



IN PURE **FORM** FOR
MEDICAL, DIAGNOSTICS &
PHARMACEUTICALS

WE BRING PLASTICS TO LIFE

All-in-one solutions from Wirthwein

Founded in 1946, Wirthwein Medical GmbH & Co. KG is today a high-performance system supplier in plastics processing and a development partner for plastic-based and customer-specific product solutions. Focusing on quality and innovation, Wirthwein Medical has also internationally made its mark in the diagnostics, medical technology, pharmaceutical industries – with high-precision components, packaging and systems. In addition, proprietary products in the pharmaceutical sector complement the product portfolio.

Our core competences include development, design, mold making, injection molding and extrusion blow molding and a wide range of assembly, finishing and logistics services. Most of our production is carried through in class 7 clean rooms pursuant to ISO 14644-1.

Highest, standardized quality and hygiene standards are assured using gapless, certified quality management according to DIN EN ISO 13485, 9001, 15378, 14001 and ISO 50001. Presently, more than 300 employees work at three sites in Mühlthal and Ober-Ramstadt – on a total area of around 55,000 square meters.

A Wirthwein-Group company

Since 2005, Wirthwein Medical GmbH & Co. KG has been a subsidiary of the internationally active, family-run Wirthwein Group. With 22 companies in Europe, Asia and the USA the Wirthwein-Group is always in close proximity to its customers. More than 3,000 employees work in the business areas of Mobility, Rail Infrastructure, New Energy, Home Appliance, Medical and Interior Design.





75 YEARS

OF PASSION FOR PLASTICS PROCESSING

A strong team for your challenges

The consistent implementation of individual customer needs to optimize medical technology requirements is an integral part of our daily work. Together with our customers and partners, we develop innovative solutions and face the challenges of healthcare with responsibility and commitment – for the safety and well-being of millions of patients worldwide.

This is ensured by our products in combination with the services, experience and ideas of our highly qualified employees. Continuous optimization of work processes, quality and efficiency make us what we are today: an innovative quality leader and dynamic pace-setter in plastics processing.

IN COMBINATION WITH IN-HOUSE TOOLMAKING:

PRECISION INJECTION MOLDING, EXTRUSION BLOW MOLDING AND ASSEMBLY

Clean room production and
thermoplastic processing

By combining state-of-the-art injection molding and extrusion blow molding production with our expertise in toolmaking and assembly, we ensure efficiency and effectiveness in the production of complex plastic components. In a closed process, we process over 300 thermoplastics at three locations on a total of 100 injection molding and 10 extrusion blow molding machines. We offer all process steps – from prototyping to series

production – from a single source. As an experienced specialist in clean room production, we produce system solutions and assemblies under standardized and controlled conditions. Customer-specific products are assembled fully automatically on 35 state-of-the-art assembly systems, printed and checked 100% online using various testing technologies.

2 BILLION

PLASTIC SYSTEMS PRODUCED ANNUALLY

CLEAN ROOM AREA OF OVER

4.000 m²



High-performance plastics for special challenges

The requirements for medical plastic systems and assemblies are becoming increasingly complex. Trends towards ever smaller molded parts and new material solutions, such as replacing glass with plastic, require a fundamental understanding of market requirements and consistent implementation of quality standards

along the entire value chain. As a system supplier for all aspects of plastics processing for medical technology, we bundle all competencies from development to clean room production, assembly, packaging and sterilization. Logistical services round off our portfolio as a full-service provider.

OUR QUALITY PROMISE:

100

PER CENT
FOR THE CORRECT DIAGNOSIS



The right diagnosis saves lives –
our drive for the benefit of patients

Innovative products in the field of diagnostics guarantee patients worldwide reliable information on their individual health data, which helps to improve their quality of life. The latest trends and developments in the areas of point-of-care diagnostics, microfluidics and ever smaller disposables require a

great deal of experience and expertise along the entire chain of production processes. As a competent partner, we develop and produce components in the fields of blood, laboratory, PCR and point-of-care diagnostics under strictly controlled cleanroom conditions.

MULTIPLE TOOLS
WITH UP TO

96
CAVITIES



Improving patients' quality of life

Health is always a priority in our daily work. The growing complexity, but also the safe handling of medicines, places ever greater demands on the functionality and purity of packaging materials and devices. Trends such as single-use products, glass replacement

or patient compliance require individual system concepts. Our expertise and experience make us a reliable full-service supplier in the field of pharmaceutical injection molding and extrusion blow molding solutions.

100

STERILE SYRINGES PER TUB/NEST
READY FOR FILLING



WIM Ject® – inject confidence with every dose

WIM Ject® is a high-quality, sterile, cyclic olefin copolymer (COC) prefillable syringe (PFS), ready for filling.

The prefillable COC syringe WIM Ject® is a safe and reliable choice for drug storage and delivery, offering superior protection for a broad range of drug applications. Its inert COC material minimizes drug

interactions, while the immobilized cross-linked silicone ensures extremely low free silicone quantities and subvisible particles, preserving drug stability throughout its shelf life.

110

MACHINES
FOR THE PRODUCTION OF YOUR IDEAS

Customized plastic packaging solutions

Throughout our company's history of more than 75 years, we have developed individual packaging solutions for numerous customers and mass-produced billions of plastic packaging, closures and application and mixing systems. We offer high-quality and economical primary packaging as well as secondary packaging for a wide

range of applications in the medical technology, diagnostics and pharmaceutical industries. By combining the two injection molding and extrusion blow molding technologies as well as numerous assembly techniques, we transform design ideas into functional packaging solutions.



MOLD MAKING AND LOGISTICS

CUSTOMIZED SOLUTIONS

Toolmaking

The increasing complexity of modern plastic products requires efficient and precise molds. With the experience gained from over 1,700 successfully approved molds, we develop and manufacture high-precision prototype, pre-series and series tools for plastics processing in clean rooms. We use state-of-the-art milling, turning and eroding technologies in an area of over 600 m² – firmly integrated into a continuous digital process chain of design and production.

This enables us to guarantee maximum precision, short response times and maximum production availability. From design and production through to assembly and sampling – our tried-and-tested process guarantees tools of the highest quality, with a weight of up to 3 tonnes and tolerances in the hundredths of a millimetre range.

Logistics

Efficient logistics solutions are crucial for the availability and quality of our products. With our own fleet of vehicles and a global network of qualified partners, we offer tailor-made transport solutions from just-in-time delivery to setting up open-air warehouses with direct delivery to our customers production lines.

By combining our own logistics expertise and digital processes, we guarantee maximum precision, short response times and maximum production availability for a reliable and sustainable supply chain.

UNCOMPROMISING QUALITY

FOR MAXIMUM PRODUCT SAFETY



Approvals, certifications and tests

A consistent focus on quality is the basis for reliable, safe products and innovative developments. Ensuring this and optimizing it along the entire process chain is the core of Wirthwein Medical's quality management. Based on a certified, integrated management system, we meet our customers' specifications, the regulatory requirements for our cleanroom processes and the requirements for sustainable, resource-conserving production.

- ISO 13485, 9001, 15378, 10001, 14001, 50001
- Class 7 cleanroom production in accordance with ISO 14644-1
- GMP requirements ('Good Manufacturing Practice')
- Elements from the regulations and standards 21 CFR 820 Quality System Relations (Medical Devices), ISO 14001 and IATF 16949 are also taken into account





YOUR PROJECT WITH WIRTHWEIN MEDICAL

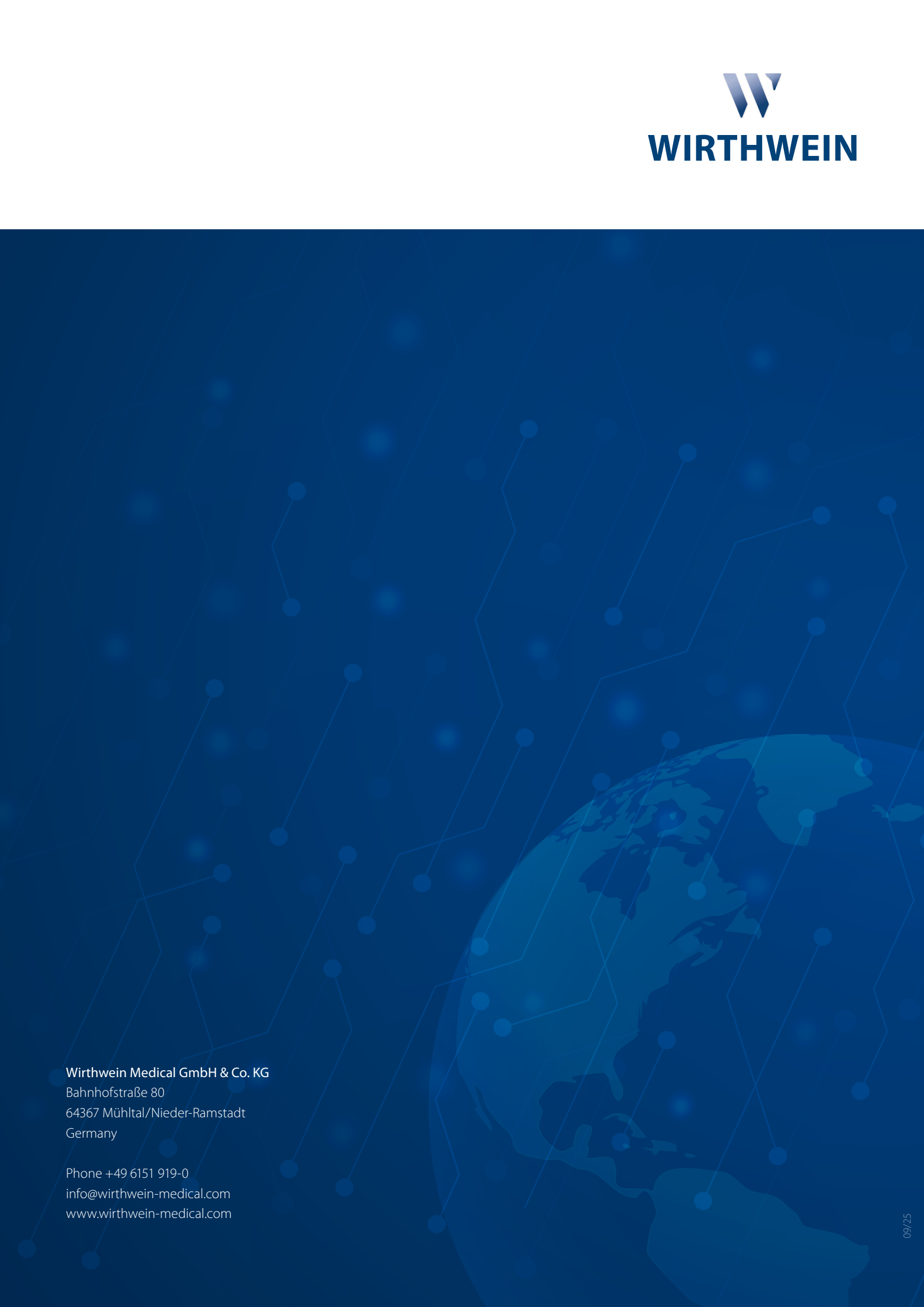
Do you have an enquiry or would you like a competent, experienced contact person for a specific project? Then contact us, we will be happy to help you.

Please use the contact form on our website, send us an e-mail or simply give us a call.

Phone +49 6151 919-340
info@wirthwein-medical.com
www.wirthwein-medical.com

A reliable development partner and system supplier since 1946

- Uncompromising quality
- Globally active family business
- Additive manufacturing and development of prototypes
- Production capacities for several million units per year
- Clean room production (ISO class 7): several clean rooms
- Certifications: ISO 13485, 9001, 15378, 10001, 14001, 50001
- In-house toolmaking and tool maintenance:
flexible, fast and high availability
- Injection molding, blow molding, assembly, packaging and sterilization:
All-in-One by Wirthwein Medical



Wirthwein Medical GmbH & Co. KG
Bahnhofstraße 80
64367 Mühlital/Nieder-Ramstadt
Germany

Phone +49 6151 919-0
info@wirthwein-medical.com
www.wirthwein-medical.com