emco



BUSINESS UNIT MEDICAL

HIGH-PRECISION SOLUTIONS FOR THE MEDICAL TECHNOLOGY OF TOMORROW!

Welcome to the EMCO WORLD!

As an internationally active machine tool manufacturer, we specialize in developing and implementing state-of-the-art manufacturing technologies for the medical industry. With innovative strength, technical excellence, and decades of experience, we create precise and reliable solutions for a highly regulated and dynamic market.

More than 1,000 successfully implemented projects – across all risk classes (I to III) – underline our extensive expertise and in-depth industry knowledge.

OUR MISSION

We support our customers in turning their ideas and visions into reality – through customized technologies, maximum precision, and close collaboration.
Our goal: to increase efficiency and safety in the production of medical components at the highest technical level.

OUR SERVICES

From the initial idea to the turnkey solution – we accompany you through every phase of your project. Our interdisciplinary teams of engineers, designers, and medical technology specialists work closely together – efficiently, solution-oriented, and according to the highest quality standards.

In addition, you benefit from our strong industry network.

YOUR BENEFITS WITH EMCO MEDICAL:

/ **Experience:** More than 1,000 successfully completed projects
/ **Expertise:** In-depth know-how across all risk classes (I – III)
/ **Technology:** Continuous development of our machines and components
/ **Partnership:** Personal support and customized solutions
/ **References:** Numerous testimonials from satisfied customers

Discover our Business Unit Medical – and let's shape the future of medical technology together.

Get to know us online – quick and easy via QR code!

Horst Lindner
Head of EMCO Business Unit Medical
+49 160 5553 372
horst.lindner@emco-world.com





/ CUSTOM SOLUTIONS FROM THE MACHINE TO TURNKEY SOLUTIONS

AND MUCH MORE . . .

PRECISION IN EVERY STEP. CONSISTENCY IN EVERY RESULT.

- / Material
- / Machine type
- / Technology
- / Cooling
- / Clamping technology
- / Automation
- / Process (Pre-/Post)
- / Tool management



BRIDGING INDUSTRIES – ENGINEERING AND MEDICINE FOR A HEALTHIER TOMORROW

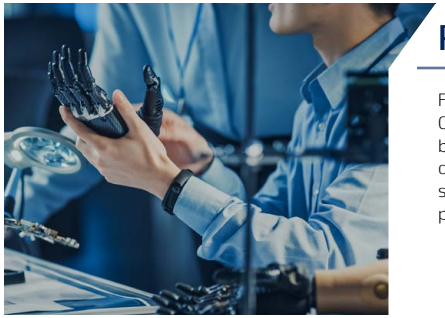
- / Support during the IQ/QQ validation processes
- / Technology workshops – including trial cuts with parts supplied by the customer
- / Support during the realisation phase – including "Green Button" certification
- / Machining of sophisticated materials
- / Feasibility studies for your components

EXPERTISE IN SIX AREAS – PERFORMANCE FROM A SINGLE SOURCE



MEDICAL DEVICES

Whether CT scanners, X-ray systems or MRI machines – medical devices consist of highly complex assemblies that demand precision manufacturing at the highest level. A wide variety of materials and geometries must meet extremely tight tolerances and the highest standards of dimensional accuracy, surface quality, and reproducibility.
With decades of experience and a broad machine portfolio, EMCO offers the right solution for even the most demanding manufacturing processes.



PROSTHETICS & ORTHOTICS

From custom-made single parts to efficient series production: Our HYPERTURN and MAXXTURN series machines enable both the flexible manufacturing of individual prosthetics and orthotics as well as the cost-effective production of complex standard components – with high repeat accuracy and complete machining in a single setup.



DENTAL TECHNOLOGY

In the field of dental technology, precision and surface quality are key. Complex geometries, delicate components, and minimal tolerances – as found in dental turbines – require powerful yet compact machines.
Our EMCOTURN, MAXXTURN, and HYPERTURN series are frequently used in this area and meet the highest demands for accuracy and flexibility, even in environments with limited space.



IMPLANTS

Whether hip or knee implants, dental or jaw implants, or bone screws – the production of these sensitive components demands the highest level of precision and material expertise. EMCO machines reliably process high-strength metals as well as non-metallic materials, including ceramics – economically, with process reliability, and consistent reproducibility.



PHARMA SOLUTIONS

Pharmaceutical production places the highest demands on process reliability and repeatability. EMCO machines are used with proven success in the manufacturing of pharmaceutical components – by contract manufacturers as well as specialized system suppliers.
Our customized and standardized automation solutions offer maximum process reliability, cost-effectiveness, and efficiency – all from a single source.



MEDICAL INSTRUMENTS

Scissors, forceps, scalpels, clamps or needles – the production of medical instruments requires specialized expertise, particularly when it comes to complex geometries and challenging clamping setups.
Our turning/milling centers and 5-axis machining centers are the ideal solution for the cost-efficient manufacturing of high-precision instruments that meet the highest standards of quality and process stability.


AUSTRIAN ROOTS.
GLOBAL STANDARDS.

MEDICAL DEVICES



YOUR BENEFITS WITH EMCO:

Manufacturing components for medical devices requires the highest standards in precision, process stability, and surface quality – often with varying batch sizes and a wide range of materials.

With EMCO, you gain access to machines that are perfectly tailored to these challenges:

- Process reliability that meets regulatory standards
- Flexible machine concepts for a wide variety of materials and geometries
- Maximum dimensional accuracy and repeatability for safety-critical components
- Complete machining in a single setup – saving time and minimizing errors
- Scalable manufacturing solutions – from prototyping to full-scale production

The result: less scrap, stable processes, top-tier quality – and a clear competitive advantage.

OUR RECOMMENDATION FOR MAXIMUM PERFORMANCE:

HYPERTURN 100 POWERMILL turning-milling center for complete machining of large and complex workpieces



CENTRIFUGE ROTOR

- 316 L



PROSTHETICS & ORTHOTICS

YOUR BENEFITS WITH EMCO:

Every prosthesis is as unique as the person who wears it – and yet production processes must be efficient, safe, and scalable.

EMCO machines deliver exactly that:

- Flexibility for single-part and small-batch production – thanks to fast setup times
- Complete machining of complex geometries in a single operation
- High repeat accuracy in the series production of standard components
- Scalable automation for growing production volumes
- Tailor-made machine solutions – adapted to individual patient needs and production requirements

With EMCO, you manufacture reliably, efficiently, and with a clear focus on the patient – today and in the future.



OUR RECOMMENDATION FOR MAXIMUM PERFORMANCE:

High-performance turning-milling center HYPERTURN 65 POWERMILL for complete machining of complex workpieces – from bar stock or as insert parts





PROSTHETIC HEAD

- High-strength aluminum

/ DENTAL TECHNOLOGY



YOUR BENEFITS WITH EMCO:

In dental technology, every micrometer counts. Whether it's milled parts for dental turbines, fixtures for scanners, or support elements – the smallest components demand the highest precision and flawless surface quality. At the same time, production environments in the dental sector often offer only limited space.

EMCO provides compact, high-performance machines specifically designed for delicate parts and demanding materials. With high dynamics, a minimal footprint, and outstanding machining quality, our machines enable cost-efficient production – even for complex geometries and varying batch sizes.

- / Compact machine solutions – ideal for laboratories and tight production spaces
- / Maximum precision for the smallest components
- / Perfect surface finishes for sensitive dental applications
- / High dynamics and short cycle times
- / Complete machining for greater efficiency and process reliabilityt

The result: maximum precision in minimal space – for confident smiles in real-world applications.

OUR RECOMMENDATION FOR MAXIMUM PERFORMANCE:

Compact turning center HYPERTURN 50
with milling turrets for complete machining



CONTRA-ANGLE HANDPIECE

/ 316 L



/ IMPLANTS

YOUR BENEFITS WITH EMCO:

Implants are among the most demanding components in medical technology. Dimensional accuracy, biocompatibility, and traceable quality are non-negotiable. Whether joint implants, dental implants, or osteosynthesis screws – even the slightest deviation can have safety implications.

With EMCO machines, you manufacture reliably and with consistent reproducibility – even when working with challenging materials. Thanks to powerful drive technology, intelligent tool management, and adaptable automation solutions, every machining step becomes a controlled and secure process.

/ Precise machining of titanium, stainless steel, ceramics, and more

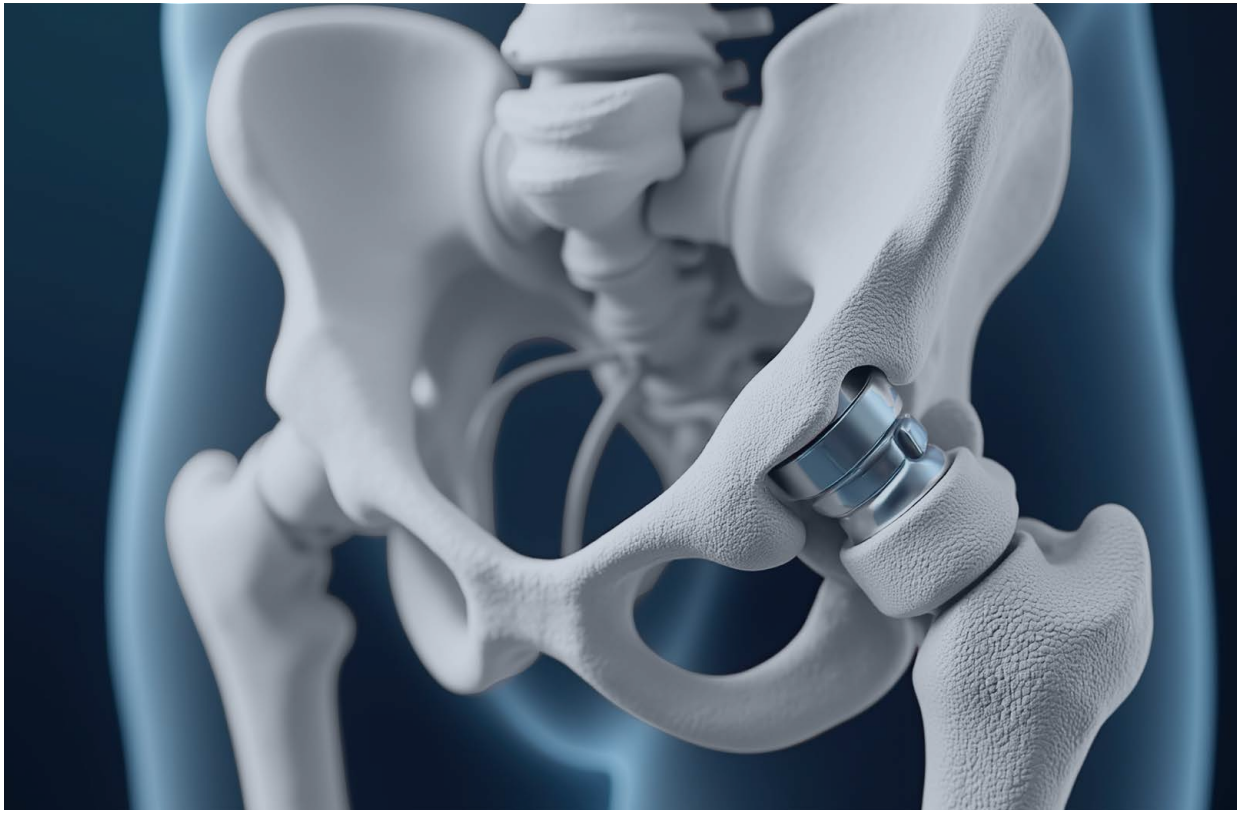
/ Consistent quality across all batch sizes

/ Automated processes with end-to-end documentation

/ High dimensional accuracy for complex geometries, best-in-class system solutions

/ Process reliability – even under the strictest regulatory requirements

The result: secure processes, flawless components, and fully documented quality – at every level.



OUR RECOMMENDATION FOR MAXIMUM PERFORMANCE:

High-performance turning center HYPERTURN 65 TRIPLETURN with milling turrets for cost-efficient high-volume series production

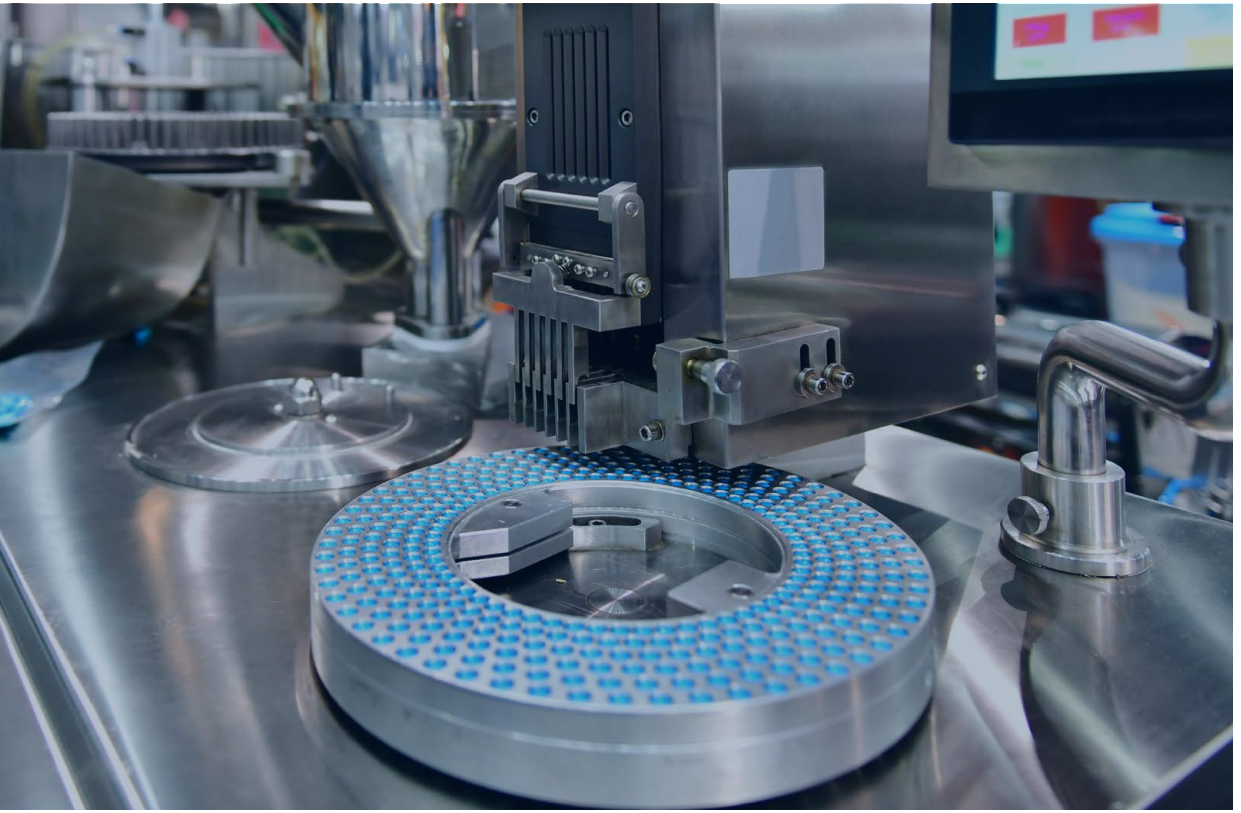




ACETABULAR CUP-LINER-FEMORAL HEAD

/ CoCrMo
/ Polyethylene

PHARMA SOLUTIONS



YOUR BENEFITS WITH EMCO:

In pharmaceutical production, absolute process reliability is essential.

Components for filling systems, dosing units, or testing equipment must be manufactured with the utmost precision – often under tight time constraints and fluctuating order volumes.

EMCO machines offer exactly this combination of reliability and flexibility. They can be quickly retooled, efficiently process a wide range of materials, and integrate seamlessly into automated production environments.

/ Absolute process reliability – even under strict regulatory conditions

/ Fast retooling for varying batch sizes

/ Precise machining of diverse materials

/ Full automation capability for maximum efficiency

/ Technology that complies with regulatory standards

The result: a reliable, future-proof manufacturing solution for an industry where compromise is not an option.

OUR RECOMMENDATION FOR MAXIMUM PERFORMANCE:

Vertical machining center MAXXMILL 750
for 5-sided machining

PUNCH FOR A TABLET PRESS

/ 316 L





/ MEDICAL INSTRUMENTS

YOUR BENEFITS WITH EMCO:

Surgical instruments such as scalpels, clamps, or forceps must meet the highest standards of precision and dimensional accuracy – and are often produced in large quantities.

Every manufacturing step must therefore be efficient, reproducible, and highly reliable.

EMCO turning/milling centers and 5-axis machining centers enable complete machining of even the most complex geometries in a single setup – with short setup times and a high degree of automation.

/ Maximum precision for complex and delicate components

/ Efficient complete machining in a single clamping

/ Short setup times for frequent product changes

/ Consistent quality in high-volume production

/ Cost-efficient series production with automation potentialial

The result: high-precision instruments with reproducible quality – manufactured with maximum efficiency and technological excellence.



OUR RECOMMENDATION FOR MAXIMUM PERFORMANCE:

Universal machining center UMILL 630
for 5-axis simultaneous machining





DENTAL FORCEPS

/ 1.4404

EMCO

beyond standard

EMCO GmbH / Salzburger Str. 80 / 5400 Hallein-Taxach / Austria / T +43 6245 891-0 / info.at@emco-world.com

www.emco-world.com

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