PROFILE COMPANY

TORNOS



The Swiss-type lathe is born in Moutier

Establishment of Tornos

Tornos merges with Petermann, a longtime competitor in Moutier

Tornos merges with Bechler to create Tornos-Bechler

Presentation of DECO 7

Tornos-Bechler becomes Tornos Tornos' initial public offering

Acquisition of Almac, a high-precision milling machine manufacturer in La Chaux-de-Fonds

Presentation of the Tornos MultiSwiss 6x14

Presentation of the Tornos SwissNano Establishment of Tornos Xi'an Machine Works Co. Ltd.

Delivery of the 100th MultiSwiss

Automatic lathe manufacturer Tornos—regarded as the pioneer in the Swiss-type lathe technology—is based in Switzerland's Jura region, an area that has been providing high precision, automatic lathes to the world since 1880. Tornos today primarily manufactures computer numerical control (CNC), Swiss-type (sliding headstock) turning machines; multi-spindle machines with CNC or cam control; and machining centers for complex parts requiring high precision (Almac in La Chaux-de-Fonds). The high precision turning industry requires the same high quality, precision, and productivity, so it is no wonder that these two strong Swiss assets come from the same area of the world. Through a global sales and service network, Tornos delivers unique solutions to customers in dedicated market segments, including automotive, medical and dental technologies, micromechanics, and electronics. Tornos Group has approximately 600 employees.





Represented in more than 80 countries, Tornos offers its customers a range of services which emphasize the process of dialogue. Before the sale, customers benefit from a personal consultation involving an exact analysis of their requirements and a detailed calculation. During the sale, they have access to a test center where they can witness all the statistical process control (SPC) tests and inspections.

Also available to them are Tornos' training centers to help them acquire the necessary skills to fully master the machines and software they have purchased. A local after-sales service, which is both close at hand and efficient, ensures that customers can use their equipment with complete confidence. Thanks to a direct system of management, all spare parts are certified as being originals.

Wherever you are in the world, Tornos delivers the same high-quality service.

A SOLUTION FOR EVERY TYPE OF PART

Techno Centers

Tornos specializes in resolving your technical challenges. As your technology partner, Tornos has built a network of Techno Centers where your unique applications can be tested and implemented in real production situations and in complete confidentiality. Carried out by Tornos' expert application engineers, these operations ensure your complete compliance with the tolerances and dimensions demanded by your applications. You also benefit from having test pieces at your disposal and the opportunity to collaborate with Tornos' experts to develop your customized solutions.

Centers of Expertise

Our Centers of Expertise provide customers with the training essential to making full use of their Tornos machines and maximize return on their capital machine investments. Our technology and training professionals help you acquire the necessary expertise in various machining procedures relevant to your workpieces. This knowledge transfer draws on our experience in market segments ranging from automotive and aerospace to electronics, watchmaking, and the medical and dental industries.





Just what is precision turning, exactly? Born more than a century ago, it is a technique enabling industrial manufacturing of parts from metal bars. The screw was the first item made from a metal bar. To produce the thread, the "collar" has to be "released"—an operation that soon gave rise to the concept of precision turning. Today, this machining method requires great precision and is executed on cam-operated or CNC lathes.

Practically every industrial sector today uses precision turning to produce a vast array of parts with different shapes and dimensions. The watchmaking, automotive, medtech, construction and home appliances industries all employ precision turning as an essential machining technology.

So, whether we know it or not, all of us use precision turned products in our every day lives. Tornos, a precision turning pioneer, is headquartered in Moutier, Switzerland, in the heart of a region traditionally steeped in extreme mechanical precision. With more than a century of leadership in automatic lathe design, Tornos is at the forefront of advancing automatic lathe technology. Due to our know-how, Tornos is regarded as the precision turning industry reference, and that means we can offer our customers ever-greater performance, coupled with highly competitive machine prices, quality and performance.



Multi-spindle

The multi-spindle machine allows multiple tools to cut multiple pieces of material simultaneously. Usually configured in six or eight spindle models, each spindle is embedded in a rotating drum and "attacked" by a cross-slide and end-slide tool effectively making each spindle a 2-axis or 3-axis lathe. Numerous attachments are available for use on one or more stations for specific metalworking operations. In production, the operations needed to be performed on a part are divided among the number of spindles. Because each spindle station is being machined simultaneously, when the drum indexes from one station to the next a complete part is produced. Optimal serialization of operations enables these machines to achieve production rates four to six times higher than those of single-spindle turning machines.

Single-spindle numerical control with sliding headstock

Tornos has been a recognized specialist in sliding headstock turning machines for over 100 years. We benefit from unrivaled expertise, which means we can offer our customers complete turnkey solutions. Our product range can respond to all of our customers' needs, whatever the diameter or the field of application. We have worked ceaselessly to develop innovative machining solutions, and we will continue to innovate in order to increase our technological advantage.



MULTISWISS

Our revolutionary MultiSwiss product line bridges the gap between single-spindle and multi-spindle lathe technologies. With its six sliding headstock spindles using torque motor technology for barrel indexing, the ultra-high speed of the MultiSwiss means you can achieve near cam-driven multi-spindle cycle times.

A multi-spindle CNC turning machine featuring new technologies and integrating all peripherals required for optimal operation, and a lower price than other multi-spindle CNC machines that's the MultiSwiss 6x14. The user-friendly MultiSwiss is designed to offer maximum user comfort. In fact, we are proud to affirm that it is the most comfortable and easy to use multi-spindle machine currently available. It was the first frontal machine available on the market, and the first to forgo Hirth gearing to lock the barrel. That classic system was successfully replaced with a highly dynamic torque motor. The spindles are equipped with a hydrostatic sheath to guarantee excellent damping which optimizes tool wear. In addition, the MultiSwiss 6x14 is the market's first multi-spindle turning machine equipped with mobile spindles.

"THINK PARTS – THINK TORNOS"

This is the slogan chosen by the company to show that it offers solutions that are perfectly matched to the numerous sectors demanding both quality and productivity. The sectors' use of Tornos machines is evidence of the pervasive presence and importance of precision turning in the world today.

A wide variety of automotive parts are produced by bar turning: bleed screws, ball joints, motor parts, suspension system components, ABS, airbags, and hydraulic systems, just to name a few.

Highly sophisticated applications and difficult-to-machine materials (e.g., titanium and vacuum-arc remelted stainless steel) require ingenious machining solutions such as thread whirling that uses a tool rotating at a very high speed. Bone screws, spinal hooks, and dental implants are just a few of the medical devices enabled by Tornos' technologies.

MEDIC





The ever-evolving electrical and electronics sectors require ever more inventive developments to produce increasingly complex and tiny parts. All modern consumer goods, from computers and electronic goods to mobile phones and TVs, require bar-turned parts.

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After-sales service

To resolve your problems, our fast and efficient after-sales service team is at your disposal at our head office or at our subsidiaries. Tornos is committed to supporting you by ensuring smooth operations and avoiding downtime.

Spare parts

Our spare parts department maintains direct services and a large stock of standard wear items. You can count on Tornos parts and services to save you outside contractor costs and guarantee optimum quality, genuine parts.

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