

STARK Spannsysteme

A company of the ROEMHELD Group



stark-roemheld.com

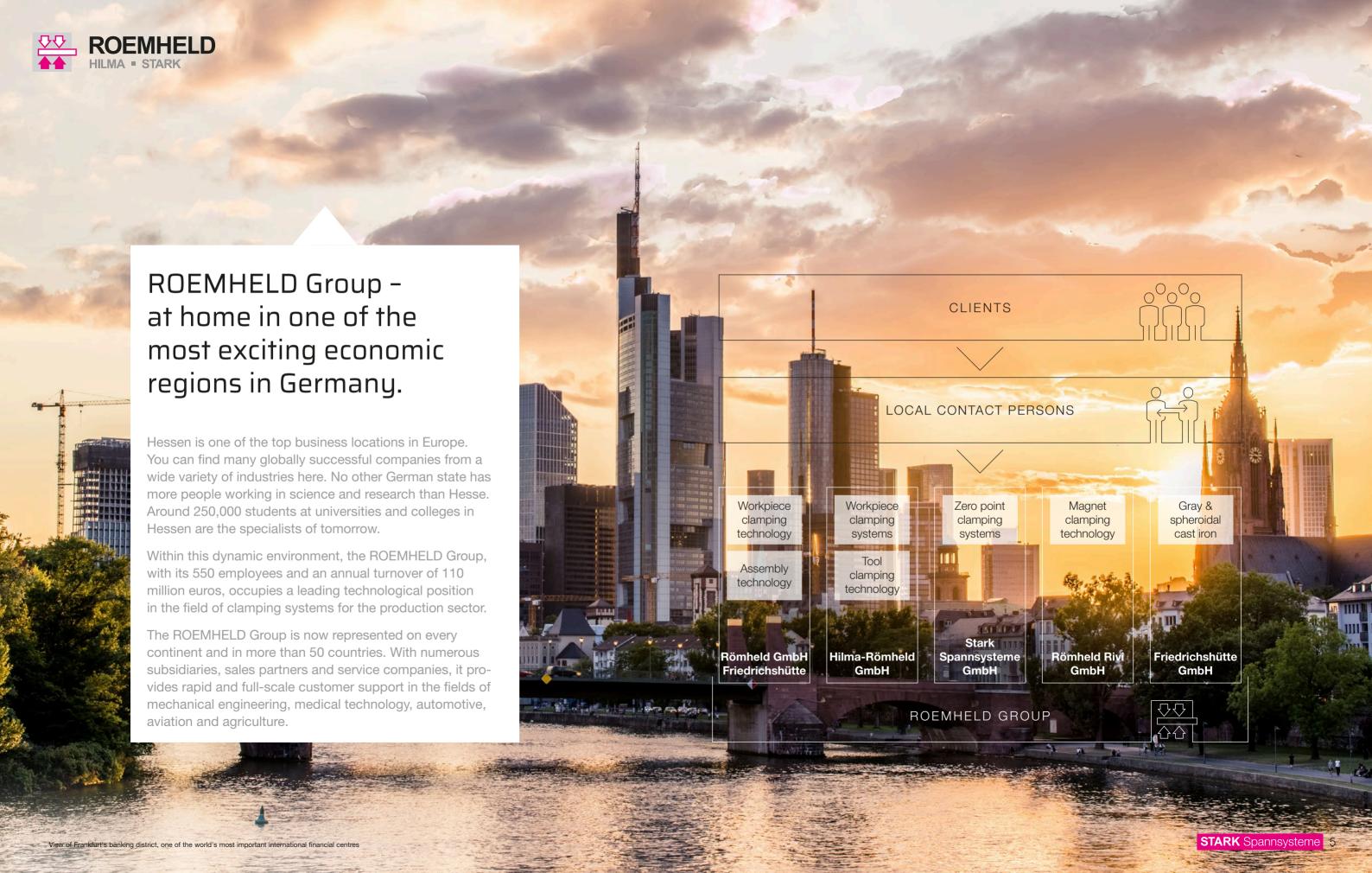




The high-tech company STARK Spannsysteme, founded in 1977, is considered a pioneer in the development and manufacture of zero point clamping systems. It is the first company on the market to specialise exclusively in this technology, and has been doing so for decades.

Highest possible quality and precision distinguish what is probably the most comprehensive product range on the market in the field of highly productive workpiece clamping. STARK components, products and systems make manufacturing more efficient and flexible.

STARK INNOVATIVE EXPERIENCED INDIVIDUAL SAFE





Copenhagen 1,5 h flight iedrichshafen Memmingen 0,5 h drive Zurich Innsbruck 1,5 h drive

STARK Spannsysteme – where technology lead meets mountains.

The economy in Vorarlberg – the westernmost federal state in Austria – is as varied as its landscape. A variety of industries and regional value chains on an international level characterise the economy of this region.

In terms of patent applications, Vorarlberg regularly ranks amongst the top five regions in Europe. Due to its economic power, this state is on a par with the metropolitan regions of Paris and Stockholm.

The average person from the Vorarlberg region is said to have the qualities of diligence, efficiency, open-mindedness and courage. Performance is valued by the population just as much as creativity and commitment.

Vorarlberg is a a border area. 80 % of the 350 km long state border is an Austrian national border. The region borders Switzerland, Germany, and the Principality of Liechtenstein. This unique four-country location is the main reason for the openness and internationality of the local economy.

STARK Spannsysteme is located in the middle of this remarkable economic region, surrounded by spectacular Alpine scenery.



INNOVATIVE

100⁺PATENTS

Our technological leadership and knowledge of our customers' needs is reflected in several hundred German and international patents and utility models.

SAFF

550 EMPLOYEES

The companies of the ROEMHELD Group are all family-owned. In 2019, 550 employees work for the Group.

EXPERIENCED

1988

STARK develops the first zero point clamping system in the machining sector and is now one of the innovators in the industry.

STARK products reduce set-up times by 90 % and ensure optimum utilisation of machine capacity.

INDIVIDUAL

30,000 COMPONENTS

With over 30,000 articles, the ROEMHELD Group's comprehensive product range offers the right product for almost every task and is constantly being expanded with new product developments and customer-specific solutions.

STRONG

110 M

Iln 2018, the ROEMHELD Group achieved cumulative sales of more than 110 million euros at its three sites in Laubach (DE), Hilchenbach (DE) and Rankweil (AT).

SAFE

50 COUNTRIES

The ROEMHELD Group is now represented on every continent: 5 locations (Germany and Austria), 6 subsidiaries (England, France, USA, China, Japan, South Korea), sales partners and service companies in 50 countries and 18 sales offices in Germany.

We know how progress works, through passion, lateral thinking, and of course collaboration.



STARK Spannsysteme

The ROEMHELD Group consists of 5 companies in Germany and Austria, each with different products and orientations. But one thing unites us: We're a team. Because we work together, learn from each other and develop together.

As a part of the ROEMHELD Group STARK contributes to numerous synergies resulting from the collaboration of specialised technology companies. In this network we focus on international scale business and are the trusted partner of numerous customers all around the world.





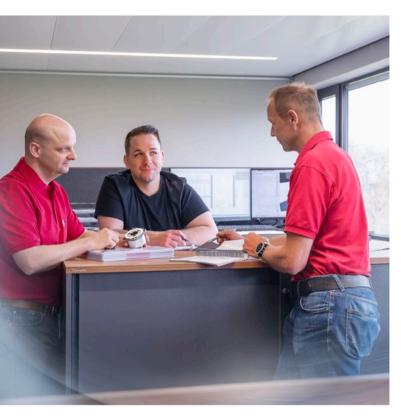
Martin Greif, managing director of STARK Spannsysteme with the shareholders of the ROEMHELD Group, Philipp Ehrhardt and Julia Reichert, and Hans-Joachim Molka, managing director of the Römheld GmbH Friedrichshütte

It's the we that makes us different. It's our togetherness that makes us better.

As part of the ROEMHELD Group, STARK not only benefits from the security and experience of a family-run company with a long tradition but also from its worldwide sales and service network.

At the same time, this background provides the independence to pursue dynamic and innovative solutions for emerging market-driven trends and to develop customised solutions with which STARK maintains its technological leadership position.





ff Technical challenges are best mastered with a versatile team."

Markus Frankenberger Mechanical Design



ff Partnership is our motivation, we cooperate to find your optimal solution."

> Andreas Kraml **Technical Sales**

ff It's rewarding to work in a place where you can play an active part in shaping solutions.

Tobias Klenz Apprentice Workshop



Adherence to delivery dates and work quality is our strength."

Klaus Tschemernjak **Production Planning**





Focus on industries and markets.

Every customer has specific requirements. With our comprehensive industry expertise, we offer you the right solutions, services, and products for sustainable and efficient application.





AUTOMOTIVE

AVIATION



CONSTRUCTION

MEDICINE

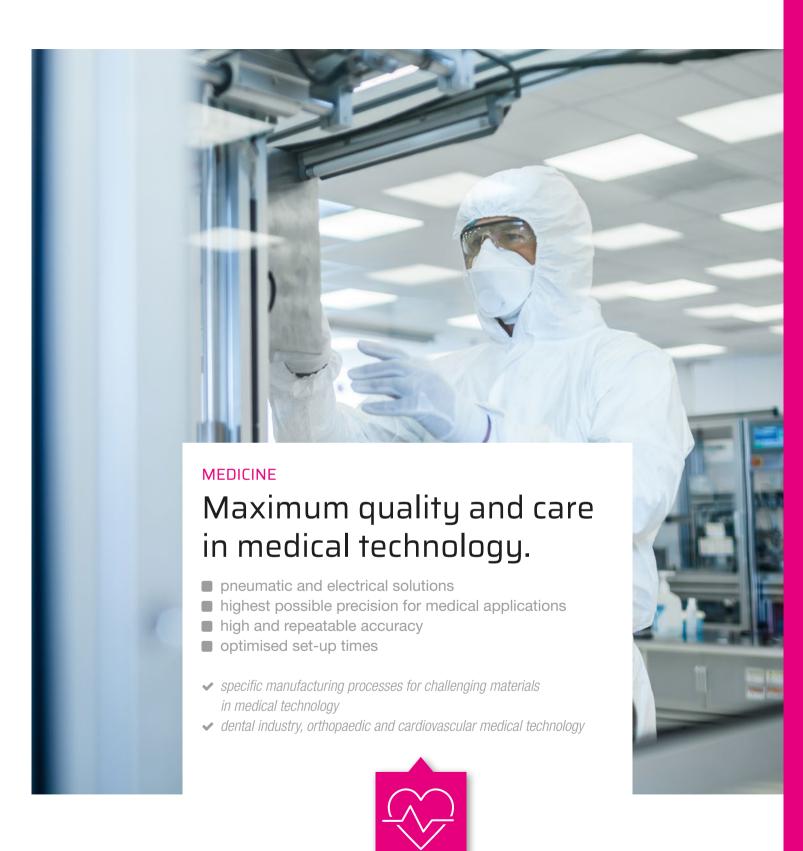














Zero point clamping system:

Strong, precise and customised for your application.



STARK.classic

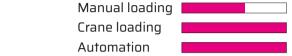
- **⊘ lifting:** STARK.classic lifts the pallet upon release

high cycle number

Automation

• versatile: clamping control, mount control, blow-out, media duct

Manual loading			
Crane loading			الـ
Automation	H	ΗY	



STARK.plaintec

clamp and clamping spigot

unique: flush-mounted fast closing

very strong: 50 kN retention force

independent: suitable for automation

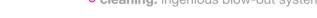
omonitored: all functions can be monitored

sliding: handling without interfering contours



STARK.sweeper

- independent: for automated solutions
- monitored: all functions can be monitored
- integrated: built-in couplings available
- o adaptable: different configurations available
- cleaning: ingenious blow-out system











STARK.airtec

- process-safe: Industry 4.0 ready
- strong: thanks to circumferential clamping segments
- oprecise: due to cylindrical fit
- economical: short clamping and release times, • quick: clamping/release time of only 0.2s

Manual loading Crane loading Automation









STARK.easvclick

Spannsysteme



STARK

- maximum flexibility in production
- highest possible process reliability
- reduced manufacturing costs due to optimised set-up times





STARK.balance

STARK.easyclick

- click: clamping by pressing
- ocompact: diameter of 85 mm and only 19 mm high

⊘ compensating: compensation up to ± 0.75 mm omonitored: all functions can be monitored

direct: designed for direct workpiece clamping

optimal: ideally suited for large devices

Manual loading Crane loading

STARK.balance



Automation

Crane loading

STARK.basic

STARK.etec

oprocess-safe: Industry 4.0 ready

• simple: simple system integration

Manual loading

o compatible: suitable for retractable nipple

ocontrollable: forces measurable and controllable

of STARK.sweeper and STARK.hydratec

- o simple: modular design
- economical: easy assembly and installation
- adapted: hydraulic or pneumatic
- versatile: 14 variants
- price-conscious: cost-effective entry-level models

Manual loading Crane loading





STARK.metec

STARK.sweeper

STARK.hydrated







STARK.connect

Manual loading

Crane loading

Automation

- flexible: various equaliser possibilities
- optimal: active insertion despite small design
- robust: highly resilient
- fast: very short clamping/release time

Manual loading Crane loading Automation









COMPONENTS

Highest possible quality and precision distinguish what is probably the most comprehensive product range in the field of highly productive workpiece clamping on the market. STARK components, products and systems make manufacturing more efficient and flexible.

CUSTOMISED SOLUTIONS

Special challenges require special solutions. Based on STARK's extensive clamping system portfolio, we create customised solutions for your individual requirements.

DEVELOPMENT PROJECTS

STARK has the ability to develop a customised solution if the standard version is not optimal. Based on our decades of experience and in-depth process expertise, we offer customised solutions that are tailored to your specific application by analysing your unique requirements.

4 SERVICES

Our service centres around the world are available for advice, project planning, assembly, turnkey installation and commissioning of systems as well as on-site training, repairs and maintenance. Our customer service around the world enjoy outstanding collaboration with our headquarters in Austria and receive comprehensive support in all technical matters.



Quality checks are carried out in an air-conditioned measuring room. Customised fast clamping locking plate with a diameter of 1.1 m for grinding applications in the aviation sector

CUSTOMISED SOLUTIONS

Special challenges require special solutions.

Successful companies expect more than "just" convincing products from their partners. They also expect process expertise and comprehensive consulting services that are aligned with their individual requirements.

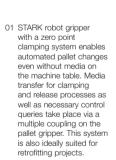
We adapt our components for you, if the standard version does not lead to the goal. Based on our decades of experience and in-depth expertise in the development and manufacture of zero point clamping systems, we can quickly and efficiently come up with a customised solution for your specific application.

- wide range of solutions through adaptations for individual customer requirements
- perfectly adapted to your specific application
- solutions for applications from batch size of 1
- fast and efficient thanks to development expertise since 1977
- comprehensive specialist knowledge throughout the ROEMHELD Group

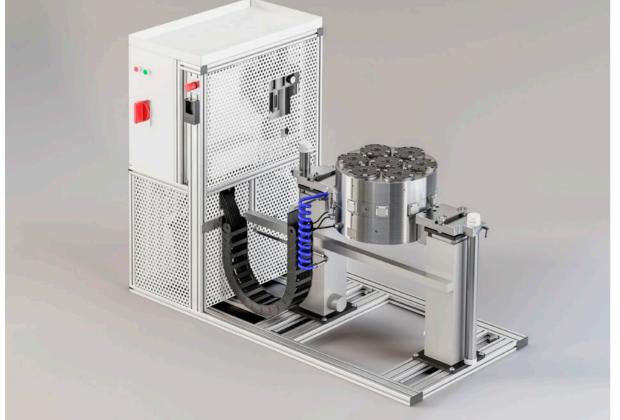
STARK Spannsysteme 25







O2 STARK set-up station as a complete solution: An ergonomic, height adjustable set-up station enables high-precision set-up of turbine parts in the aerospace industry. A hydrostatically mounted rotary table with STARK zero point clamping system guarantees minimal deviations between set-up station and processing machine.



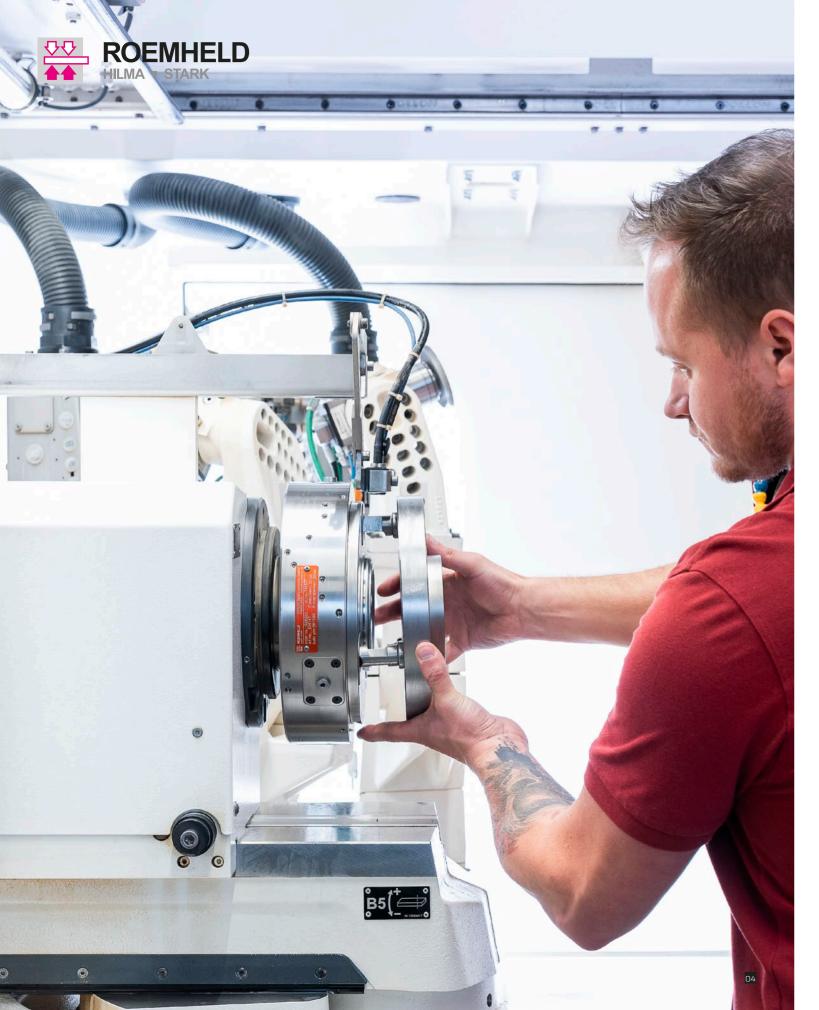
DEVELOPMENT PROJECTS

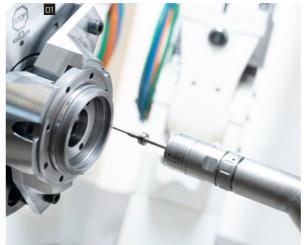
It starts by understanding the customer's application in detail.

Increasing complexity and rapidly changing conditions, markets and customer needs demand customised solutions for unique challenges. In addition to a perfect product, it is also increasingly important to offer process expertise and comprehensive consulting services.

We are speeding up processes to be even closer to our customers. Local contacts and a global team guarantee sustainable solutions that meet the high technical and economic expectations of our customers.

- a holistic approach to processes and analyses ensure smooth and cost-optimised production
- development of customised complete solutions or solutions for optimizing sub-processes
- development and implementation expertise that has been built up over decades
- flexible yet efficient production structures









- 01 Highest possible precision thanks to state-of-the-art machine tools
- 02 Flexible production is enabled with a fully automatic pallet changer with STARK.hydratec quick-change system
- 03 Five-axis machining for economical production a special fixture is precisely clamped on a STARK.hydratec zero point clamping system
- 04 High-precision STARK pallet changing system for cylindrical grinding machines

Fast availability, accuracy, quality, and process reliability.

STARK attaches great importance to optimally designed processes – from development and design to production, assembly and quality assurance, this modern business premises offers optimal conditions.

Fully air-conditioned production facility, state-ofthe-art machinery, flexible and efficient production structures and highly qualified employees guarantee high-precision STARK product quality, delivery reliability, efficiency and cost transparency.

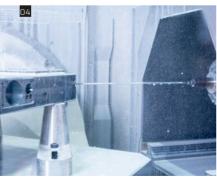
We strengthen our own competitiveness and that of our customers with a delivery reliability of over 98 %.











- 02 New generation, multi-functional machines enable DONE-IN-ONE machining from the raw material to the finished, turned and milled component
- 04 Media connections of STARK fast clamping plates, whether for a pneumatic or hydraulic application are fabricated with deep-drilled holes



Innovative solutions, tried and tested components on a high technical level.

Our product quality is based on the highest possible development standards, high-quality materials and state-of-the-art machinery and processing technologies.

Thanks to its decades of history and as a pioneer in zero point clamping technology, STARK has in-depth product and application knowledge.

A complete quality assurance and testing system is an integral part of all processes. The vibration-decoupled and shielded measurement equipment and a test system for long-term tests under production conditions guarantee our customers the highest degree of reliability.











- 01 Highly qualified employees ensure the highest possible quality standards
- 02 Set-up station with STARK.hydratec quick-change system with integrated media transfer enables precise and safe set-up without machine downtime
- 03 Experienced employees with in-depth product knowledge and application expertise form the foundation of our quality promise
- 04 Machining processes are dependable and reliable

STARK stands for quality, excellent products, highly efficient processes and outstanding results.

We achieve this by practising common values and striving for common goals. The expertise and commitment of our employees are decisive factors driving the success of our company.



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