

FORMING INNOVATION



IT HAS ALWAYS BEEN ONE OF MANKIND'S HIGH ARTS TO GIVE IMPORTANT THINGS A SPECIAL FORM.





IT IS OUR HIGH ART TO GIVE SPECIAL THINGS THE RIGHT FORM.



From left: Thomas Kraus (Chief Sales Officer), Marcus Wirthwein (Spokesman of the Executive Board), Holm Riepenhausen (Chief Technical Officer) and Dr. Ralf Zander (Chief Financial Officer)

"PLASTICS ARE INNOVATIVE MATERIALS."

The specific application of plastics has become indispensable for many developments in automotive engineering, railroads, the electrical industry, the production of home appliances, as well as in the medical technology and diagnostics industries.















3,5000

EMPLOYEES WORLDWIDE WORK FOR THE WIRTHWEIN-GROUP

As an expert for innovative forms we have been fulfilling individual customer requests since 1949.

As a specialist for innovative forms, we have been working on individual customer requirements since 1949. With 23 companies in Europe, Asia and the USA, we are close to our customers worldwide. More than 3,500 employees work for the Wirthwein-Group in the Automotive, Railroads, Electrical, Home Appliances, Medical Technology and Interior Design industries.

Since its foundation, Wirthwein has been an owner-managed family business. This makes us independent and dynamic. We cultivate long-term relationships in the market and are a reliable and stable partner.

Wirthwein produces using state-of-the-art technology there where our customers need the components and assemblies. That is, all over the world. Nevertheless, we are regionally anchored. With Bembé Parkett and Winkler Design, the Group is also active in the Interior Design industry. The cross-group collaboration creates synergies which our customers benefit from: in terms of innovative yet economical solutions. However diverse the business areas are, the group-wide quality standards are equally high.

Plastics – it is indeed an art to form products of this material.

We form processes with highly complex requirements for automation technology and multi-level production. When it comes to plastics technology, Wirthwein provides a particularly comprehensive service portfolio. Our customers greatly profit from our extensive know-how which we apply across a wide range of industries.

Wirthwein sets standards through the transfer of knowledge between its business units. High cost-effectiveness and constantly high product quality give our customers a sense of security. Our development expertise also guarantees you a technological edge.

Quality is the hallmark of Wirthwein and the basis for mutual success.

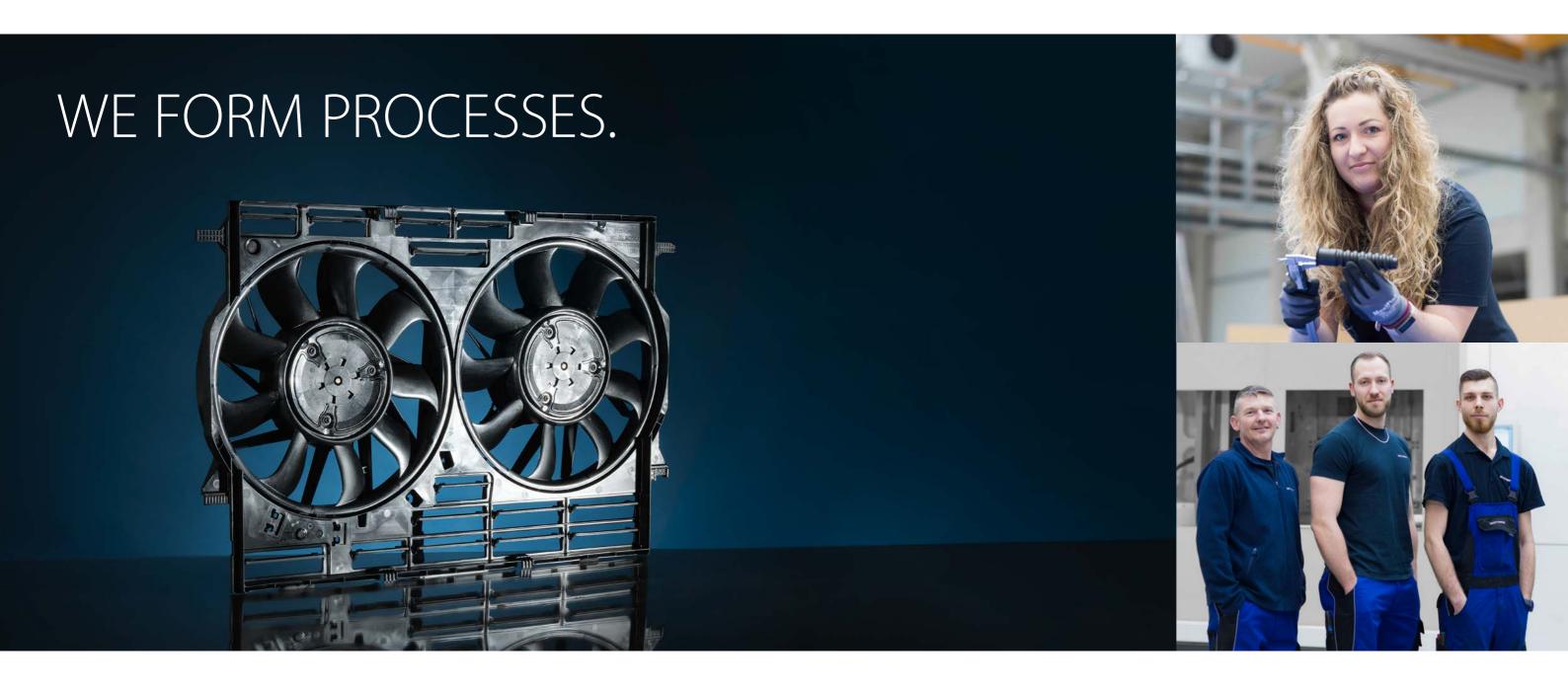
As a producer of safety-relevant plastic components for railroad superstructures, maximum quality assurance has been standard for us for decades. This quality philosophy applies to all business areas likewise. We are Q1-supplier of Deutsche Bahn AG and A-supplier of renowned OEM's as well as important system suppliers.

Our quality management system complies with IATF 16949 requirements, which is also confirmed which is also confirmed by the certifications we have received at our sites:

- IATF 16949
- ISO 14001
- ISO 13485
- ISO 9001 ISO 50001
- ISO 15378
- TISAX result available

80,500T

OF PLASTICS ARE PROCESSED EVERY YEAR





Concept and Development

Our customers come to us with a wide variety of requests and challenging projects. We take care of every requirement regardless of the industry. Right from the start, we tackle processes together with our customers. From the first sketch to the delivery of the finished products, we clarify workflow and processes to turn ideas into injection molds and then into plastic components and assemblies.

Our development work is based on the specific requirements of customers and project partners. State-of-the-art methods and tools as well as highly qualified staff form the basis of our development work to create innovative top-quality products. This ensures a smooth transition from development to design to production, across all industries and national borders.

Design and Construction

Manufacturing variants are coordinated and implemented with you in close cooperation with our in-house mold making department. Precise design drawings and 3D animations provide you with important information on component behavior and manufacturability.

Particularly sophisticated designs require additional engineering services such as filling simulations, warpage or strength calculations. Materials and processes are carefully selected and optimized.



Mold- and Toolmaking

Toolmaking is a key factor for us as a full-service supplier in plastics engineering. Our decades of comprehensive experience in the business fields of Automotive, Railroad, Electrical and Home Appliances Industries and Medical Engineering is a prerequisite for a broad transfer of know-how. The Wirthwein plants work closely together and create true flexibility in this network. This international exchange of know-how throughout the group forces innovative solutions for complex tasks.

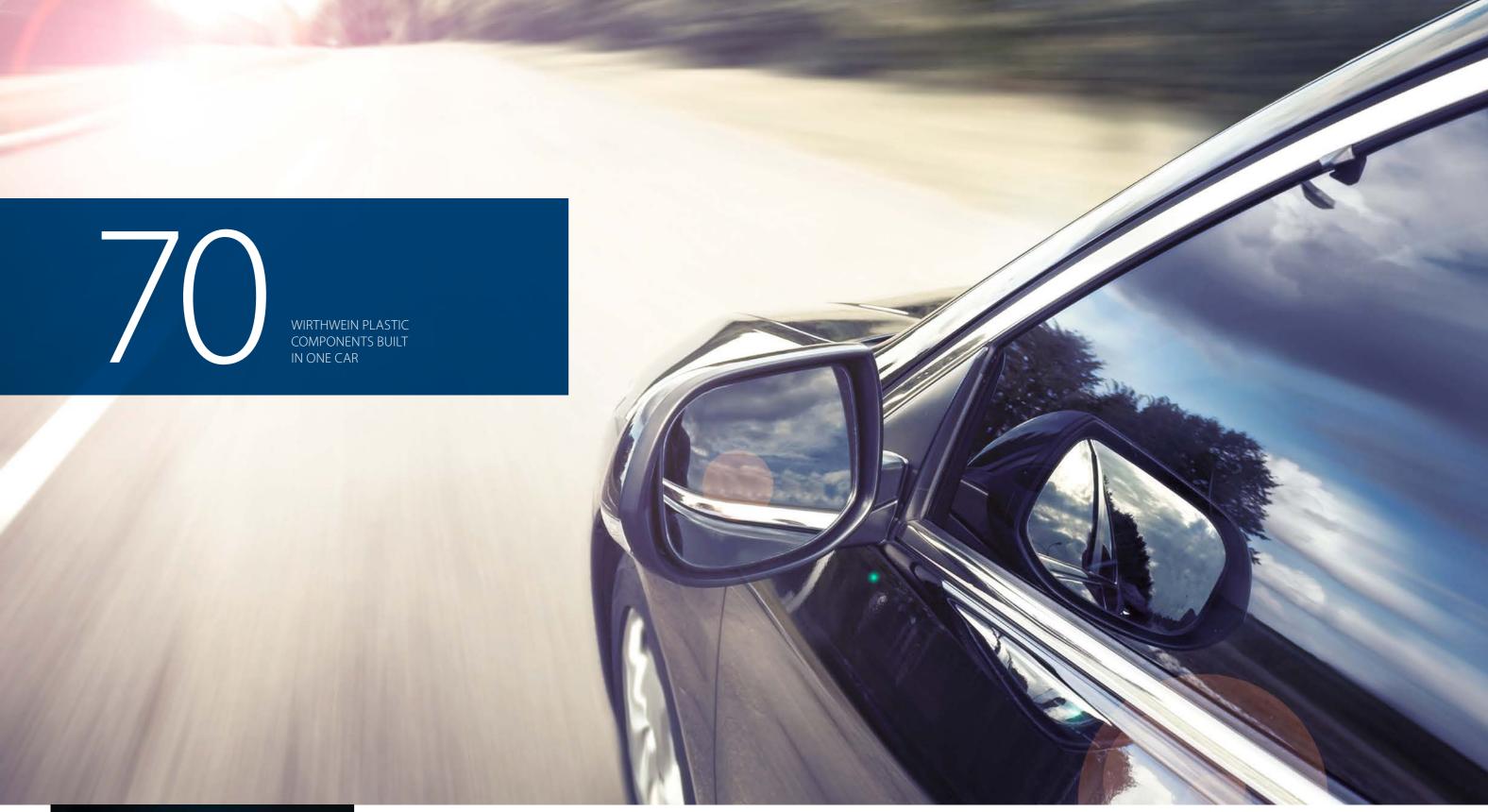
We are also very flexible and dynamic when it comes to size and weight - we offer solutions from the production of components with a wall thickness of 0.5 mm, axial wheels with a diameter of almost one meter, suds containers with a weight of 6 kg, to injection molds with sizes of 1,000 x 1,800 millimeters and a weight of 20 tons.

Production and Logistics

We constantly strive to improve ourselves. With state-of-the-art technologies in all process steps, an extensive fleet of state-of-the-art machinery and comprehensive quality assurance, we ensure efficiency and effectiveness in the production of complex plastic parts. We work flexibly in the thermoplastic injection molding of technical plastic parts with insert and shot weights from 0.007 grams to 10 kilograms. Our customers can always rely on the outstanding properties of our products - today and in the future and at whichever Wirthwein plant.

As a long-standing system supplier we offer you ecologically sustainable and well thought out logistics concepts with short transportation routes, high package densities, and protective wrapping. We deliver just in sequence to your assembly line and therefore orient by your production cycle. Our intelligent transport planning helps to keep your storage- and inventory costs as low as possible.



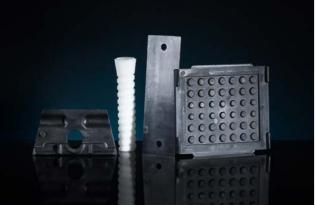




In top form for automotive – We mold plastics into shape.

For the automotive industry we develop components and manufacture in series production worldwide. Our customers include renowned automotive manufacturers and system suppliers. Our strength lies in the dovetailing of development, project management, in-house moldmaking, and the use of the latest and the use of state-of-the-art manufacturing technologies.

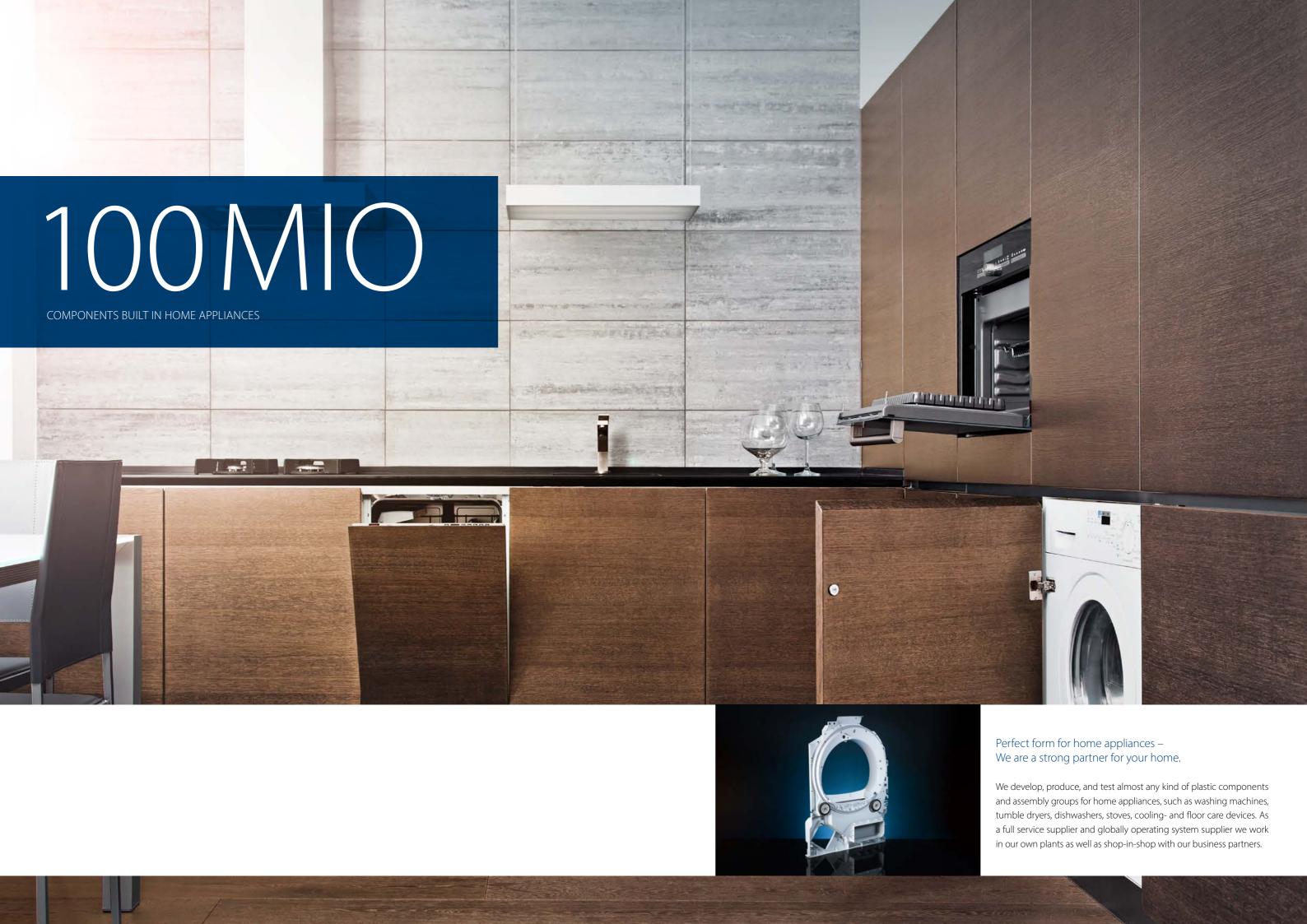




High performance for the railway – We put trains on the right tracks.

Pretty quietly though. The use of high-performance plastics greatly reduces noise emission of radial- and axial fans. We also rely on sophisticated materials for many other industrial applications, such as deformation- and temperature resistance.









In pure form for medical, diagnostics, and pharmaceutics – We bring plastics to life.

As a system supplier of sophisticated plastic systems and primary packaging material, we meet the specific requirements on the medical, diagnostics, and pharmaceutics industries. We design, develop, and produce your ideas. We have the passion for maximum precision in both plastics processing in the clean room and in-house toolmaking.

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