




**Hirschvogel
Group**

Traditionally innovative.

**READY
FOR THE
FUTURE.**



With a main span of 1,624 m, the Great Belt Bridge in Denmark shown here is one of the longest suspension bridges in the world. At the same time, this masterpiece is a symbol of how visionary innovation can become reality and lead the way forward.

Innovation has always been integral to our business. Perhaps this best explains why a Hirschvogel component can be found in almost every car on the road. After all, we do everything we can to achieve the best solution for each one of our customers – no matter how challenging the task.

This consistent strive for improvement is more in demand today than ever before – even beyond our traditional core business, the automotive industry.

The following pages will provide you with a first impression of the extent to which these considerations determine our actions.

“Traditionally innovative”. This is our motto. It was valid yesterday, it is valid today – and it will not lose any of its validity in the future.



IS THERE A CLIMATE IN WHICH INNOVATIONS THRIVE?

[About strong roots and global presence](#) >>

STRONG ROOTS ARE THE IDEAL BASIS FOR FLOURISHING GROWTH.

The headquarters of the Hirschvogel Group has been located from the start – namely since 1938 – in the Bavarian village of Denklingen, just a few kilometers away from the picturesque Lake Ammer. It is here that Hirschvogel has evolved from a village forge into a global company that enjoys a leading position in its markets – a company which today, as in the past, is an economically and legally independent family business.

Fueled by strong values, our courage to pursue technological progress is manifest in all that we do – as is our own ability to evolve. After all, our vision is to continuously improve. As the demands on our business grow, new questions continually arise. And we put our heart and soul into finding the best answers to these questions.



The headquarters in Denklingen: Everything began in 1938 at a village forge with five employees. Today, more than 2,000 employees work here.

FROM CENTRAL INNOVATION TO GLOBAL PRODUCTION.

Today, the Hirschvogel Group is a group of companies with a worldwide presence. With nine production sites in Europe, Asia and America – under the umbrella of our parent company Hirschvogel Holding GmbH – we are, as a Group, one of the world's largest automotive suppliers in the area of steel and aluminum forging as well as subsequent machining.

For us, internationalization means following the customer in order to be a strong local partner in the relevant country. This is why we first develop products and processes centrally and then produce globally – always according to the same standards – to fulfil the relevant local requirements. In this way, global vehicle platforms can be served by us according to the “local for local” principle, receiving identical technology as well as high quality and delivery reliability from a single source. In so doing, we generate exactly the right climate for implementing innovations with maximum efficiency at all our locations.



Hirschvogel Umformtechnik GmbH
Denklingen, Germany
Forging processes:
hot, cold, warm and combinations thereof

2



Hirschvogel Komponenten GmbH
Schongau, Germany
Processes:
machining and ready-to-install functional assemblies



Hirschvogel Aluminium GmbH
Marksuhl, Germany
Processes:
aluminum forging



Hirschvogel Eisenach GmbH
Marksuhl, Germany
Forging processes:
hot, cold and warm

4



Hirschvogel Components Poland Sp. z o.o.
Gliwice, Poland
Forging processes:
warm as well as machining operations

5



Hirschvogel Incorporated
Columbus/Ohio, USA
Forging processes:
cold and warm forging as well as machining operations

6



Hirschvogel Components Mexico S.A. de C.V.
San Juan del Río/Querétaro, Mexico
Forging processes:
cold and warm forging as well as machining operations

7




Hirschvogel Automotive Components (Pinghu) Co., Ltd.
Pinghu, China
Forging processes:
hot, cold and warm as well as machining operations

8



Hirschvogel Components India Pvt. Ltd.
Sanaswadi, India
Forging processes:
hot, cold and warm as well as machining operations

9



HOW CAN INNOVATIONS GO INTO LARGE SERIES PRODUCTION?

About outstanding development expertise and a broad production spectrum >>



**EVERYTHING IS DEVELOPING
PERFECTLY HERE.**

Research and Development

At Hirschvogel we carry out fundamental research independently of day-to-day business. Our experts are involved in the further and new development of forging technologies, and are also in close contact with national and international research institutes. We do this in order to consistently expand our technological lead and to fully exploit all potential for our customers.

Part and Process Development

We work closely together with the customer as early as the component design stage – willingly within the framework of a simultaneous engineering process – and thereby allow our know-how to flow into the joint solution. The customer's product knowledge and Hirschvogel's in-depth understanding of the process complement each other to generate an optimum solution for each and every component. In addition, we ensure seamless interaction among all those involved in the development process. This testifies to the fact that behind every successful innovation is successful teamwork.

RESEARCH AND
DEVELOPMENT

PRODUCT AND
PROCESS DEVELOPMENT



INNOVATIONS NEED THE RIGHT TOOL.

How can developments be accelerated while at the same time guaranteeing high-tech quality? With this question, our attention quickly turns to our in-house Die Shop, which is involved at an early stage in product and process development. In this way, the areas of Forging, Die Making and Design interface with each other seamlessly.

Our customers profit greatly from this close collaboration and from receiving services from a single source. After all, they are provided with highly efficient tools for processing state-of-the-art materials, such as carbon fiber composites, and they can draw on application know-how. In addition, the Hirschvogel Die Shop is able to produce prototypes in the shortest possible time using machining or additive manufacturing processes. Although these prototypes do not yet have the same properties as forged components, they are available to the customer very quickly for installation tests. This therefore proves to be the ideal way to significantly accelerate innovations.

DIE SHOP

PROTOTYPE
CONSTRUCTION



**THE FULL TECHNOLOGICAL
SPECTRUM ENABLES
INNOVATIVE EXCELLENCE.**

We are one of the few companies in the world to have mastered all common forging production processes – from hot forging to aluminum forging. In total, the Group has well over 100 press lines with press forces of up to 4,000 t. Our production program focuses on medium to large series production using automated processes. This is where the advantages of the full technological spectrum are brought to bear. After all, our core know-how lies in understanding complex manufacturing technologies and combining diverse processes. We are a leader in the manufacture of complex (near-) net-shape and monoblock forged parts as well as machined and ready-for-assembly components and functional assemblies.

In short, we have the technology to “put innovations on the road” in an optimum way.

STEEL

ALUMINUM

HOT FORGING

WARM FORGING

COLD FORGING



ALL'S WELL, THAT ENDS VERY WELL.

The production process is only completed when finishing processes have been carried out because it only becomes clear at this stage whether a good result will turn into a very good one. The forged parts are processed by means of machining or other operations – all the way to the ready-for-assembly state. The added advantage for our customers is that they have a fixed contact partner and, at the same time, access to all technical processes.

Our broad range of modern technologies enables us to achieve optimum results for our customers across the entire process chain. No matter what your requirements are, Hirschvogel offers everything you need to implement even the most complex functional assemblies.

SOFT MACHINING

HEAT TREATMENT

HARD MACHINING

JOINING

ASSEMBLY

A person wearing AR glasses is shown interacting with a futuristic digital interface. The interface features various data visualizations, including a large circular gauge at the top right, a hand reaching out to touch a glowing element, and several smaller circular gauges and bar charts. The background is a blurred, futuristic setting with blue and green tones. A large, semi-transparent blue triangle is overlaid on the left side of the image.

HOW MUCH INNOVATIVE SPIRIT LIES IN THE FUTURE?

About E-Mobility, true lightweights and numerous application areas >>

WE ACCELERATE E-MOBILITY WITH SMART COMPONENT SOLUTIONS.

We at Hirschvogel take an offensive approach to challenges. For example, we are not simply waiting for the big breakthrough of E-Mobility to come along, but are already actively shaping the path to it ourselves.

The Hirschvogel Group is already producing rotor shafts in a variety of designs for permanent synchronous and asynchronous motors. Thanks to the breadth of our manufacturing capabilities, we are able to manufacture single-piece and multi-piece hollow shafts as well as components for hybrid drives. Each component is developed by us in a cost-optimized production chain for large series manufacture. We are thus paving the way towards E-Mobility – component by component.

ROTOR SHAFT



ROTOR CARRIER



TRANSMISSION SHAFT





WHEEL HUB WITH INTEGRATED BRAKE DISK CONNECTION



DEMONSTRATOR THICK SHEET-METAL FORGING



LIGHTWEIGHT PINION WITH SHEET-METAL DISK



THE FUTURE WILL BE MUCH LIGHTER.

In many different industries, the focus is on lightweighting. Anyone wishing to make weight savings needs a really good source of inspiration. That is why, when it comes to lightweighting, we look to nature as our role model. We develop high-strength and, at the same time, weight-optimized parts by transferring natural phenomena to technical designs. After all, nature has learned over millions of years to use resources efficiently and to adapt itself perfectly to different requirements.

By applying bionic methods, we not only improve function and strength but also achieve maximum material efficiency. In this way, it really is possible to attain higher load values alongside longer service life and lower weight.





APPLICATION POSSIBILITIES WITHOUT LIMITS.

There are numerous industries in which Hirschvogel can play an important role in future. After all, when it comes to high-strength and weight-optimized parts and components, we bring extensive experience and innovative spirit to the table. In addition, we have efficient know-how in implementing completely new solutions quickly and cost-effectively.

Our development partnerships also know no limits. We have been working together with partners from industry and universities for a long time now in order to jointly tap innovation potential. Because one thing is clear: No one can master the challenges of the future on their own.

AUTOMOTIVE

AGRICULTURAL &
CONSTRUCTION MACHINES

AVIATION

COMMERCIAL VEHICLES

E-BIKES

ENERGY

MECHANICAL &
PLANT ENGINEERING

RAILWAY ENGINEERING

HOW COMPATIBLE ARE INNOVATIVE SPIRIT AND THE STRIVE FOR EFFICIENCY?

[About lean processes and high employee motivation >>](#)

OPERATIONAL EXCELLENCE COMES FROM THE STRIVE FOR CONTINUOUS IMPROVEMENT.

In order to achieve operational excellence, we are prepared to keep scrutinizing our processes and thus continuously improve them in a targeted manner. In all areas – from production to administration – we strive for customer-oriented and value-adding processes. Every form of waste is uncovered and consistently reduced or eliminated.

All our leaders and employees are active drivers of continuous improvement at all times. To this end, we draw on proven principles and methods of lean management, such as Idea Management and Shopfloor Management.

We are guided by three key principles: We focus on customer-oriented and stable processes. We operate these processes in flow and based on the customer takt time, in a self-regulating and consumption-controlled way.





A LIVELY CORPORATE CULTURE PROMOTES INNOVATIVE SPIRIT.

Caring, honest, reliable: Our family business Hirschvogel stands for the values practiced by the founding family of the same name. The care, loyalty and responsibility shown towards all employees as well as the strive for independence and sustainable growth based on a secure foundation have shaped our corporate culture to this day.

This typical Hirschvogel culture creates the ideal conditions for visionary ideas and innovations to emerge and flourish. It is embedded in an atmosphere of motivation and mutual respect that relies on active participation, free development of potential and committed idea management. It is the combination of the individual, highly exciting development and design possibilities of our employees and the sense of togetherness of a family company with a global presence that allows Hirschvogel to master every challenge.

APPRECIATION

OPENNESS

TOLERANCE

TEAM WORK

SUSTAINABILITY



FRANK HIRSCHVOGEL
STIFTUNG

BUILDING BRIDGES. SHAPING THE FUTURE.

With the establishment of the Frank Hirschvogel Foundation in 2007, the family shareholders sent out a strong message for the future – for the preservation of the Hirschvogel Group as a financially independent family business and for the assumption of social responsibility. We support children and young people in the context of school and vocational training in the regions surrounding our plants, and fund projects and activities in science and research at colleges and universities.

We recognize outstanding achievements and remarkable commitment to the community in the form of awards and scholarships. Selected programs and innovative projects – such as the Research Week or the School Laboratory – enable the intensive development of skills and knowledge.

With all these funding activities, young people receive the support they need to prepare them for the challenges of the future – and, at the same time, they are given the skills to play an active part in shaping this future. Investing in the education and training of talented young people ultimately represents the soundest investment in the future.

PROJECTS

SCHOLARSHIPS

AWARDS

What does the future hold for the Hirschvogel Group? This depends, as it always has done, on the successful implementation of innovations, both in automotive applications as well as in other areas where we are active. And, of course, it depends primarily on what has made us strong in the past, namely highly committed employees who embrace their tasks with passion.

**WE ARE READY.
READY FOR THE FUTURE!**





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