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RAMPF Advanced Polymers

**Customized and sustainable solutions for formulating,
sealing, casting, and design**

RAMPF

#DiscoverTheFuture

Chemical and Engineering Solutions



Advanced Polymers



Composite Solutions



Machine Systems



Production Systems

RAMPF Advanced Polymers is a company of the international RAMPF Group.
Find out more on page 20.

RAMPF Advanced Polymers

High-performance. Customized. Eco-friendly.

We have been developing and manufacturing reactive resin systems based on polyurethane, epoxy, silicone, and silane-modified polymers – for more than four decades.

- Our portfolio includes
- > Sealing systems, electro and engineering casting resins, edge and filter casting resins, and adhesives
 - > Board and liquid materials for model and mold engineering
 - > Chemical solutions for the manufacture of customized recycled polyols based on polyurethane, PET, and PIR residues

Our products and solutions are used globally and in a wide range of industries – from automotive and electromobility, electrics/

electronics, and white goods to aerospace, foundry, furniture, and mattresses.

We conserve resources and protect our environment, both in the development of our chemical products and in their manufacture and recycling.

Together with our customers and partners, we are working towards a successful and sustainable future.





Products and services

High-performance, customized, and resource-saving technologies for a sustainable future



INNOVATIVE MATERIALS & BRAND DIVERSITY

Plastic systems for sealing, design, insulating, bonding, protecting, and casting

RAKU® POX Epoxy	RAKU® PUR Polyurethane	RAKU® SEAL Sealing Adhesives	RAKU® SIL Silicone
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Plastic systems and solutions for state-of-the-art model, mold, and tool engineering

RAKU® TOOL Polyurethane and Epoxy

Customized, high-quality recycling polyols

RECYPOL® Ether and Ester Polyols	PETOL® Ester Polyols	Polyols based on renewable raw materials
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HIGH-PERFORMANCE & SUSTAINABLE

Ambition. Reality. Tradition.

Every day, we strive to make our products and solutions even more eco-friendly, from the selection of raw materials to the manufacturing process and delivery.

As a pioneer in the chemical recycling of polyurethane, we have been setting standards for over three decades. The raw materials obtained with our groundbreaking technologies are used in both our customers' products and our own.

It goes without saying that we procure energy sustainably – and use it intelligently. At our locations in Grafenberg and Pirmasens, we use only green electricity from renewable energy sources. A proactive environmental management system ensures that we never stand still but continuously improve our energy and environmental performance.

SERVICE TODAY & IN THE FUTURE

Customer-oriented. Competent. Committed.

We provide our customers with comprehensive support – from product development to market launch and sales. And we do this around the globe: With production facilities on three continents and a worldwide network of distribution partners, we are always there for our customers, wherever they are.

In all this, people are always at the center. Trusting and successful collaboration with our customers is our top priority. Together, we develop the solutions of tomorrow – and have been doing so for more than forty years.

Your industry | Your application

Our solutions are customized, sustainable, and used in a wide range of applications worldwide

 CONSTRUCTION	 ELECTRO / ELECTRONICS	 ENERGY TECHNOLOGY
 FILTER	 LEISURE AND SPORT	 FOUNDRY
 WHITE GOODS	 CERAMICS	 PLASTICS PROCESSING
 MECHANICAL ENGINEERING	 MEDICAL TECHNOLOGY	 BOOTH CONSTRUCTION / WOODWORKING / FURNITURE
 MOBILITY · Automotive / Motorsport · Aerospace · Marine and Rail		





+ YOUR BENEFITS

- > Comprehensive industry and application expertise
- > Customized material formulation with a wide variety of colors, shapes, and geometries
- > Materials listed on specifications for leading automotive and electronic manufacturers
- > Listings to UL 50 and UL 94

Foam gaskets | Maximum protection and exceptionally easy handling

Innovative sealing systems that live up to the highest standards

Protecting components from moisture, dust, dirt, wet conditions, and other influences is the fundamental task for sealing systems.

RAMPF Advanced Polymers is a leading developer and manufacturer of liquid to highly thixotropic foam gaskets based on polyurethane and silicone. The products of the RAKU® PUR and RAKU® SIL brands represent the pinnacle of automated sealing with outstanding productivity, exceptional performance, and consistent high quality. Leading manufacturers around the world have made automated RAMPF sealing systems the industry standard.

Industries and applications:



ELECTRICAL AND ELECTRONICS INDUSTRY

- Industrial lighting (indoor, outdoor)
- Offshore
- Control cabinets and electrical enclosures



E-MOBILITY AND AUTOMOTIVE

- Battery covers
- Brake and tail lights
- Chargers
- Loudspeakers
- Fuse boxes
- Door modules



HOUSEHOLD APPLIANCE INDUSTRY

- Enclosures (refrigerators, washing machines, vacuum cleaners, dishwashers, and many more)
- Hobs, air ducts, recuperators, and many more



PACKAGING INDUSTRY

- Lids for steel and plastic drums
- Steel cans, IBCs



+ YOUR BENEFITS

- > More than 40 years of experience in developing, manufacturing, and marketing innovative electro casting resins
- > Broad spectrum of properties optimized to your requirements
- > Our products conform with RoHS and fulfill the highest requirements of test standards and listings, e.g. UL 94, RTI, and OBJS2
- > Listed with leading manufacturers in the automotive and electronics industries

Electro casting resins

High conductivity and high performance

Wide range of products for the reliable protection of sensitive components

Electro casting resins are key to the ongoing development of numerous industries. The automotive, energy, automation, and household goods industries are all dependent on technical advances in the storage and transportation of electrical energy.

One- and two-component electro casting resins from RAMPF Advanced Polymers boost reliability and performance while also ensuring cost-efficiency and a long service life. They reliably and efficiently protect your components (transformers, control units, inverters, motors etc.) against chemical substances and environmental influences such as heat, cold, and moisture. Customers using our products based on epoxy (RAKU® POX), polyurethane (RAKU® PUR), and silicone (RAKU® SIL) include leading manufacturers in the automotive and electronics industries.

Industries and applications:



AUTOMOTIVE-ELECTRONICS

- Sensors
- Ignition coils
- Control units



MOTORS

- Industrial fans, household appliances, hard drive power units, vehicles, and industrial machinery



E-MOBILITY

- Gapfiller
- Power electronics
- Battery electronics



TRANSFORMERS

- Smart TVs and computers
- E-mobility and automotive



+ YOUR BENEFITS

- > Expertise and experience in a wide range of applications and numerous markets
- > Reliable protection – even under the highest loads
- > Material properties for optimized processing
- > Comprehensive support in product selection or development as well as material processing

Casting Resins and Elastomers

Durability meets versatility

Reliability and safety for a wide range of applications

At RAMPF, Casting Resins and Elastomers stands for highly resilient elastomers, customized casting and construction materials, and a broad portfolio of innovative reactive resins.

RAKU® PUR (polyurethane), RAKU® POX (epoxy), and RAKU® SIL (silicone) systems are used in a variety of applications across the globe. Our versatility makes us a sought-after solution provider. We develop our products to suit your specific material and processing requirements.

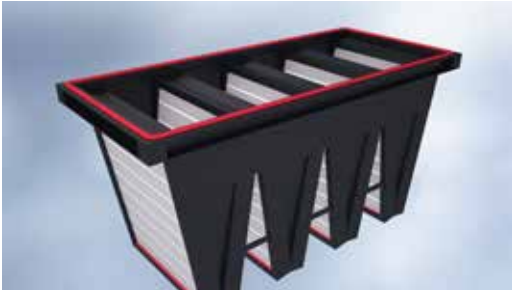
Together with our sister company and application expert RAMPF Production Systems, we develop products for both simple manual mixing and dispensing systems and highly automated dispensing technology.

Industries and applications:



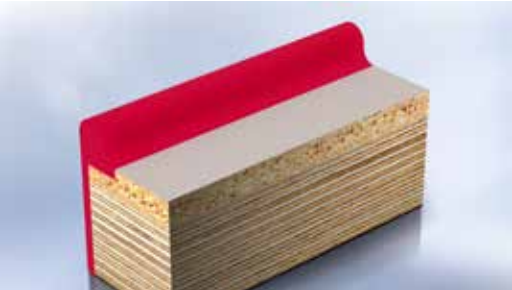
+ CORNER ANGLE BONDING

- Aluminum windows, doors, and frames



FILTER INDUSTRY

- Industrial filters
- Air and HEPA filters
- Oil and hydraulic filters



EDGE CASTING

- Laboratory furniture
- Doors and furniture for the household sector, hospitals, schools, and kindergartens



WET CAST MOLDS

- Concrete molded parts
- Forms for natural stone imitations



+ YOUR BENEFITS

- > Development, production, and marketing of high-quality recycled polyols (basic polyols) from PUR/PIR and PET residues
- > Recycling polyols reduce the carbon footprint compared to primary polyols
- > Recycling as a competitive advantage – economically and ecologically
- > Independence from scarce petrochemical raw materials
- > PUR recycling – customers can utilize our capacities in Pirmasens or set up their own recycling plants using our chemical know-how

Chemical recycling

A sustainable competitive advantage

Customized, high-quality recycling polyols

RAMPF Advanced Polymers specializes in chemical solutions for the manufacture of high-quality recycling polyols.

For over 30 years, our team has been developing and manufacturing high-quality recycling polyols. In multi-functional plants, tailored polyols are manufactured from PUR/PIR residues or PET/PSA using solvolysis (glycolysis, acidolysis, and polyolysis). The polyols obtained from this process are reintegrated by our customers into their production. This creates a cycle that delivers both environmental and economic benefits.

RAMPF bio polyols made from renewable raw materials complete our sustainable product portfolio.

RECYPOL® Ether and ester polyols based on polyurethane or polyisocyanurate residues	PETOL® Ester polyols based on PET/PSA	BIO POLYOLS Polyols based on renewable raw materials (NP) Production through modification or functionalization of renewable raw materials (e.g. rapeseed oil)
PUR/PIR RESIDUES	PET FLAKES	RENEWABLE RAW MATERIALS

The recycling of PUR residues and recovered materials enables our customers to reuse their raw materials multiple times in their production processes. They can use our capacities in Pirmasens or their own recycling plant built directly at their site. Our unique chemical expertise is also utilized in the design of customized plants for our customers.



+ YOUR BENEFITS

- > Largest producer of styling, modeling, and working board materials with up to 30% raw material components from chemical recycling
- > Close Contour products for highly efficient and high-quality model and mold engineering
- > Innovative products and solutions for the composites and foundry industry with economical and ecological benefits
- > Comprehensive, worldwide support from experienced technicians

Economical. High-performance. Sustainable.

State-of-the-art model and mold engineering materials

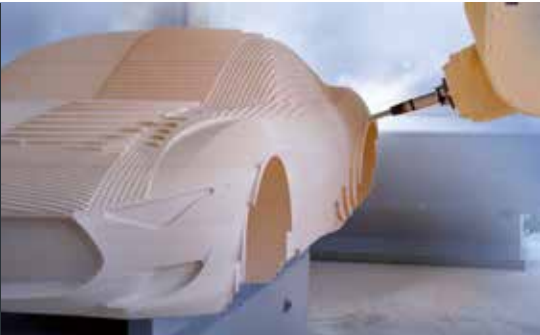
For over 40 years, we have been pioneers in the field of innovative model and mold engineering materials and are known as the inventors of the brown modeling board. Our materials combine efficiency, performance, and sustainability.

We are committed to sustainability and constantly working on new products and solutions. Our goal is to develop more environmentally friendly products and reintegrate manufacturing waste into the production cycle.

Tooling & Modeling currently recycles up to 50% of its production residues using a chemical recycling process developed by RAMPF. Additionally, our RAKU® TOOL board materials contain up to 30% raw material components from chemical recycling.

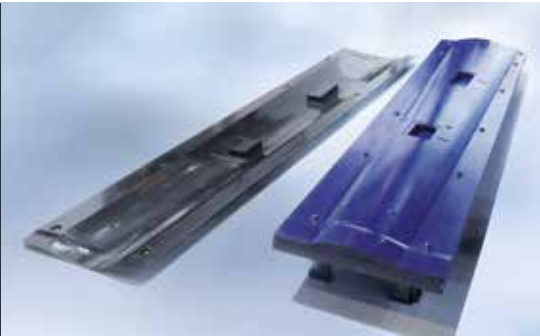
Board Materials

Readily available styling, modeling, and working board materials with specially matched adhesives in a density range of 0.08 – 1.7 g/cm³



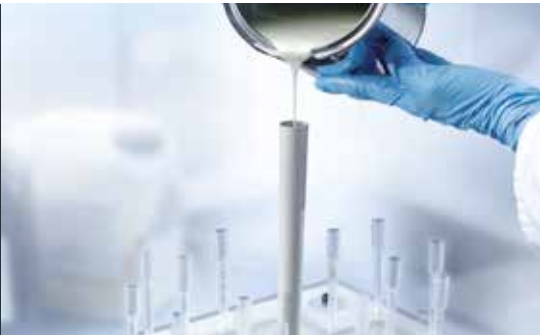
Close Contour Products

Customized, ready-to-mill castings and blocks; seamless, dimensionally stable modeling pastes for every component size and application



Liquid Systems

Gelcoats, laminating and multipurpose resins, laminating pastes, infusion systems, casting resins, fast cast resins, rapid prototyping systems, and ancillaries





+ YOUR BENEFITS

- > Customer focus: Trusting partnership for customized solutions
- > Expertise from a single source: Comprehensive consulting and cross-process competence
- > Material, plant, and process technology from a single source
- > Processing expertise: Experience in foaming, casting, bonding, coating
- > Think global, act local: Global production capacities, international network of experts, high production flexibility, short delivery times, individual on-site consulting

Think global, act local

Comprehensive support

Materials, processing, consulting –
your end-to-end partner

RAMPF offers its customers complete support – from product development to market launch.

GLOBAL PRESENCE

- Production in Germany, USA, and China according to the highest quality standards
- International network of distribution partners and experts

LABORATORY AND APPLICATION TECHNOLOGY

- Material and process consulting
- Individual material development or product customization
- Application engineering consultation for component design and prototype manufacturing
- Prototype production

PROCESSING EXPERTISE

- Application consulting and process optimization
- Encompassing machinery for near-series customer trials
- Processing of one- and two-component materials with low-pressure mixing and dispensing systems

AFTER-SALES SERVICE AND TRAINING

- Long-term customer support by technical field representatives and application technicians
- Training at the RAMPF Academy

We are inventors. Team players. And a strong partner.

RAMPF stands for pioneering chemical solutions and visionary engineering. Worldwide.

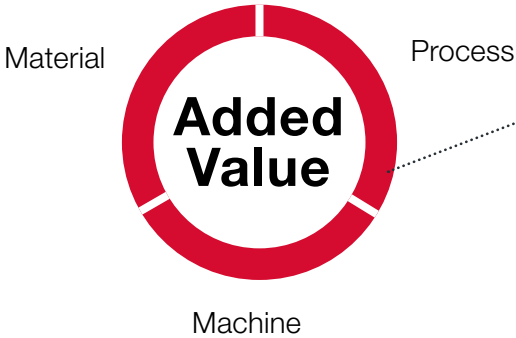
From a one-man operation to an international group with twelve sites spread across three continents – with our products and solutions centered around reactive resins, machine systems, and lightweight construction with composites, we rank among the market leaders in a whole host of industries.

Discover the future – this is both our corporate slogan and the foundation of our long-standing success story. In close cooperation with our customers and partners, we develop tomorrow's products and solutions today – for the decisive competitive advantage.

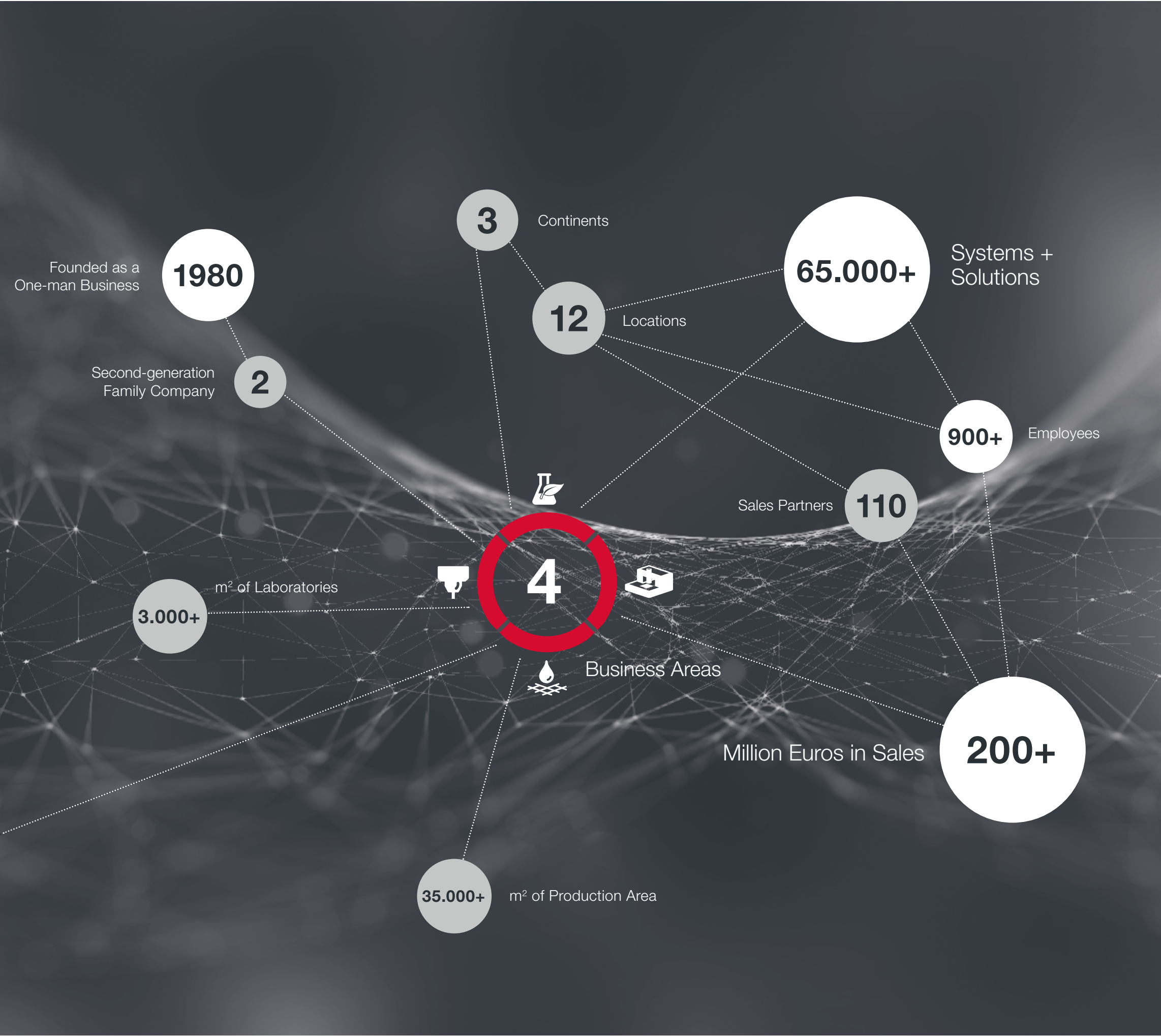
Sustainability has been a priority right from the outset. This is no mere buzzword but an integral part of our day-to-day activities. As pioneers of chemical recycling, we have been contributing to an effective circular economy for decades. The raw materials that we recycle are used both by our customers and within our Group.

We are also a sustainable employer. RAMPF grows with its employees – we invest in our staff and are keen for them to work with us in the long term. We achieve this by openly showing appreciation and offering extensive training and development opportunities.

A forward-looking, sustainable, and value-creating family-run business – as a partner to industry and as an employer, we attach the greatest of importance to trust and reliability. These qualities are an absolute must when it comes to establishing long-term, successful partnerships.



RAMPF – Chemical and Engineering Solutions.
Utilize our wide-ranging innovative potential
for Added.Value.





RAMPF –

discover the future

Developing the Solutions
of Tomorrow – Today.

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Mass production?
Not at RAMPF.

**We engineer
made-to-order solutions.**

