

YOUR PARTNER FOR HIGH PRECISION METAL PROCESSING



TRINON
TITANIUM

WELCOME TO THE TRINON WORLD

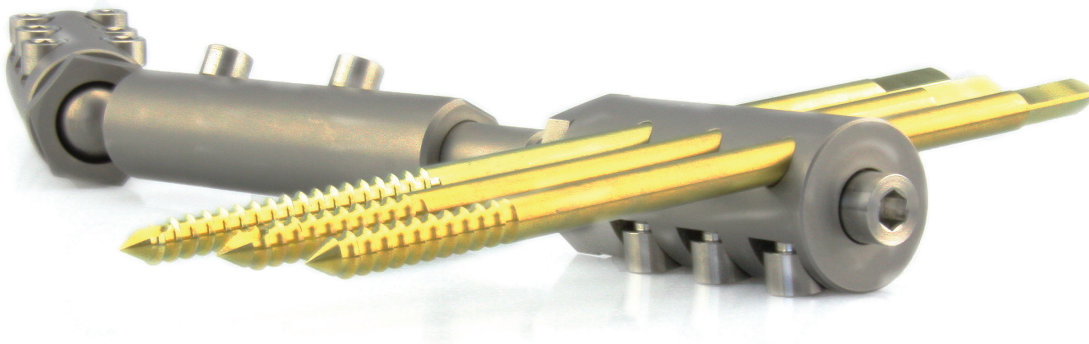
Since 1993, Trinon Titanium, based in Karlsruhe, Germany, is supplying various industries with metal processing services in titanium and special alloys.

In the last 20 years, the company has grown to an established SME with over 300 employees in 3 countries.

Even through its recent period of growth, the company has retained its core values, allowing it to ensure flexibility, speed, and precision while manufacturing affordable parts in an increasingly competitive market. This allows Trinon Titanium to offer a high level of quality that has become synonymous with German engineering, while also providing competitive pricing options in a global context.

Today, a big focus at Trinon Titanium is the utilization of advanced technologies. From additive manufacturing processes, high precision manufacturing of small parts, or advanced waterjet cutting techniques, Trinon Titanium has been at the forefront of the implementation of new production methods.

With the flexibility of our manufacturing, the experience of our employees, and the constant investment into new technologies, we can offer our partners high-quality components at competitive prices.



ONE MINUTE OVERVIEW



Trinon Titanium GmbH:

Specializes in metal processing of titanium and other difficult-to-process materials

Able to manufacture one-offs, low volume series, and mass production items

Long-established certification standards (DIN EN ISO 13845 and EU Directive 93/42 EEC)

Simultaneous 5-axis milling department with over 8 machining centers

More than 20 multi axis CNC Swiss style turning machines

High precision waterjet machines (micro-scale)

In-house surface treatment ranging from barrel finishing to anodizing

Large on-site material store

Integrated CAD/CAM design offices with rapid prototyping and reverse engineering capability

In-house cleanroom (Class 7)



HOW WE WORK

At Triron Titanium, we believe that in order to deliver high quality products within tight schedules we have to adapt to the specific requirements of every project we tackle.

We are able to develop products with our clients from the concept level up to production-ready stage within our integrated CAD/CAM design offices. Our dedicated development team applies modern design and reverse engineering concepts to create the most efficient solutions and manufacturing methods for the project at hand.

With mass-production capabilities in 3D milling, 12-axis turning technologies, and additive manufacturing processes, we are technologically equipped and ideally positioned to fulfill the needs of various industries aiming to build titanium parts with challenging requirements.

With over 300 technical employees in our certified (DIN EN ISO 13845 and EU Directive 93/42 EEC) manufacturing plant, we are able to offer the highest quality and flexibility within efficient timelines.

Thanks to a large material store located at our manufacturing site, we can deliver products in various titanium grades quickly.

If you are looking to create a new product or simply need a design manufactured, we are a partner to consider.



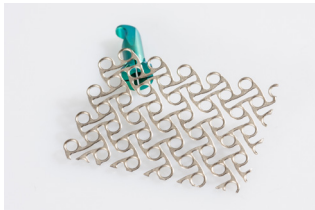
TECHNOLOGY



Swiss style CNC turning with up to 12 axes allows us to perform multi-operation processes at higher speeds and higher complexities. We retain conventional turning operations for special orders.



Our milling department is equipped with several 5-axis milling centers fitted with high-speed turrets. They work closely with the CAD/CAM programmers and a dedicated quality control team.



With the most modern micro waterjet technology, we are able to cut material with great accuracy, without contamination and the need for extensive post-production processing.



We have established various surface finishing processes including barrel finishing, drag finishing, blasting, and anodizing. Our partnerships allow us to apply and develop special requirements easily.



In the design department, our engineers are assisting customers with the development and design of parts, if required. With access to 3D laser scanning, advanced freeform software, and additive manufacturing, the team is able to support customers when solving complex problems.



Assembly of components can be done directly on-site and, if required, we have cleanrooms (Class 7) at our disposal where parts can be packaged under strictly controlled environments.

NOT JUST MANUFACTURING



At Trinon Titanium, we understand more than just manufacturing. At times, our customers ask us to go bold and help bring to life projects that leave a long-lasting impression on their viewers.

One such project is the Titanium Clinic in Marbella, Spain. The architect envisioned a facade clad with a titanium structure to distinguish the building from its adjacent structures.

Trinon Titanium worked with the architectural office to design and build a support structure to hold over one thousand titanium squares in 2 mm material thickness.

Built under a tight schedule, a dedicated team of Trinon Titanium employees ensured the project was delivered on time and on budget.



Another project Trinon Titanium has participated in is the "Past Mapping" sculpture gifted by several German and Swiss universities to the Korean German Institute of Technology in Seoul, Korea.

Conceived by renowned Australian spatial designer Lawrence Wallen, the sculpture consists of over 400 individual parts and measures more than 15 m in length.

Depicting the topographies of Seoul and Berlin, each segment of the sculpture is different in design, making production and assembly a challenging task. The sculpture was designed, manufactured, and assembled in collaboration with Lawrence Wallen and his team in just under 8 weeks.

WHO WE WORK WITH



Our customers include multinational companies such as Audi, SGL Group, Brembo, Carl Zeiss, Siemens, Fraunhofer Institute, Fresenius and other companies from various industrial sectors.

Furthermore, we are a supplier for SME's and individual clients who expect the highest quality at affordable prices.





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