

»ON THE BASIS
OF TRADITION,
TO PURSUE
THE NEW.«

Engelbert Zapp Senior, 1730

ZAPP



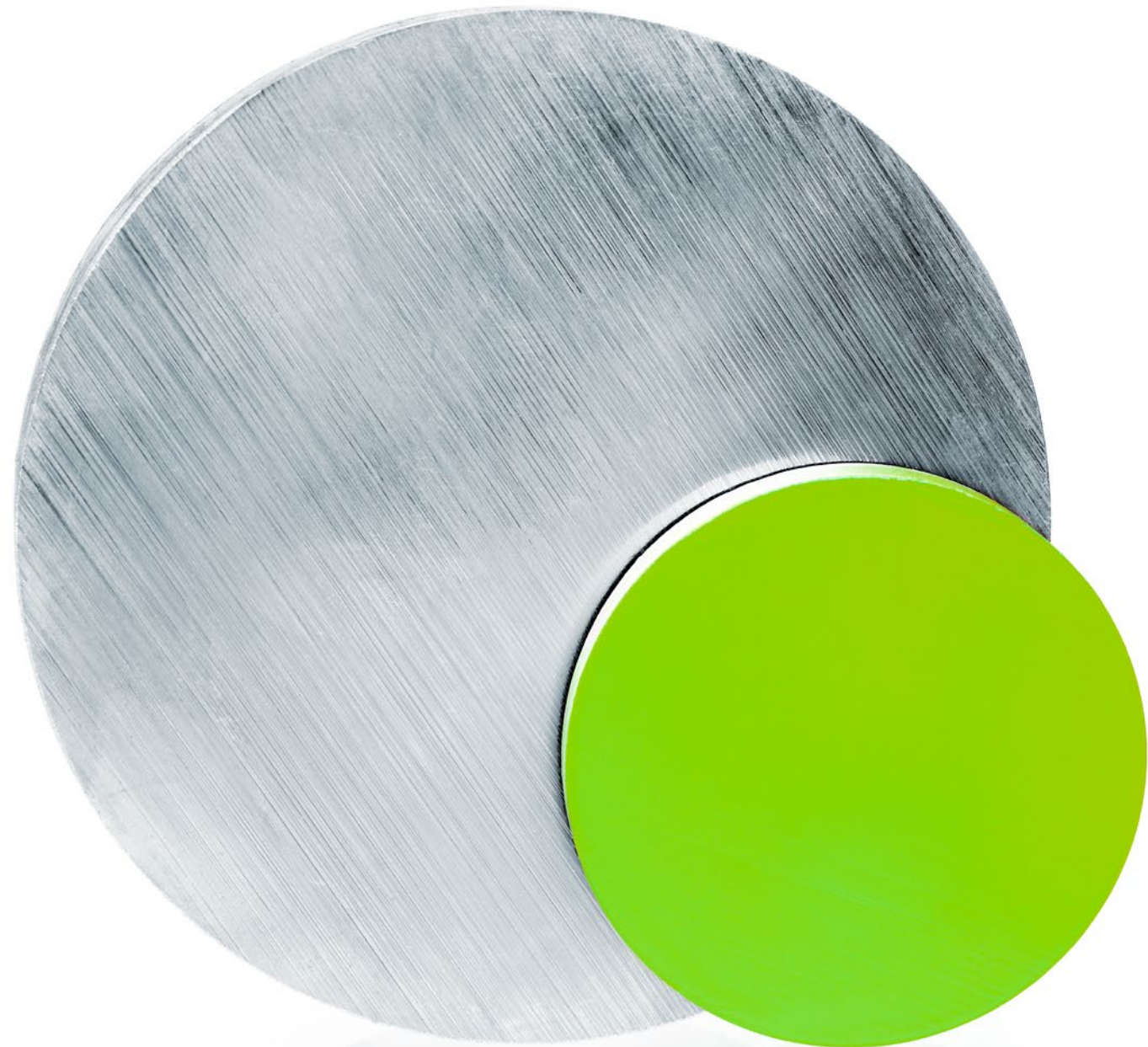
NEW
SINCE
1701

WHY US?

You benefit from

- _ over 300 years of **experience** with steel.
- _ products **made** in Germany and the U.S.A.
- _ **tradition!** This means trust, partnership, and reliability.
- _ **consistently high quality** your production can rely on.
- _ trouble-free production processes.
- _ us taking care of the **first work steps** in the processing of products, such as cutting bars to length or further assembly, ahead of time.
- _ many **product forms** such as wire, bar, profile, strip, sheet metal, plate, powder and others with clearly defined properties.
- _ long-term partnerships with reliable **raw material suppliers**, that meet our high quality requirements.
- _ a **permanent contact** in the company.
- _ sound technical advice.
- _ Zapp's own **R&D department**.
- _ common **solutions** to all questions.
- _ our **global** orientation with locations in Europe, the US, and China.
- _ an extensive network of **representatives** worldwide.
- _ a reliable partner who is at home in the aerospace industry, oil and gas industry, in the automotive sector as well as in the sensitive sector of **medical technology** and in many other industries.

Anyone who can do that can do everything else too!



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IMPRINT



DISCOVER A BROAD PRODUCT RANGE OF STEEL

Turn your ideas into reality with Zapp at your side. Benefit from our experience and knowledge. Get the ideal **product shape** to fit your application.

Choose wire, bar, profile, strip, and more from stainless steels, titanium materials, nickel and CoCr-based alloys, or metal powder. We look for new ways to meet your needs. We are driven to solve complicated technical challenges and support your production with intensive **quality assurance**.

We are happy to take over the first **production steps** such as sawing and polishing for you.

Thanks to our network of selected sales partners and our own locations in Europe, Asia, and the USA, we deliver quickly and reliably.

300 years of curiosity. Hermann Zapp founded the company in 1701 in Runderoth, Germany. It quickly became a specialist for **stainless and high-performance steels**.

We move with you. Motion that has been helping build a piece of the future together for the next generations for 300 years.

MATERIALS TECHNOLOGY FROM PAST GENERATIONS – FOR FUTURE GENERATIONS

By Dr. Stefan Seng

Founded in 1701 by Engelbert Zapp, the company has been closely associated with steel ever since. Over time, the cold-rolling processing company became a global niche supplier of **precision semi-finished products**. We supply these as strips, wires, bars, profiles, plates, tubes, powders, and other semi-finished products.

On request, we are happy to take over the first preliminary stages of **processing for your products**. These can be CAD/CAM disks, water-jet cutting, or sawing and polishing.

The Zapp Group distributes **high-performance materials and tool steel** through exclusive distribution rights. We obtain these materials from Haynes International, Inc. (USA) and Erasteel (France). Our own brands round off the large selection of these materials.

**New since 1701.
Always moving
forward
for centuries**

Our principles

Quality is our top priority alongside service. Zapp stands for **reproducible quality**, selected products, efficient processes, and best results.

The success of our company is based on the fact that we have common values and goals. We are a family-owned company with a history of more than 300 years in the steel business.

»On the basis of tradition, to pursue the new«: that's what Engelbert Zapp Senior wrote as early as 1730. This enthusiasm for new developments has become an essential part of our corporate philosophy.

Today the company has around 1,300 employees **worldwide** and production sites in Germany, the UK, Sweden, and the USA. With several service centers and a tight distribution network, we are very close to you in all important sales markets.

Our goals

Opening up to new technologies and investing therein has characterized our actions for centuries. The Zapp Group stands for this flexibility as well as for the **precision** of the products at the limit of what is technically possible.

We provide you with materials that are always tailored to the respective application and that are sometimes also developed with, and for, the customer. These are the core competencies for you – our partner. We are happy to advise you on the optimal use of our products.



Dr. Stefan Seng
CEO

Our employees

Our employees are our capital of tomorrow. That is why we **invest** in sophisticated training and further education. Employees also define the demands that we as a company place on our products as their own demands.

Being fair to one another and performance on both sides are a prerequisite for this. This is how we work together on a long term, trusting basis.

Our leadership style

Our common understanding of leadership is shaped by the responsibility of managers for their results and those of their employees. With clear goals and priorities, they ensure that steps are understandable.

The corporate strategy is the basis of all decisions. Clear measures and related actions derive from it.

Company profile

Our core business is the precise **cold forming** of semi-finished products and trading with high-performance materials. The combination of profitability and independence ensure the preservation of our company. The constant further development of our product portfolio, as well as our own research and development division are the guarantee for our success.

For us, progress means recognizing the needs and interests of our customers, employees, and suppliers. We want to meet these more and more every day. We are committed to this with all of our effort.

We don't just talk about quality. It is the basis and a matter of course for a traditional family-owned company that is more than 300 years old. The latest **certifications** are the foundation and are subject to automation.

OUR MOTTO: ALWAYS MOVING FORWARD

- _ For over 300 years, Zapp has been at the top thanks to technical and intellectual movement.
- _ Centuries of experience
- _ Sophisticated products, technical progress, and innovation
- _ We guarantee the most modern technology and the highest quality standards.

Follow us on a 300-year journey of moving forward!

1701 that's when Zapp's story began. Hermann Zapp founded a hammer mill business. In doing so, he started a more than 300-year history of success. Since then, family members and today's companies in the Zapp Group have shown themselves to be agile and flexible.

Thanks to these characteristics and by always keeping their eyes open, they got a feeling for the right way into the future. The Zapp Group has been consistently well managed through the most varied economic phases and has grown continuously.

In **1730** Engelbert Zapp Senior wrote this wise sentence: »On the basis of tradition, to pursue the new.« This principle is still valid and relevant. Even today, we measure ourselves by developing and continuing this scientific curiosity.

1887 was a year that was marked by a decisive step to become bigger. The focus was on trading in high-performance materials. Robert Zapp Senior received the exclusive distribution rights for Krupp tool steel. This laid the foundation stone for today's trading division with the areas of Tooling Alloys and High-Performance Alloys in Ratingen.

In **1926** Robert Zapp took over the Ergste steelworks. In doing so, he laid the foundations for a worldwide-operating Zapp Group. In the next few years the focus gradually shifted from stainless steel wires to high-alloy materials and special steels.

In the **1960s** the company concentrated exclusively on the »new« types of steel, the stainless, heat- and acid-resistant types.

In the **1990** the company acquired Westig GmbH in Unna and continued to expand. In 1995 the company became Stahlwerk Ergste Westig GmbH.

The Zapp Group became a corporation in **1998**, which, in addition to the two locations in Ergste and Unna, also included the trading division in Ratingen. In the course of this, the next logical step in internationalization took place with our own locations in the USA, China, and the UK.

In **2005**, the highly specialized and technically demanding areas of automotive industry and medical technology were increasingly added. The Zapp Group has continued to develop into a highly specialized niche provider to this day. Many investments up to the present day are proof that Zapp is constantly moving forward. The expansion of capacities in the USA, the UK, and China, and focusing on the precision strip product area in Unna, are just a couple of examples.

The establishment of a new service center for special and high-performance materials in Unna in **2020** has promised even faster delivery. Discovering new niches and products, developing as a company, and constantly looking ahead are essential characteristics. **What you can expect from us is progress!**

Zapp in a nutshell:

If you are looking for out-of-the-ordinary and special steel for your technically demanding application, you are at the right place. We supply selected steel grades to almost all industries. A compelling argument – renowned customers from the medical technology, automotive, oil and gas, and aerospace industries trust in our products.

Just give us a call. We look forward to working with you!



Only those who are moving forward stay at the top – whether it's automotive, electronics, or medical technology. Together we ensure that our lives and those of the next generations are easier, better and safer.



»Customer-oriented
thinking and actions
are our strengths.«

»Since my first day of training at Zapp, I have admired the dedication and passion with which our customers are served worldwide.

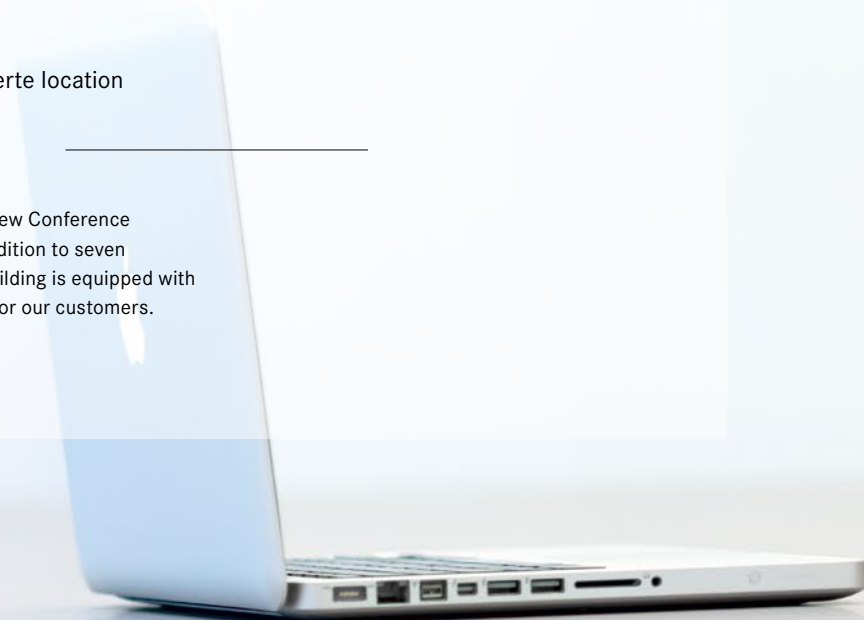
The individual – also technical – advice to our customers and the development of long-term partnerships are part of Zapp's essential key competencies.

For me in the internal sales department, fulfilling customer requirements is the top priority. In my daily work I make sure that the requirements of my customers are recorded and implemented.

I particularly enjoy the personal contact with our international customers.«

Vivian Nebgen
Inside Sales, Schwerte location

Vivian Nebgen in the new Conference Center in Ergste. In addition to seven meeting rooms, the building is equipped with the latest technology for our customers.





»Apprenticeship at Zapp was my first choice.«

»Last year I started my apprenticeship as a process mechanic at Zapp. For me, this was the ideal opportunity to start my career with a solid foundation.

I have a lot of fun and have already learned a lot. Sometimes it is not easy to meet the demands and to do the tasks properly. However, thanks to the great support of my colleagues, I've always succeeded.

As apprentices we learn right from the start that the customers expect an excellent product. And of course, we do our best to meet these expectations.«

Duran Yildirim
Apprentice, Schwerte location

Our coils

- _ weigh approx. 2,500 kg (5,511.56 lbs)
- _ the running time per coil to the end product is about 8 hours
- _ are processed on a 7-stand tandem rolling mill
- _ manufacture of high-precision profiles for the automotive industry

»Ensuring supplies
and negotiating
is my daily business!«

»As a purchasing manager at Zapp, this includes a wide range of tasks, and every day is exciting and varied. In addition to the development of methods to act economically for the company, statistics are evaluated every day and conclusions regarding future developments are drawn from them.

Purchasing as the interface between manufacturer, supplier, and Zapp's internal processes ensures a transparent flow of information.

While it is also important to consider many aspects such as the market situation, transport, technology and time, there is nothing like a good negotiation that contributes to the success of the company.

And this success benefits our customers, because at the end of the day better prices from suppliers mean better prices for our customers.«

Mirko Dünwald
Purchasing Manager Precision Wire,
Schwerte location

Ready to ship
_ Material 1.0611
_ Flat-rolled and profiled profile



»Checking the strip surface
for smallest impurities.«

»The best part about my job is the versatility. We accompany a product from the first customer inquiry, through conception and testing on the machines until they are ready for serial production. Here, we are in contact with all product divisions of the company and spend a lot of time with our colleagues at the plants to understand what really defines our products.

Our responsibility for the product does not end with the start of serial production, of course. We are still available to advise our customers on all questions and, if necessary, to support them on site.«

Dr. Simon Trubel
Physicist Research & Development,
Unna location

Checking the strip surface for smallest
impurities





SEMI-FINISHED PRODUCTS PLUS – A PLUS FOR YOUR PRODUCTION

Make things easier for yourself and your production. Focus on your core processes and save time. We would be happy to take over production steps such as sawing, polishing, or for example edge processing, in-line laser welding and much more for you.

Just let us know what is important to you.

You will receive products, which are tailored to your application and that »pass through« your production efficiently and quickly – always keeping our common high-quality standards in mind.

Your satisfaction inspires us. Just give us a call!
We look forward to working with you.

WIRE – EXTRA STRONG, YET FLEXIBLE

Choose wire in over 100 materials

You can order it in different surface finishes from glossy to coated. We supply wire in sizes from 0.15 to 20 mm for your special applications.

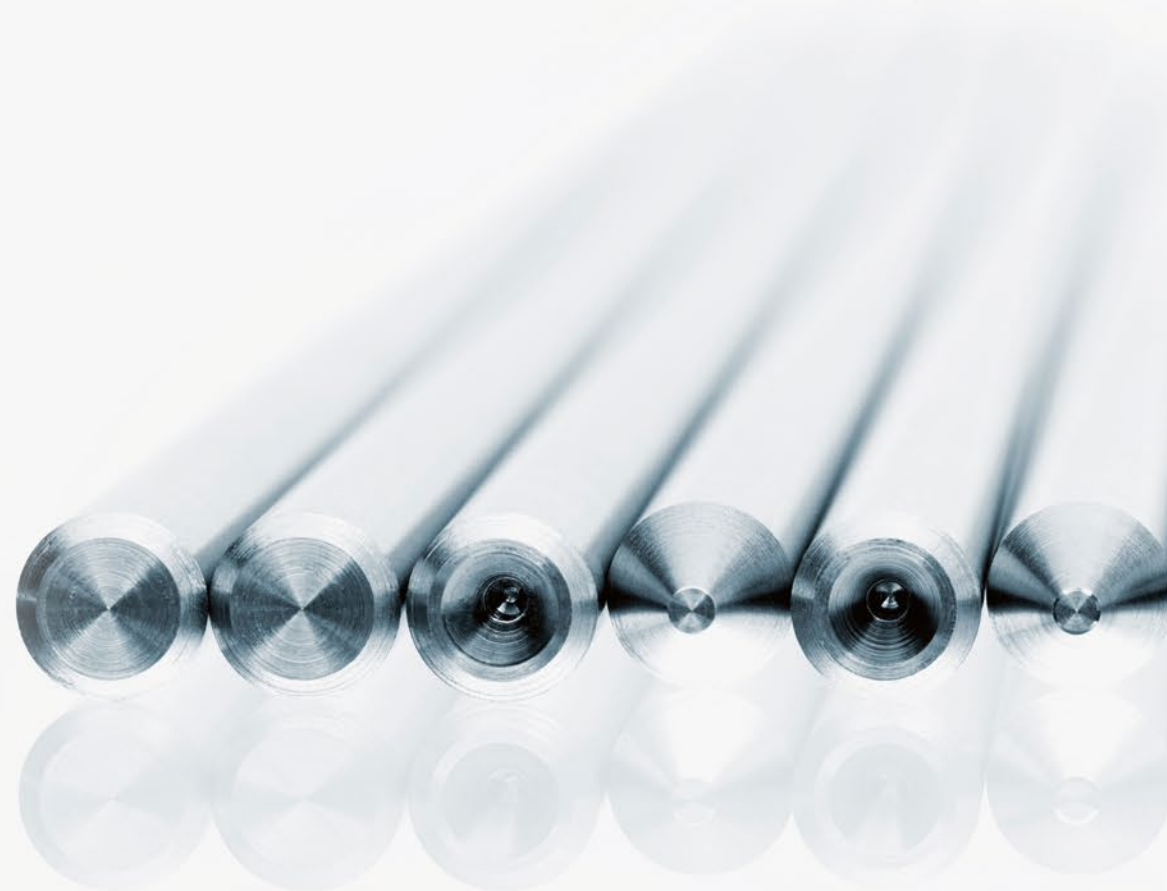
Quality is a basic requirement for all deliveries. Surface testing by means of **eddy-current crack detection** is just a small example.

Thus, it is not surprising that the finest Zapp wires are of particular importance in medical technology. They are used by well-known manufacturers of medical applications.

Your advantage: With the expansion of our capacities through wire production in Sweden, the wire range has once again grown significantly. These wires have exceptionally **high strength** and **good flexibility** at the same time.

Process reliability through constant and reproducible product properties ensure efficiency in further processing. Consistent products support you in improving your further processing.

Your plus: perfect, precise, safe



BAR – ONE CLASS BETTER

You always receive our steel bars a tolerance class better than the standard.

We can also supply very thin bars with precise end finishes – chamfered, pointed or centered.

This also applies to bars with excellent straightness and excellent surface quality. This is made possible by modern and advanced grinding technology.

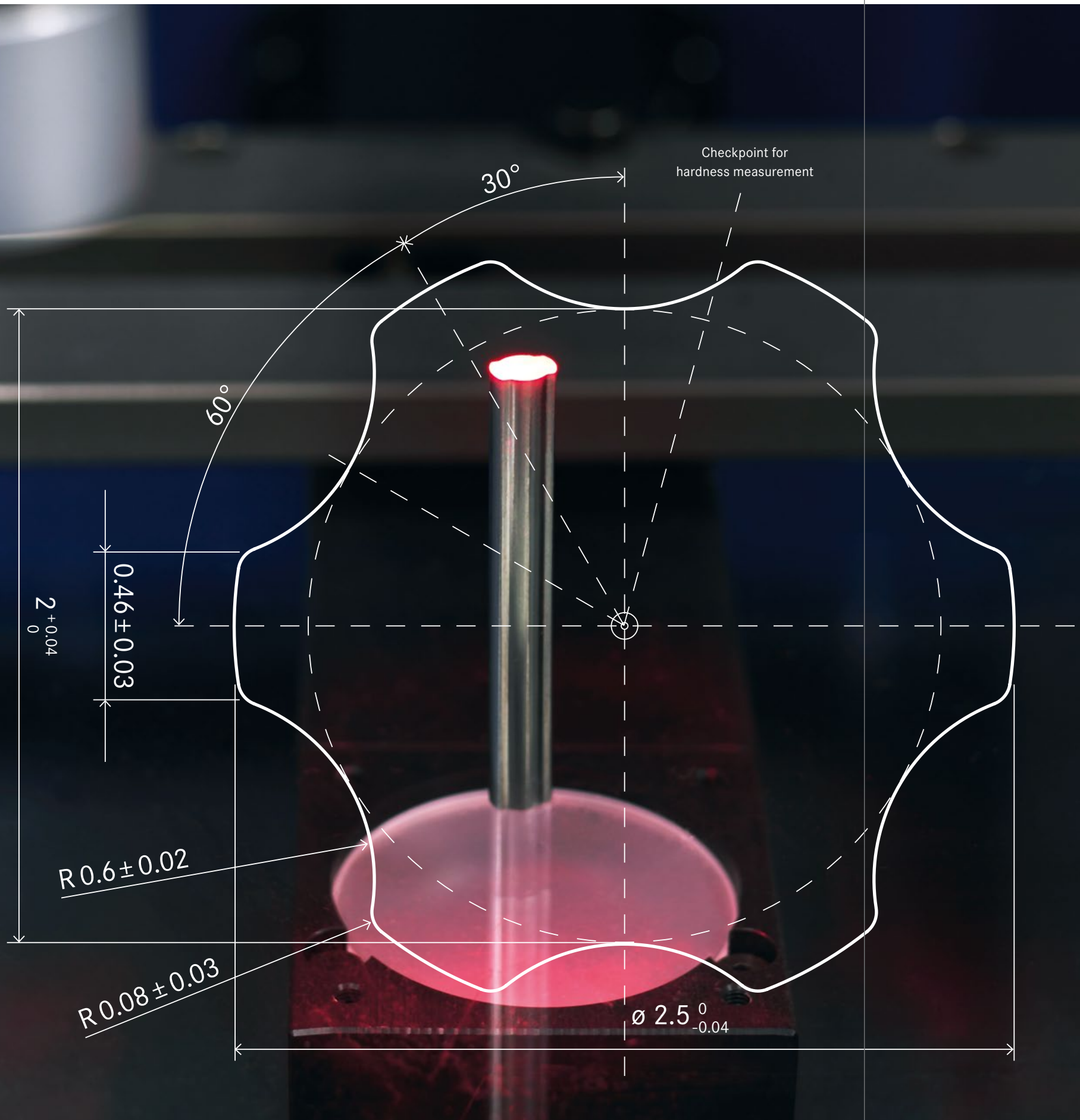
Bars produced for valve technology have consistently soft magnetic properties at a high level. These are achieved by means of a unique annealing technique.

To ensure the quality of our bars, we use a sophisticated **crack test**.

The surface and diameter of our bars are **100% checked**. As a result, you can rely on consistent and reliable quality for your production.

**A standard you can rely on:
precise, on time, perfect**





PROFILE – A RANGE OF INFINITE POSSIBILITIES

With our own **tool shop**, there are almost no limits to our possibilities for a special profile. 12,000 tools, modern CNC processing machines, and over **5,000** profile geometries speak for themselves. From the small triangular profile with an edge length of 0.3 mm to the plate profile of 63 x 6.35 mm, we already have profiles for your application in stock. If you need a different profile, we will design and manufacture it according to your specifications.

Drawing, rolling, and roller forming offer you a wide range of **forming technologies**. We can also produce complex geometries for you. Near net shape profiles ensure minimum machining in your production.

We are also specialists in **precision profiles** and **flat wires** with over 4,000 different geometries. These profiles are used in all industries. The focus here is on **eye rim profiles** for the eyeglass industry, guitar fret wires, and rail profiles for model railways.

You benefit from a wide range of materials. The super finish **surface quality** is one of our special features allowing you to minimize re-polishing and scrap loss.

Tools in Schwerte

12,000

Differently shaped profiles

5,000

Triangular profile up to

0.3 mm (0.0118 in)

Flat profiles on stock

63 x 6.35 mm (2.48 x 0.25 in)

FLAT WIRE – OUR SPECIALTY

Flat wires are produced with the tightest dimensional and manufacturing tolerances with defined ring curvature and straightness requirements.

Continuous thickness and width measurement of the material over the entire core length is a matter of course for us. According to your wishes, we can also supply flat wire without undesirable welding points. You can also choose spool sizes from 100 to 800 kg.

»Always focusing on schedules«

»Above all, on-time delivery to you is important to me and is therefore the central focus of my daily work.

My career at Zapp began in the late '90s as a student assistant in the area of production and machine data collection.

Today I work in various product divisions as a team leader in distribution logistics or classic shipping.«

Markus Schauffel

Logistik Precision Strip, Unna location

Our coils

Width of strip: up to 750 mm (29.53 in)

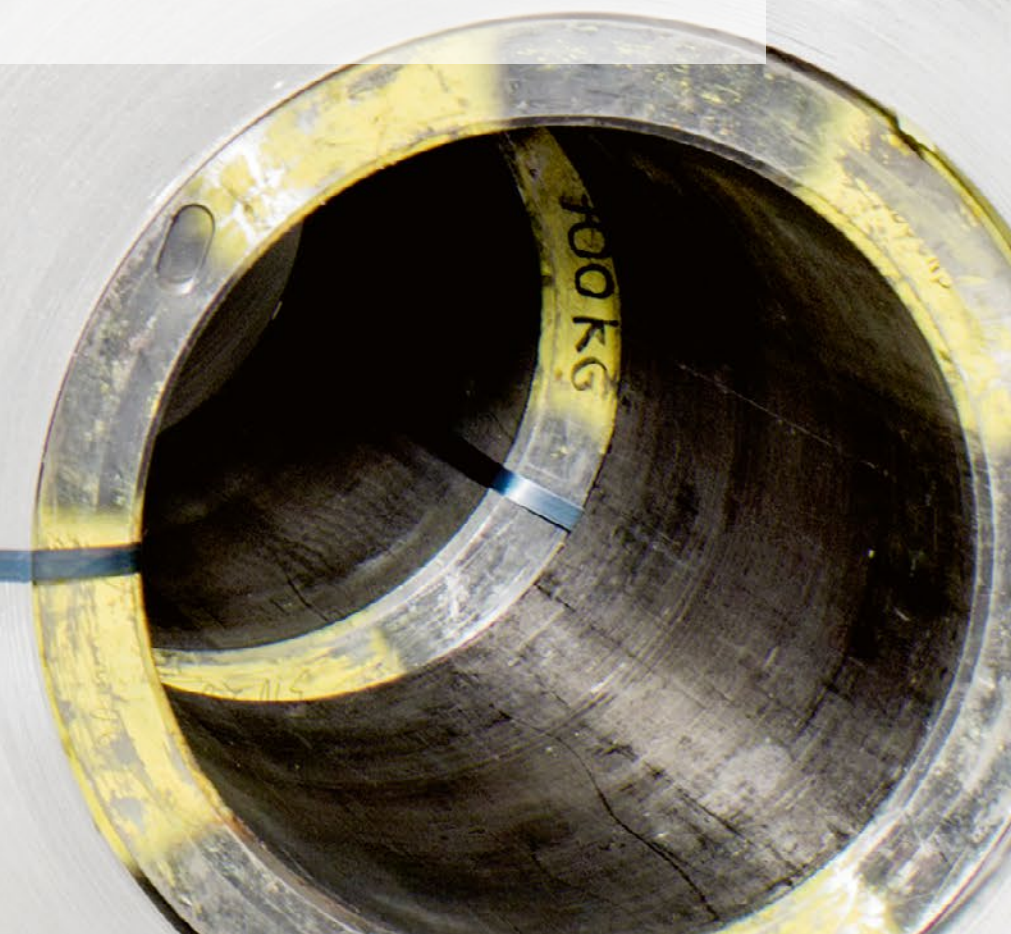
Unna production or up to 1,066 mm (42 in)

Dartmouth production

Outer ring diameter: 1,760 mm (69.29 in)

Weight: 10,000 kg (22,046.23 lbs)

Running meters: approx. 15,000 m (590,551.18 in)



»Speed, through safe production processes.«

»I have been working at Zapp since 2013 and at the Unna Service Center since 2021. The core of our service center business is to process many short-term orders with different customer requirements on schedule and with the shortest possible lead times, especially with regard to our 24-hour Service. That's where all my attention is focused, and that's what I always work towards with my team: fast and reliable processes, secure jobs and good teamwork. Because safe production processes and a strong team enable us to accept and master the challenges we face.«

Frederik Steinwender
Production Line Manager Service Center,
Unna location

Service Center
In the narrow-aisle warehouse there is a large selection of different tool steels.



»Quality is
important to us.«

»Good organization and an ever optimized process help me to ensure that customers receive their orders quickly and with consistent Zapp quality.«

Christian Block

Service Center Tooling Alloys Milling and sawing technology,
Unna location

Milling machine

Table dimensions: max. 1,800 mm L x 700 mm W
(70.87 in L x 27.56 in W)
Table load: up to 3,500 kg (7,716.18 lbs)
Travels: 1,600 mm L x 750 mm W x 900 mm H
(62.99 in L x 29.53 in W x 35.43 H)
Speeds: max. rapid traverse 16,000 mm/min
(629.92 in/min), max. feed: 10,000 mm/min (393.70 in)
Tool holders: DIN 69871 SK 50
Speed: max. 4,000 rpm
Motor power: 30 kW
Universal milling head: for machining from 0°- 90°

Tools

End mill Ø: 3 - 35 mm (0.118 - 1.38 in)
Milling heads with indexable inserts Ø:
40, 52, 63, 80, 125, 160, 200 mm
(1.57, 2.05, 2.48, 3.15, 4.92, 6.30, 7.87 in)
Tool magazine with tool changer: for 24 tools

Environment

A system for cooling water treatment that filters oil and pollution from the cooling water so that the cooling water can be used longer.

COMBI-U750



»Zapp – reliable. ambitious.
professional. precise.«

»In sales, we ensure that we are a reliable supplier for you. My tasks include the planning and coordination of technical, organizational and personnel issues.

We work ambitiously on cost-optimized solutions for your requirements. To ensure this, precise cooperation with our technical team and our field service is necessary, as well as smooth and professional handling of our customer transactions.

Constant learning, familiarization with new processes and dealing with people are a matter of course for my job and make these tasks so interesting.«

Daniela Habibovic
Manager Inside Sales, Tooling Alloys
Ratingen location

The blocks are made of the material Z-Tuff PM^{cold} and have a dimension of 503 x 203 x 2,500 mm (19.80 x 7.99 x 98.43 in). They also have an impressive weight of approx. 2,000 kg (4,409.25 lbs) each.



Movement that has been helping for 300 years to build a piece of the future for the next generations together with you.

STRIP – YOU DECIDE WHICH THICKNESS YOU WANT

Thicknesses from 0.030 to 2.0 mm represent our standard program. Our latest development is ultra-thin foils in the μm range (25–30 μm). These are particularly suitable for etching or laser cutting applications. For more information, please contact: precisionstrip@zapp.com

Only very few producers worldwide can manufacture such a technically complex product. This is where our strength lies, because we start exactly where others stop. That is why we are continuously working on our new ultra-thin foils and their qualification. Not only the material thickness is important here; a variety of other technical properties and designs are also available.

Only those who can supply **process-reliable** material at the highest level can guarantee a consistent and reliable end product – and thus largely trouble-free production. You can concentrate fully on your core business. On request, we can perform the **first processing steps** for you.

Share your specifications with us. Together we will find and develop the desired precision strip for your application.

HIGH PERFORMANCE ALLOYS – CUTTING AND SAWING THE WAY YOU NEED IT

Nickel, cobalt, titanium – these are the three keywords when it comes to high-performance materials. We also supply them in small quantities and with special properties.

Most of our materials are used in the most technically demanding applications in the chemical, oil and gas, aerospace, automotive and pharmaceutical industries, as well as many others. You will receive complimentary, in-depth technical **advice** on the material which is most suitable for your application.

Without the best choice of material, you won't get the most out of your product. That's what it's all about. For you, this is essential; for us, it is the standard you can expect over the long term. Because only when both partners are on equal footing can a reliable, **trusting**, long-term business relationship develop.

More than 1,200 tons of material are available for you in over 30 different grades. Choose your semi-finished product: sheets and strips, bars and wires, tubes, forgings or welding consumables. **Water-jet cutting** and **sawing** complete our services. We source our high-performance materials from renowned manufacturers such as Haynes International, Inc., U.S.A.

For you we are:
fast, knowledgeable, versatile

RELIABLE.
COST-OPTIMIZED.
FAST.



TOOLING ALLOYS – TAKE ADVANTAGE OF POWDER METALLURGICAL (PM) STEEL

For **tool manufacturers and users**, PM steel offers many advantages over conventional tool steel. This steel enhancement makes tools more **wear resistant**, stronger and more reliable.

Zapp is your partner when it comes to forming, cutting, pressing or casting.

We source our powder metallurgical tool steel from well-known manufacturers such as Crucible Industries LLC, USA, and Erasteel, France. Zapp's own brands round off our range.

And what's best: trained technicians and engineers look at your product and process with an experienced eye. You get the right material for your application. Worldwide!

Access large stock and service capacities in Europe, Asia, and America.

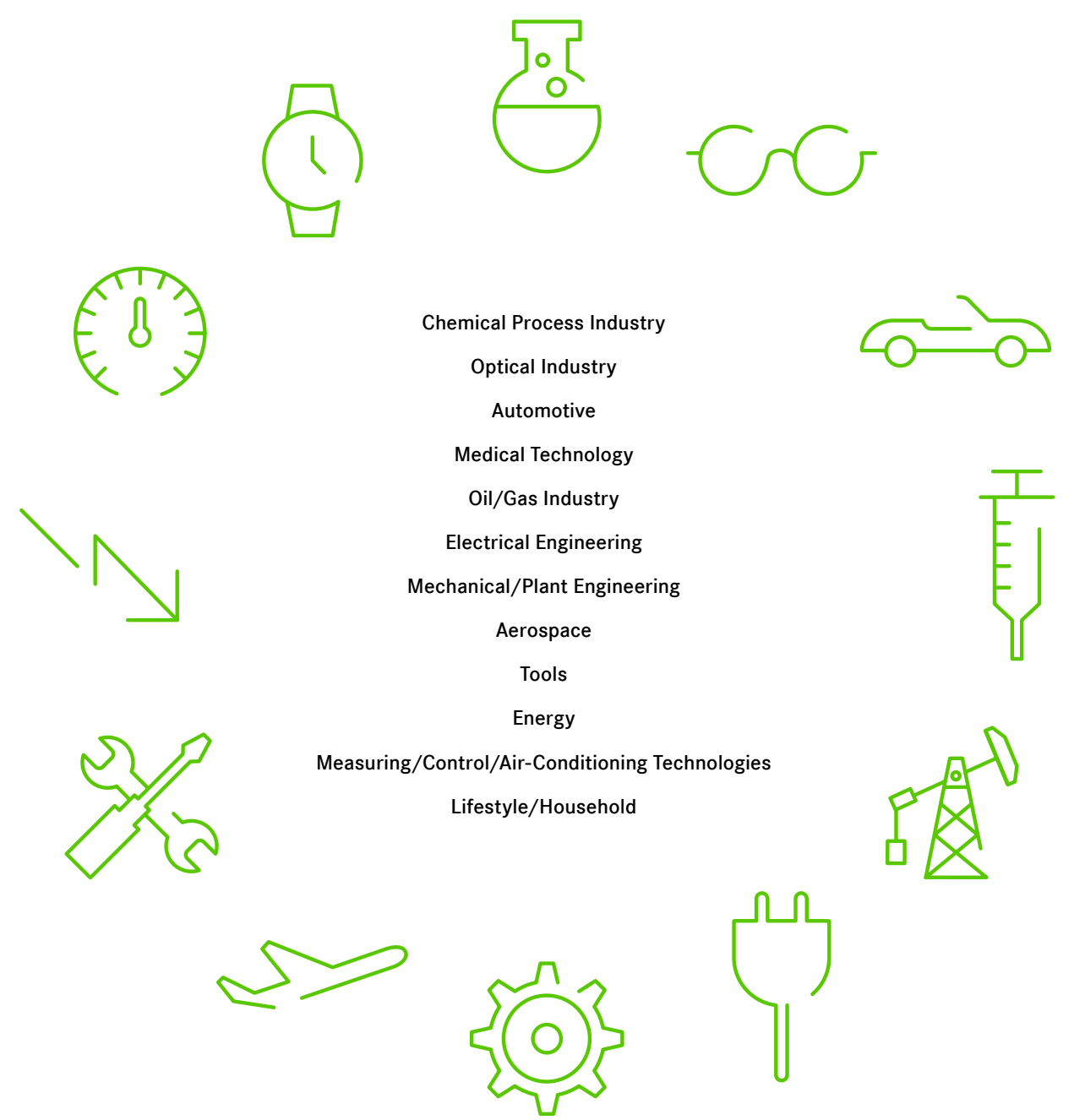
We look forward to your first contact! By email or phone, according to your preference.

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OUR INDUSTRY SECTORS



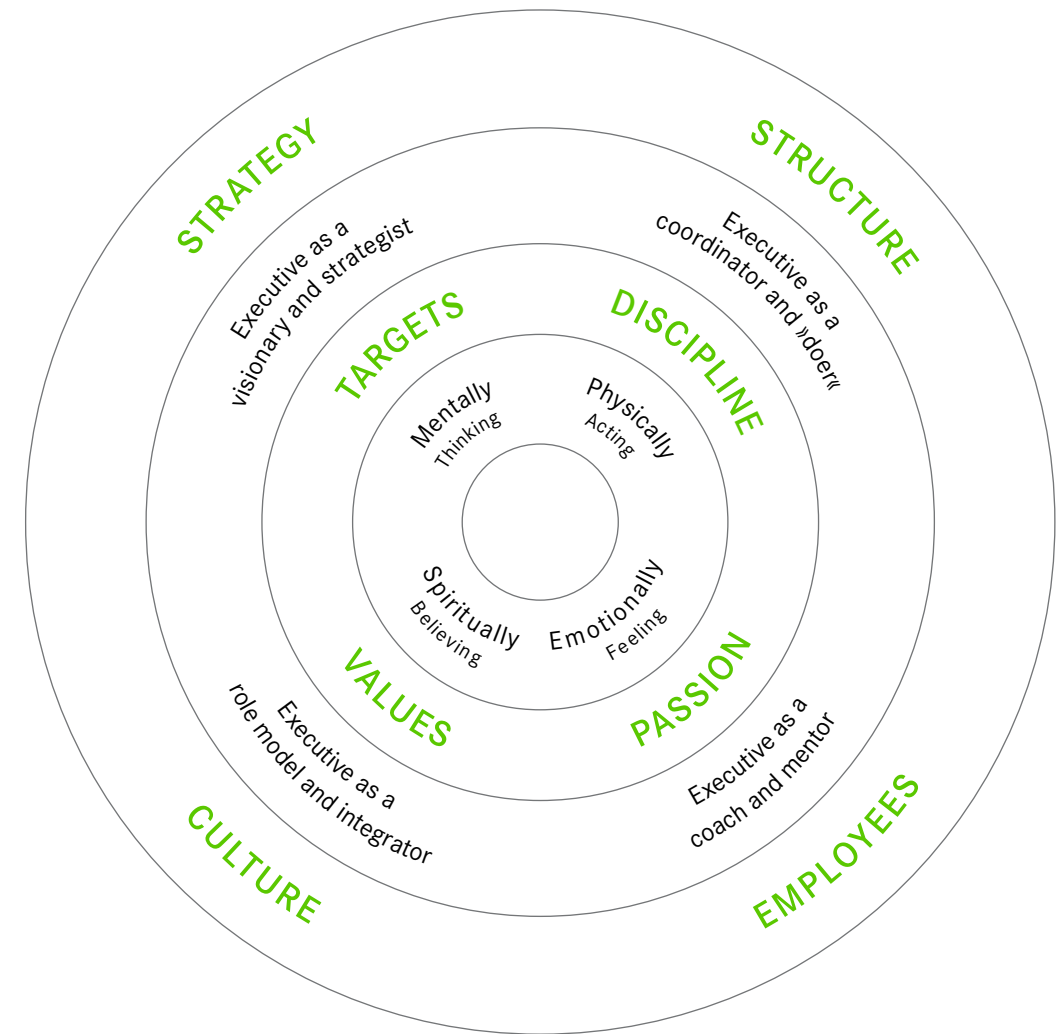


perfect

precise

versatile

VALUES AND BELIEFS OF THE ZAPP GROUP



Zapp's Values & Beliefs consist of three essential guiding principles with regard to the company, the employees, and the executives. These principles can only be lived and developed through targeted interaction of everyone involved. We are working steadily and consistently on this.

OUR LOCATIONS

- Service Centers and sales offices
- Production



IMPRINT

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We are aware that some photos do not comply with the locally applicable occupational safety regulations. It goes without saying that we attach great importance to occupational safety. In order to break down visual habits, we have intentionally omitted this from some motifs.

The illustrations, drawings, dimensional and weight data and other information included in this brochure are intended only for the purposes of describing our products and represent non-binding average values. They do not constitute quality data, nor can they be used as the basis for any guarantee of quality or durability. The applications presented serve only as illustrations and can be construed neither as quality data nor as a guarantee in relation to the suitability of the material. This cannot substitute for comprehensive consultation on the selection of our products and on their use in a specific application. The brochure is not subject to change control.

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Nice to meet you.



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