to evaluate the options of each machine, reduce the risk of collisions and resulting downtime, and improve production efficiency. This software is a programming aid that generates tables to control the paths of each axis and spindle. It is closely based on the operation of a cam-type machine. To enable this, it is equipped with a powerful computer with an integrated interpolator and



NEOSWISS
INDEXABLE HEADS

Modular Swiss-Type Turning Holder

New System for Swiss-Type Turning Machines with **Quick-Change Heads**. Features Minimum Setup Time.



Fast Setup
Minimizes
Machine
Downtime

Rotary Wedge Mechanism
Designed to Amplify
the Clamping Force for
a Rigid Connection



A Variety of **Right**
and **Left** Heads
Can Be Mounted on
the **Same Shank**

NEOLOGIQ
MACHINING INTELLIGENTLY

Member IMC Group
ISCAR
www.iscar.com

The HORN Technology Days are back after a four-year break

From 14th to 16th June 2023, HORN will be offering unique insights into production at the Tübingen site, with a focus on the theme of 'Mastering processes'. The tool, fixture and machine comprise a complex process which requires a holistic approach and a thorough understanding to provide added value. Specialised seminars will cover topics including tool coating, brass and steel machining, polygon turning and high-speed thread-whirling processes, gear hobbing and tools for electromobility, among others. Visitors will also have the opportunity to visit the carbide manufacturing facilities and attend the final presentation of the ZykoMed project, which produces functionally integrated implants using novel cyclic synchronous machining processes.

The HORN Technology Days will offer numerous opportunities for discussion with speakers, experts and business partners.

Head to Tübingen and discover HORN's latest technological advances. For more information, visit www.horn-technologydays.com.



a machine simulator. The software enables the operator to visually position the operations on a timeline and to generate a more efficient code for the CNC. The software works similarly to the editing software used by amateur filmmakers, making it very easy to place operations in the desired locations. Since the tools already exist in the database with their geometric details, the desired movements can simply be indicated using the ISO code.

TISIS is the Tornos portal to Industry 4.0

TISIS demystifies process monitoring and it allows manufacturers to take their first steps into the world

of Industry 4.0. Users can also monitor the details of the machining process remotely via a smartphone or tablet.

Tornos Service

Backed by both geographical proximity to customers and a keen understanding of their processes, applications and market challenges, Tornos customer service delivers an unparalleled package of support. This includes commissioning assistance, professional training and supervision, a free telephone hotline, on-site support for operations performed, preventive maintenance, trouble-free delivery of original spare



parts worldwide, complete overhauls to optimise the service life of Tornos machines, as well as a range of operations and exchange modules aimed at extending the functionality and profitability of customers' applications. Buying a MultiSwiss is much more than a business transaction. It is your investment in the future. The Tornos customer service department thrives worldwide by ensuring superior production capabilities with Tornos brand products.

Tornos Academy

The Tornos Academy brings manufacturers' business objectives to life by matching the skills of their employees with their customers' expectations. For the manufacture of medical and dental parts, this means

not only having the right equipment, such as the MultiSwiss but also the right training to outperform the competition. The Tornos Academy helps customers and their machine operators to realise the full potential of Tornos solutions.

A genuine first-class partner

Combined with a full range of peripherals and automation solutions, software, services and training, the MultiSwiss is proof that Tornos is committed to being the partner of medical and dental parts manufacturers at the forefront of medical technology innovation.

tornos.com

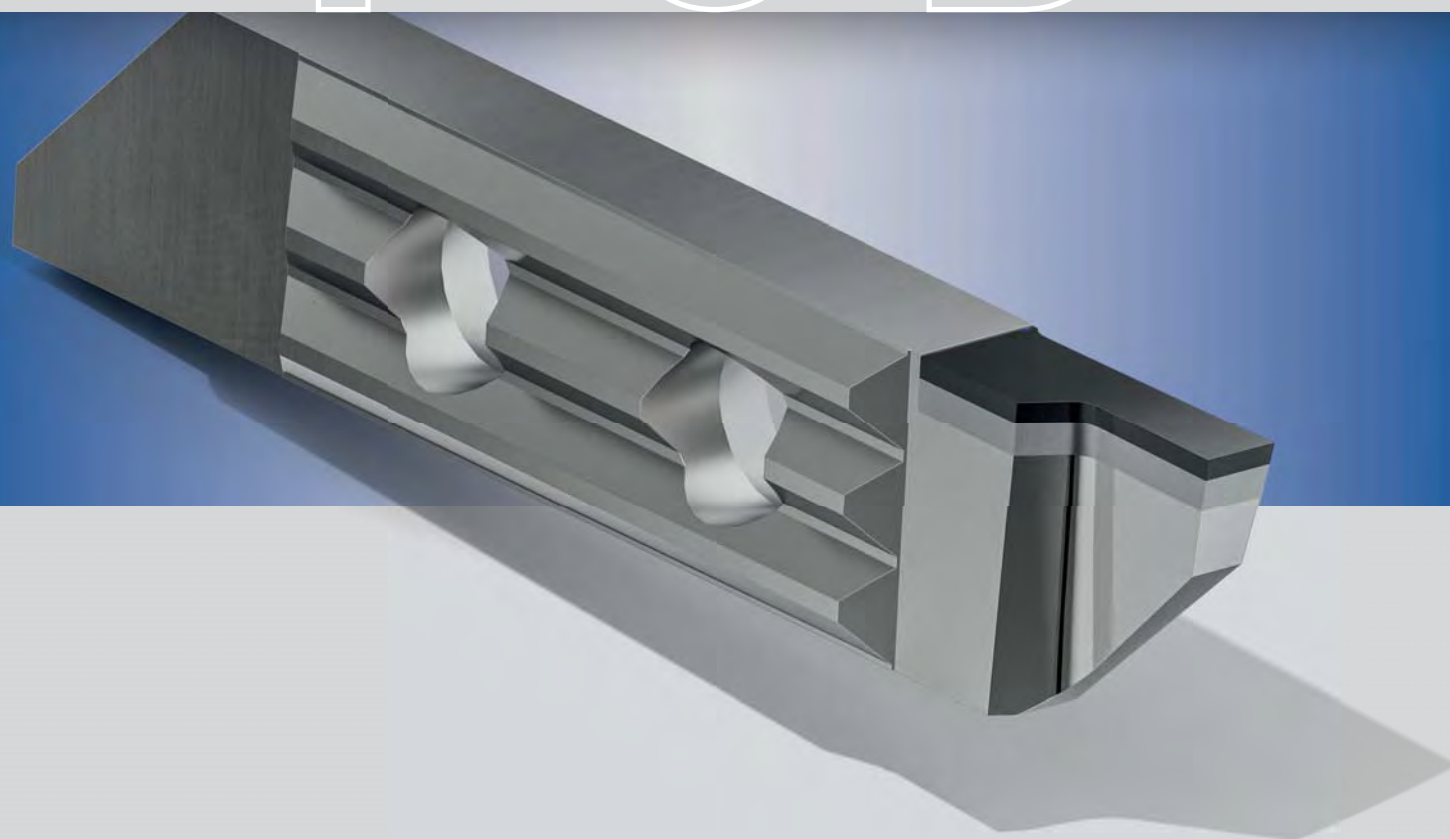


TUNGSTEN CARBIDE AND DIAMOND PRECISION TOOLS

APPLITEC
SWISS TOOLING



PCD



Plaque PCD

Nouveauté TOP-Line : pour les métaux non ferreux et les matériaux non métalliques

WWW.APPLITEC-TOOLS.COM

TORNOS



BUILDING THE FUTURE TOGETHER

CNC powerhouse TITANS of CNC has launched a revolution in technical education with its **FREE** online-based TITANS of CNC Academy—and Tornos is a proud partner, providing state-of-the-art automatic lathes to the academy. Together, TITANS of CNC and Tornos are lifting up students, educators, and the manufacturing workforce.

Stay in step with the revolution:
Visit titansofcnc.com today—and be sure to follow TITANS of CNC on social media.

