

KIEFEL
TECHNOLOGIES



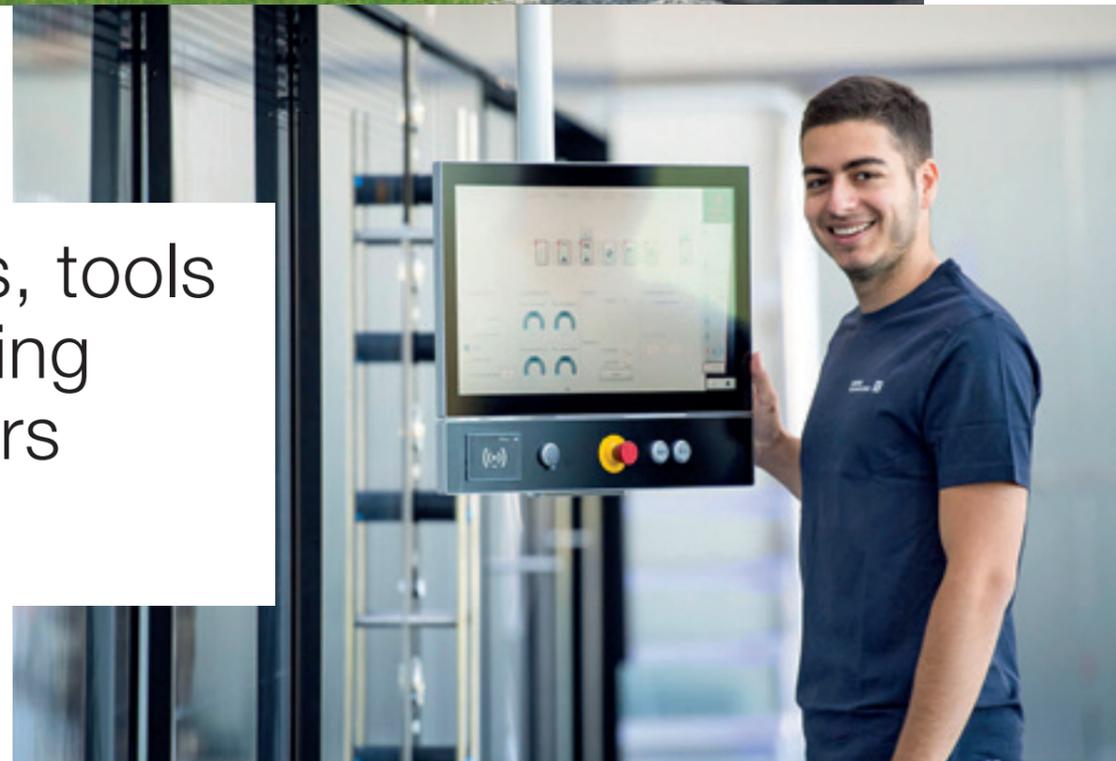
A Member of Brückner Group

DRIVING
YOUR
PERFORMANCE



High performance machines, tools and automation for processing of polymers and natural fibers

for the Packaging, Medical & Pharma, & Appliance Industry



Contents

4 - 5

We are Kiefel

6 - 7

Our values

8 - 9

Kiefel Driving Sustainability + Rethinking

10 - 11

Material R&D and Technology Centers
for outstanding solutions

12 - 13

Polymer and Fiber Packaging
For the most perfect packaging

14 - 15

Medical & Pharma
Hygienic safety at the top of the list

16 - 17

Appliance
Food optimally cooled

18 - 19

After Sales Service
Reliable partner worldwide

20 - 21

Brueckner Group
Worldwide presence



Our strategic approaches

#KiefelDrivingSustainability

We are Kiefel

Material processing experts

Kiefel develops and produces high quality machines for the processing of polymers, recycled and bio-based materials, as well as natural fibers. World-renowned manufacturers rely on our market-leading technologies for the packaging, medical & pharma, and appliance industries.

“Driving your Performance” is our claim and we put this promise into practice every day. For more than 60 years we as a reliable partner have been putting our customers first in everything we do - in every step of the value chain. Our own Technology, Material and R&D Centers enable us to offer our customers turnkey solutions and provide support from material to product development through high performance machines, smart automation and tools to extraordinary service.

Kiefel gives you everything you need from one single source. With our tailor-made, cost-effective solutions as well as passion to meet the requirements of our customers we help our customers to achieve their goals competently, efficiently and quickly.

Facts & figures

- Headquarters: Freilassing (Germany)
- Subsidiaries: Micheldorf (Austria), Sprang-Capelle (The Netherlands)
- Global Network of Sales and Services
- Around 900 employees worldwide
- Turnkey solutions for packaging, medical & pharma as well as appliance industries

Research - for example into new materials - is a top priority for us



Sustainability is extremely important to you? Then we have something in common!

Our approach: Give us your product, we will make it sustainable. By rethinking your product, its design & function, the material and composition, tools and machines, process and automation. With our extensive materials-processing expertise, we are the right contact for recycled or biodegradable materials. Together, we develop market-driven products that meet the highest standards.

#KiefelDrivingDigital

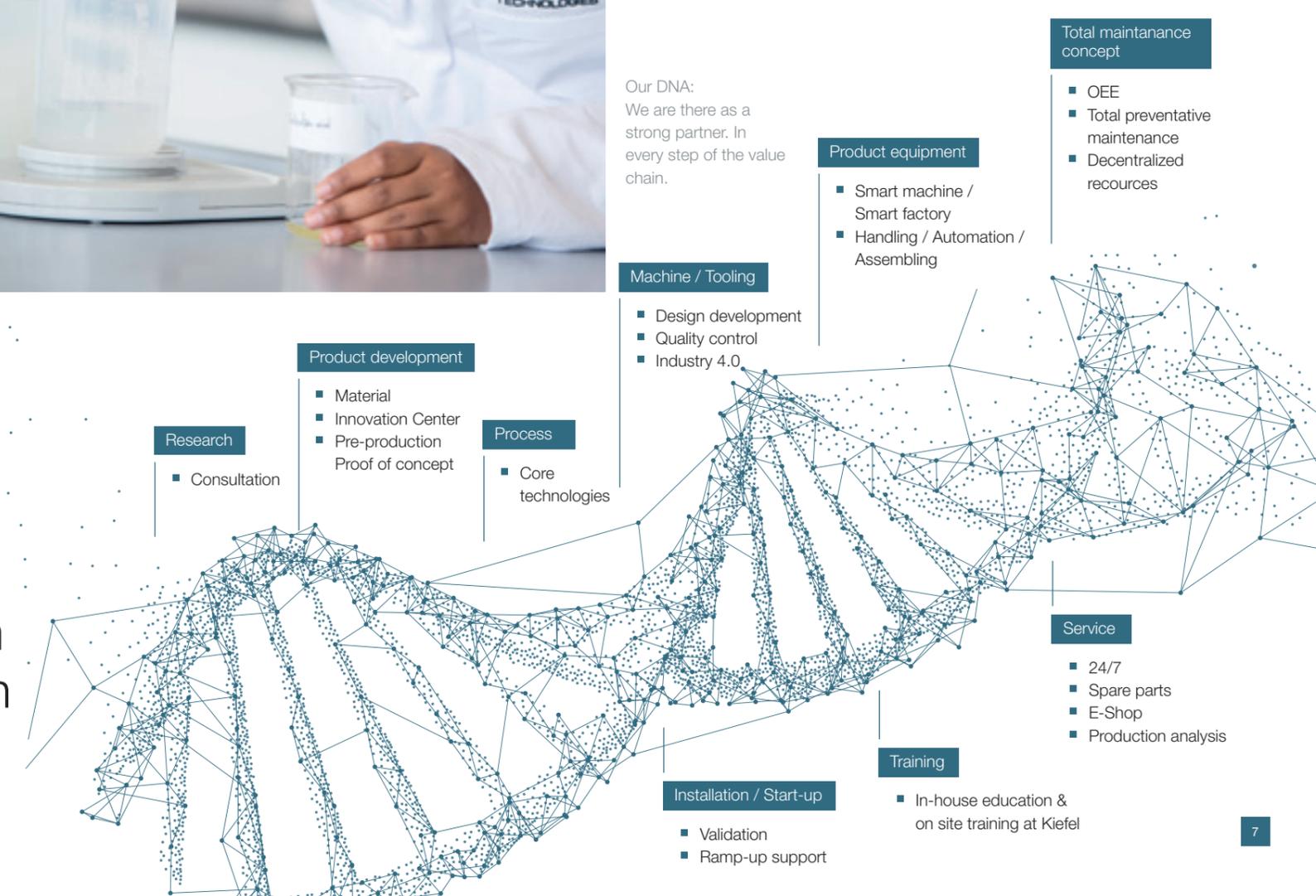
Digitalization plays a major role in everything we do - and is incorporated into our products and services. We are driving forward smart machines, smart production and smart services.



Our values

What defines us

- INNOVATION:** We are the EXPERTS for materials and technology. From product development and single machine solutions to complete turnkey solutions, we drive your performance.
- CREATIVITY:** We are MOTIVATED and thrilled to find ideas and to tackle changes.
- ENTREPRENEURSHIP:** As PIONEERS we think beyond the limits – to maximise the customer benefits at the highest quality standards.
- INTEGRITY:** We live our moral RESPONSIBILITY reflected in our value system. You can count on us.
- YES, WE CARE:** We investigate and research sustainable SOLUTIONS in every aspect of our work



“Kiefel progressed throughout many years from a solid machine building company to a modern solutions provider.”

Thomas Halletz, CEO KIEFEL GmbH



Our mission & vision

- 
Our mission is to drive sustainability holistically in our corporate DNA. In practice, this means that we constantly question our actions and improve them step by step.
- 
Our vision: We are the leading solution provider for the development and implementation of the most sustainable technology.

Rethinking

Our concept to make products more sustainable

We rethink product design and functionality, materials and composition with a view to a more sustainable product. Depending on this, we adapt manufacturing processes and optimize machines and tools for your production.

Rethinking product, material, tools & machines



Kiefel Driving Sustainability

Yes, we care – for sustainable solutions

Tremendous changes are shaping our world: Climate change and environmental pollution have a significant impact on our society.

As a thermoforming and joining technology company, we are therefore taking an active role in helping to shape a better future for all of us.

We rethink materials, products, processes and machines with the aim of developing the best and at the same time most sustainable solution for the

respective application - in the medical & pharmaceutical field, the refrigerator or packaging industry. With investments in our own Technology and Material R&D Center, research activities and cooperations, we go the extra mile and support our customers as experts in close partnership throughout the entire value-added process.



Research & Development - the heart of innovation

Material R&D and Technology Centers for outstanding solutions

The Kiefel Technology Centers and the Material R&D Centers deepen our materials expertise and allow us to support our customers even more closely in the development process for everything related with materials, products and machines. Here our customers receive solutions that are optimally tailored to their individual requirements. This enables us to meet the demands of a holistic solution provider, develop, use even more sustainable technologies, processes and materials for our customers in the future.

With the centers, we can carry out extensive proof-of-concept studies for applications in the packaging as well as in the medical & pharmaceutical sector.

Fiber and Polymer Packaging

We are the right partner for:

- Detailed analysis of new materials
- Material savings
- Investigation of specific material parameter e.g. via electrical and chemical analysis
- Product development, prototyping & sample manufacturing
- Proof-of-Concept & process optimization
- Product quality tests in physical lab
- Customer-specific developments
- Tests and optimization of new machine components
- Product & process optimization



Medical & Pharma

- Product design/development support
- Material analysis and consultancy
- Product quality testing
- Proof of Concepts (PoC)
- Prototyping of new products
- Product design for ease of manufacturing
- Functional design studies
- Holistic process consultancy
- Evaluation and testing of special process steps
- Fabrication of test set-up and pilot plants – scalable processes





Automation solutions

First class thermoforming equipment

For the most perfect packaging

As a technology partner for polymer-based, bio-based or fiber-based packaging solutions Kiefel offers more than just machines. Our comprehensive understanding of a wide range of thermoforming technologies and many decades of engineering experience definitely make your project a success. From product development and the process to the tooling and customized automation - the Kiefel team supports you at every production stage as a strong and reliable partner.

Machines, tools & automation for the packaging of

- Food (e.g. bakery products, ready meals, fruits or meat)
- Technical devices (e.g. for electronics)
- Medicine

- Agriculture products (e.g. plant trays)
- Cosmetics
- and more

Polymer Packaging

Our thermoforming machines are optimally designed for the processing of different polymers – also bio-based or recycled, such as (r)PET, (r)PP, (r)PE, PS, PLA, PHA, bio-PET.

For trays, lids, punnets and similar products Kiefel offers the steel rule cutting machine series SPEEDFORMER KMD. Flexibility and efficiency will optimize our customer's production. High pressure and accurate forming combined with strong cutting and punching technology ensure best quality results and stable production.



For production of cups and a wide range of similar products, the Kiefel tilting machines offer the perfect solution. The cup forming SPEEDFORMER KTR Series stands for highest possible output and lowest production cost.

High performance tools and smart automations e.g. for stacking, sleeving, boxing or quality control complement our portfolio of turnkey solutions.

Fiber Packaging

The Kiefel Fiber Thermoforming technology is the perfect solution for packaging made from natural fibers. Materials range from fresh fiber (e.g. NBHK/NBSK, CTMP or UKP), to recycled fiber (e.g. testliner, greyliner or OCC) and annual plants (e.g. wheat straw pulp, miscanthus or bagasse). Depending on the application, they can thus be an alternative to plastic packaging - made from renewable raw materials and with a low CO2 footprint.

For qualitative pulp preparation we offer the NATUREPREP KFP series. Our pulpers process fibers that are common in the paper industry (primary or secondary fibers).

Use of natural fibers

For production of fiber packaging our NATUREFORMER KFT is an all-rounder for fiber-formed products. With a wide range of automation options as well as high quality tooling.

For R&D and production of molded fiber samples the NATUREFORMER KFT Lab is a downscaled machine, which supports product development.

Hygienic safety at the top of the list

The right solution for every medical and pharmaceutical bag application

We move in a highly sensitive area with our production equipment for the medical and pharmaceutical industry. Kiefel is fully aware of this responsibility. This is why our teams operate with precision, reliability and efficiency – just like our customers.

As a supplier of both advanced technology and proven machine concepts, as well as having the

Our promise:
Efficient and reliable solutions

welding technology over 50 years, Kiefel provides the perfect solutions for the cost-effective manufacturing of high-quality products for the medical and pharmaceutical sector. We offer fully-

competence and experience in Radio Frequency (RF) and Thermo-Contact (TC)

automatic and semi-automatic welding lines, along with high-performance filling and sealing systems. Whether for PVC or non-PVC – our customers appreciate the innovative design, tailor-made solutions as well as standard machinery, and extraordinary finishing precision of our production equipment.

With our own Technology Center we can also support in the product development and undertake PoC's. And we can provide the qualification of our machines with documents and services as per customers requirements, from e.g. simple inspection certificates to complete IQ/OQ realization.



Highest precision and innovation is important for us in every project.



From standardized devices to customized machinery

- Form Fill Seal machines
- IV, nutrition and CAPD bag machines
- Bioprocess bag machines
- Blood bag and blood filter machines
- Urine catheter and drainage bag machines
- Ostomy pouch machine

As well as solutions for

- Automation, assembly and packaging
- Beverage bags



Focus on freshness

Food optimally cooled

One of the main focuses of our forming technology are the machines for the production of refrigerator components. Whether for refrigerators or freezers, whether inner or door liners, whether single or combined, even complex shapes and designs can be processed with the most intelligent solutions thanks to the powerful thermoforming machines. The production of inner door liners is carried out from plastic rolls. Plastic plates are used for the production of inner containers.

For high-quality production of inner door panels and inner containers, the so-called air pressure forming process is used as a standard.



SHARPFORMER KID PREMIUM & SMART

This series stand for high quality and flexible thermoforming machines - designed for the production of high quality inner linings for popular refrigerators.



SHARPFORMER KID SPEED

The new generation of inline thermoforming machines has been dedicated to the high-performance production of door panels made of HIPS or ABS materials.



#KiefelDrivingSustainability

Step by step for a better future

Up to 20% less material consumption with better quality due to high-pressure thermoforming and improved energy efficiency.



Always by your side

Your reliable partner - worldwide



Providing first class service to our customers at all times is our highest priority. With Kiefel Service you profit from a comprehensive range of services which ensure your maximum productivity. We are fully committed to optimizing the availability and value conservation of your systems. Our experts Service team is there for you when you need assistance or support: live or remote, online, by phone or via AR.

We will support you throughout the lifetime of your plant.

We deliver, assemble and commission your Kiefel machine at your site. We instruct and train your staff in machine operation and safety, we offer production support, provide you with high quality spare parts, perform tool inspections and repairs, or carry out relocations of your equipment. With custom fit retrofits and upgrades our customers can easily adapt to changing market needs, reduce costs and drive business growth.

#KiefelDrivingDigital

Through the personalized Kiefel Portal, customers can access various digital service solutions around your Kiefel equipment e.g.:

- Equipment: Simple request of machines, parts and tools
- Documents: All machine documents presented online
- Training: Step-by-step online training for machine operators
- Upgrades: Machine upgrades requested in a few clicks
- Maintenance: Upcoming maintenance proactively planned
- Product & process optimization



- Digital Kiefel Portal
- Online & Live Trainings
- Maintenance Dashboard
- Remote Support
- Retrofits & Upgrades



50,000+ Kiefel original parts in stock

2,200+ Service visits globally

2,200+ Machines and tools in the digital Service platform

100+ Training modules for more than 500 machines

Worldwide presence

We know the local and regional situation

2,900 employees
21 locations
14 countries



- Siegsdorf (Headquarters), DE
- Salzburg, AT
- Bogota, CO
- Burgdorf, CH
- Doetinchem, NL
- Freilassing, DE
- Haldenstein, CH
- Hong Kong, CN
- Micheldorf, AT
- Moscow, RU
- Mumbai, IN
- Portsmouth, US
- Rayong, TH
- Roissy en Brie, FR
- Rüti, CH
- São Paulo, BR
- Sprang-Capelle, NL
- St. Petersburg, RU
- Suzhou, CN
- Tjaereborg, DK
- Topolcany, SK



Campus Siegsdorf
Brückner Group,
Brückner Maschinenbau,
Brückner Servtec

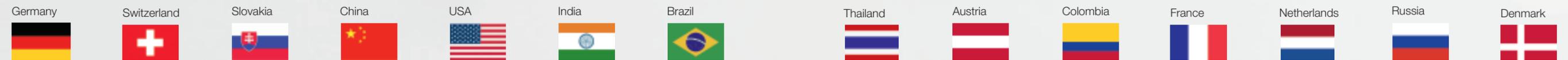


Campus Freilassing
Kiefel



Campus Rüti
PackSys Global

- Brückner Group
- Brückner Maschinenbau
- Brückner Servtec
- Kiefel
- PackSys Global



Brückner Group GmbH

Königsberger Str. 5-7
83313 Siegsdorf
Germany

T +49 8662 63-0
sales@brueckner.com

Brückner Maschinenbau GmbH & Co. KG

Königsberger Str. 5-7
83313 Siegsdorf
Germany

T +49 8662 63-0
sales@brueckner.com

Brückner Servtec GmbH

Königsberger Str. 5-7
83313 Siegsdorf
Germany

T +49 8662 63-0
servtec@brueckner.com

Kiefel GmbH

Sudetenstraße 3
83395 Freilassing
Germany

T +49 8654 780
kiefel@kiefel.de

PackSys Global AG

Spitalstrasse 38
8630 Rüti
Switzerland

T +41 55 253 37 00
info@packsysglobal.com

Detailed information on all our locations:

www.brueckner.com

KIEFELGmbH

Sudetenstraße 3
83395 Freilassing
Germany

T +49 8654 78-0
info-de@kiefel.com
www.kiefel.com



The KIEFEL GmbH is a world leader when it comes to the design and manufacture of machines used to process plastic film materials. The company offers core expertise in the fields of forming and joining technologies. As a supplier to reputable manufacturers in various sectors, KIEFEL GmbH services customers in the automotive, medical technology, refrigerator and packaging industries. The headquarters of KIEFEL GmbH is in Freilassing/Germany. The company also runs its own network of sales and service centers in the United States, France, the Netherlands, Russia, China, Brazil, Indonesia and India, and is represented by sales partners in more than 60 countries worldwide. Kiefel also owns the Dutch thermoforming toolmaker Kiefel Packaging B.V., and the Austrian KIEFEL Packaging GmbH, supplier of tools and automation solutions. KIEFEL GmbH is a member of the Brückner Group, a worldwide leading supplier of plastics machinery.