



Excellent
precision turned parts,
perfect for you



Stefanie Firner and Bernhard Firner – Executive management

Anyone operating the field of precision knows that even the tiny details really matter. Our customers around the world can depend on us as a partner capable of transforming even the most difficult of work-pieces into reality. Because we listen very carefully and because we are never satisfied until your expectations are fulfilled – once everything fits perfectly.

PRUDENT ACTION CREATES SUSTAINED SUCCESS

Success – the aim of every business venture. At Firner Trautwein, success is expressed in more than figures and quarterly results. We also take a long-term view of the way we seek to develop. Responsibility and sustainability are the most important factors here.

Respect and dependability in the way we act with our employees and customers, and with the environment, are more than just words: They are instead a living reality for us. We place great emphasis on having a liberal environment in which clarity, openness, tolerance and transparency are paramount, and where every single individual is treated with respect. You see, we are convinced that this is how to create a space in which people like to work and to commit themselves – the only way that we can join forces to progress matters effectively.

When we look back over our track record, we can assert with pride that this has been the right path to follow. We shall therefore continue pursuing this path in a consistent manner. Nowadays, energy efficiency must adopt a high priority position in any entrepreneurial environment. As a consequence, sustainability is a central concern at Firner Trautwein.

We are already thinking of tomorrow as we act today, and we operate a complex and comprehensive environment, energy and quality management system. That is because we are convinced that having a responsible attitude towards the way we deal with our resources is a matter of crucial importance to the future.

Our success – the outcome of prudent reflection and of action based upon responsibility. This is the only way in which we can inspire the confidence not only of our employees but also of our customers, and we have already been doing precisely that for many years.

That our customers can always depend upon:

- ▶ **Our products are manufactured precisely to your stipulations and specifications.**
- ▶ **The price is calculated at an appropriate and realistic market level.**
- ▶ **Each order is delivered at the agreed time.**

The satisfaction of our customers right around the globe confirms that we consistently act in the right manner. That is what we call collaboration based on partnership.

OUR CERTIFICATE

Quality Management in acc. with ISO/TS 16949:2009
Environmental Management in acc. with ISO 14001:2004
Energy Management in acc. with ISO 50001:2011





TURNED PARTS THAT CONNECT

Precision components in the electronics and electrical engineering sector must satisfy demanding requirements. The right choice of materials in terms of mechanical resilience, good electrical conductivity, compliance with environmental stipulations and cost-optimised production is made in close consultation with our customers. With our plating partners, all of whom have a long track record with us, we can provide a full spectrum of plating options, using metals such as nickel, tin, silver or gold.

For electrical contacting, a large number of blue-chip customers place their confidence in Firner Trautwein and our dependable range of contact pins and bushings. We also produce meter terminals for electricity meters, or contact elements for electronic components, all in high volumes. Our product range is rounded off with turned parts for connector housings and sheath elements. Our flexibility, our experience and our expertise make us into the perfect partner for the electronics sector.

PRODUCT PORTFOLIO



- ▶ Bushes and connector pins
- ▶ Connection terminals for electricity meters and power distribution
- ▶ Connector housings and sheath elements
- ▶ Connection terminals for PCBs
- ▶ Broached terminal bodies and box terminals
- ▶ Bushes for screw connections



TURNED PARTS THAT DELIVER SPEED

In the automotive sector you will find a multiplicity of applications involving our precision turned parts. These components are exposed to high temperatures, aggressive media and mechanical loads. In particular, our components are used in fuel and transmission fluid pumps. We have also been in demand for many years for our electrical connection components for the electrical systems in vehicles. We manufacture these parts in high volumes.

Durability and ultimate performance – even when very large quantities are involved. These are the most important of values for parts built in one of the central and leading sectors in Germany. With our great expertise, we here at Firner Trautwein are the perfect partner for you!

PRODUCT PORTFOLIO



- ▶ Electrical connection components
- ▶ Components for automotive electrical systems
- ▶ Housings for sensor systems
- ▶ Components for fuel pumps and transmission fluid pumps
- ▶ Mechanical mounting elements



TURNED PARTS THAT LOVE TO BE IN CONTACT

Enabling signals to be received perfectly by the recipient is not always just a matter of signal content. Instead, the right transmission route is often important as well. With its connectors, bushes and contact elements, Firner Trautwein is a renowned partner for blue chip customers in the communications industry.

Alongside conductivity, the number of plug-in cycles and the ease of repeatability of those connections have important roles to play, e.g. in the audio and hi-fi sector. Another essential quality criterion is great visual appearance. With our experience and flexibility, we can offer a great range of options. You see, when you purchase precision turned parts from Firner Trautwein, you are placing your confidence in solutions that not only sound good – they also look great!

PRODUCT PORTFOLIO



- ▶ Connector pins
- ▶ Bushes
- ▶ Housings
- ▶ Contact elements
- ▶ Coaxial connectors



TURNED PARTS THAT LEAVE BEHIND
A GLEAMING IMPRESSION

Precision components in the sanitary technology sector are exposed to serious external loads. As well as mechanical forces, these include the impact of water and temperature. Whether surface-mounted or recessed, the prevention of stress crack corrosion and the use of materials resistant to dezincification are matters of high priority. Firner Trautwein is an experienced partner in matters relating to brass materials, especially with drinking water alloys with low lead contents, or that are completely lead-free. The components manufactured from these materials are

used for temperature control and water pipework, or as mounting elements. In some cases with additional corrosion inhibition on the surface, in the form of nickel- or chrome-plating.

Of course, the design has to be right too - which is why our product portfolio has for many decades included high-gloss chrome-plated connecting pipes, escutcheons and covers for decorative applications. Perfection in sanitary applications – with precision components from Firner Trautwein.

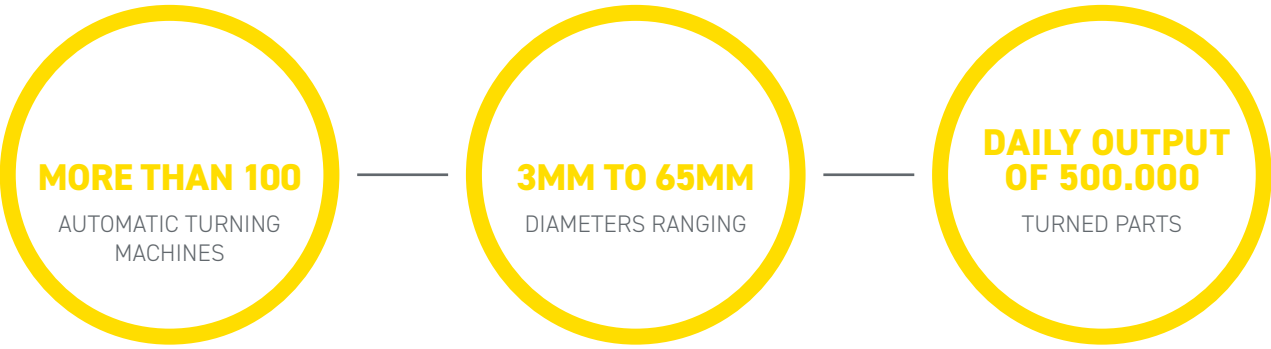
PRODUCT PORTFOLIO



- ▶ Turned parts for temperature control
- ▶ Water-bearing turned parts and assemblies
- ▶ Threaded nipples and hose connections
- ▶ Fittings and mountings
- ▶ Mounting elements
- ▶ High-gloss chrome-plated connecting pipes, escutcheons and covers



A LEADING FORCE IN THE MANUFACTURE OF CUSTOMER-SPECIFIC PRECISION



Ultimate precision combined with maximum flexibility. With our modern range of machines, we are equipped for anything. Complex components can be produced quickly, efficiently and reliably.

From small to large – with this bandwidth, very many different industry sectors wish to have us as a partner for turned parts.

We set up our production operations to meet your precise needs – with batch sizes ranging from small to medium to large.

TURNED PARTS THAT SUIT YOUR NEEDS PERFECTLY

With our expertise and our many years of experience, we have been able to establish a reputation in many sectors as a dependable manufacturer of customer-specific turned parts and precision components. This makes us an interesting partner for many industry sectors – wherever absolute precision is called for, wherever metal and machining processes must be in perfect harmony and wherever specific requirements need to be met precisely. Firner Trautwein stands for ultimate capability and reliability.

This is confirmed time and again by customers from the following industry sectors: **Electrical engineering / electronics, automotive, communications technology, sanitary industry, building technology, transport technology, transmission technology, medical technology, mechanical engineering, hydraulics, pneumatics, controls & instruments technology and the lighting industry.**

Do you have a very specific requirement? Please get in touch with us, and we can then work together to create optimum turned parts, ones that perfectly suit your needs.

For us, the perfect turned component consists of more than metal. It comprises a great deal more than that: When you source precision turned parts from Firner Trautwein, you access a combination of the most modern machines and systems, the finest of skilled employees and tried-and-tested processes. This enables us to assure the highest standards of quality at cost-effective terms and conditions. Naturally, we are entirely familiar with a vast array of different machining properties and material qualities, and would be pleased to advise you.

With our CNC single-spindle, multi-spindle and automatic rotary indexing machines, Firner Trautwein works across a range of diameters spanning approx. 3 mm to 65 mm, and chucking components with diameters of up to 150 mm.

We would also take great pleasure in carrying out assembly work for you. Just get in touch and let us know what you would like to accomplish. Working together, we shall find the perfect solution.

We machine brass, steel, stainless steel and aluminium alloys across the full spectrum of material qualities:

Brass is a great all-rounder with multiple benefits: Good machining properties, resistance to water and steam, robust, very economical and, above all, with good electrical conductivity.

The appeal of **aluminium** lies in its combination of strength and light weight. Which explains why aluminium components are used where weight needs to be kept to a minimum, e.g. in the automotive and aerospace sectors.

Robust, durable, temperature-resistant, relatively non-wearing and low maintenance – almost no other material is as versatile to use as **stainless steel**, which makes it suitable for a tremendously wide range of sectors and applications.





EQUIPPED FOR THE BEST

With our ultra-modern range of in-house machinery, we are able to satisfy every requirement relating to ultra-precise turned parts. Speed, flexibility and cost-effectiveness, from short to long production runs. Our spectrum of machining processes ranges from single-spindle and multi-spindle turning machines to automatic rotary indexing machines, transfer machines and special-purpose machines, and even includes deburring and assembly systems. Our motto describes an endless cycle: One turned component leads seamlessly to the next one. With our experience from countless projects for customers from many different industry sectors, we have acquired a great deal of expertise – knowledge that makes us the perfect advisor and partner in relation to all questions relating to our precision manufacturing capability. Even at an early stage of development, we would be delighted to discuss the project you are planning.

IN-HOUSE MACHINERY

- ▶ CNC single-spindle automatic turning machines
- ▶ CNC multi-spindle automatic turning machines
- ▶ Cam-controlled multi-spindle automatic turning machines
- ▶ Automatic rotary indexing machines
- ▶ Automatic deburring machines
- ▶ Transfer machines and special machines
- ▶ Further processing machines
- ▶ Automatic assembly machines

You can benefit from our competence: What parts do you need and how many, and where are they later going to go into service? Together, we can then agree a process sequence that will lead to your desired turned part. If you so wish, this can also include assembly.

To ensure that you are all-round satisfied with us, we can of course remain by your side as a partner thereafter: Firner Trautwein will not leave you out in the cold. We would like to know how our products perform in your application, whether further improvements would be a good idea or, to summarise that in simple terms, to know where the journey goes next. With Firner Trautwein, you are placing your confidence in an expert that understands precision manufacturing to be an all-inclusive process – and something to which we are personally committed.

OTHER PRODUCTION PROCESSES

- ▶ Surface coating
- ▶ Heat treatment
- ▶ Flanging
- ▶ Surface welding of contact materials
- ▶ Nut-running
- ▶ Building of sub-assemblies

WE MAKE OUR 150 YEARS OF EXPERIENCE AVAILABLE TO YOUR BENEFIT

At times when being young appears to have an intrinsic value, we are self-assured enough to be able to say: No, we are not really young anymore. To be more accurate, we here at Firner Trautwein look back over our 150 years of experience in the turned part manufacturing sector. Over this long period of time, we have been able to acquire the skills that have made us into one of the leading manufacturers of customer-specific precision turned parts.

After all, what has always accompanied us is our strive for improvement, the urge to achieve perfection – a never-ending process. At the heart of what we do, we have always been committed to producing the best possible components precisely to the wishes and requirements of each of our customers. It is the length of time that we have been engaged in this that enables us to keep on acquiring new and even better production and machining processes, to get to know a vast array of different metals better than almost anyone else, and to make a start where others may already have decided to stop.

Throughout all of this time, what sets Firner Trautwein apart is the thought we give to the future. Something that today might appear impossible is something that we seek to make happen tomorrow – which is to create your perfect turned component!



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