



RAMPF Composite Solutions

Innovative Solutions for Complex Composite Challenges

RAMPF **#DiscoverTheFuture**

Chemical and Engineering Solutions









Advanced Polymers Composite Solutions

Machine Systems

Production Systems

RAMPF Composite Solutions a company of the international **RAMPF** Group. Learn more on page 12.

RAMPF Composite Solutions Expert in Design, Engineering, and Manufacture

The company based in Burlington, Ontario, Canada, is a leading expert in the manufacture of carbon fiber and fiberglass composite parts for the aerospace, medical, and consumer product industries.

Core competencies include VARTM (Vacuum Assited Resin Transfer Moulding), metal plating, Tailored Fiber Placement, and value-added assembly.

RAMPF Composite Solutions is completely vertically integrated, offering project management, product development, tool design and manufacturing, material and component testing, dedicated new production introduction, and complete component manufacturing. Extensive R&D is the driver of innovation, and long-term relationships focused on close cooperation fuel the optimization of existing processes and the development of new products.

Engineering Services cover the full suite from concept to a finished design and qualification package.



Your industry | Your application

Quality, progress, and performance for all main industry applications



× 4

AEROSPACE

- Airborne mapping and surveying systems
- Airborne surveillance & reconnaissance systems
- Composite components and products used in aerospace evacuation systems
- Flight data recording systems
- · Imaging and targeting systems
- · Landing gear systems
- · Seating systems
- · Structural components
- · Water and waste systems



Defense & Security

- Airborne mapping and surveying systems
- Airborne surveillance & reconnaissance systems
- · Imaging and targeting systems

MEDICAL

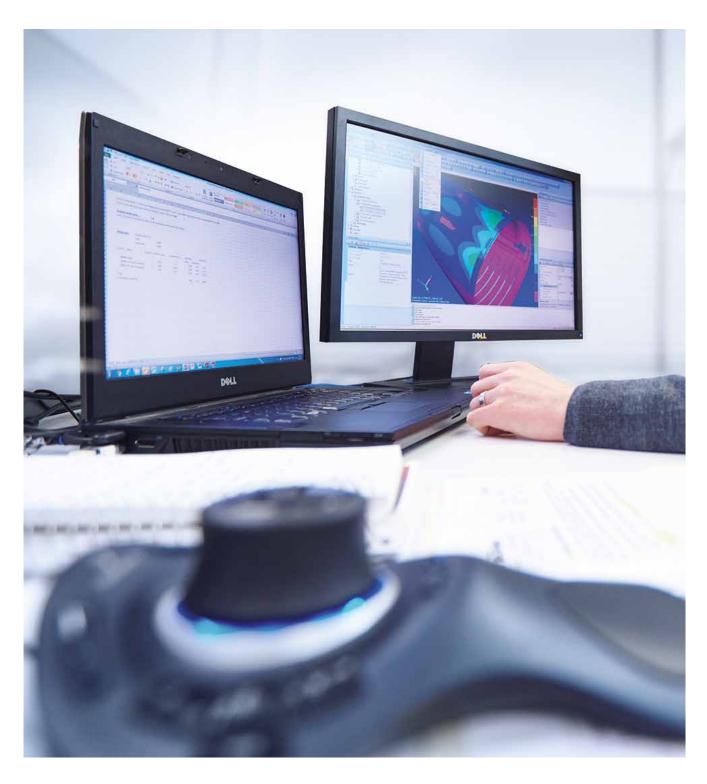
- Composite components and products used in diagnostic imaging systems
- · Oncological MRI equipment

Communications

- Antenna systems and broadcasting equipment
- Components and products used in satellite communication systems

Consumer

 Composite components and products used in high-end loudspeaker systems



Engineering

World-class engineering services for all industries – from concept to qualification

From sketch to full scale production.

- FEA (Finite Element Analysis)
 3D modeling/design software, including Catia V5, Solidworks
 Tool design and manufacturing in-house
- Tailored Fiber Placement (TFP) for the optimization of fiber placement to maximize strength and stiffness – even at lowest weights
- > Design for Manufacture & Design For Cost
- > Process engineering, development, and documentation
- Product design support
- Prototyping
- Qualification support
- > Pilot builds
- Low rate introductory production
- > Full scale production



+ YOUR ADVANTAGES

- > **VARTM** for manufacture of highest quality tolerance parts and competitive costs
- > Vacuum Infusion for production of highest quality composite parts
- > Out of Autocalve Prepregs for aerospace applications
- > Precision **Tooling** and **Prototyping**

Composite Manufacturing

Complete solution provider of carbon fiber and fiberglass composites

Processes and methods

VACUUM-ASSISTED RESIN TRANSFER MOLDING (VARTM)

- Production of highest quality tolerance parts
- Lower tooling costs compared to RTM

VACUUM INFUSION

- Production of high-quality composite parts
- > Very good fiber-to-resin ratio and high surface quality

OUT OF AUTOCLAVE PREPREGS

- Autoclave-quality mechanical properties
- Reduced capital and operating costs, increased manufacturing flexibility

Services

- Complete subassembly, including all necessary hardware and kitting
- Part and subassembly testing, including mechanical testing
- Tolerance of high-precision parts and assemblies
- Metalization of composites with copper and electroless nickel plating, and painting to MIL-SPEC or to other standards and as application demands



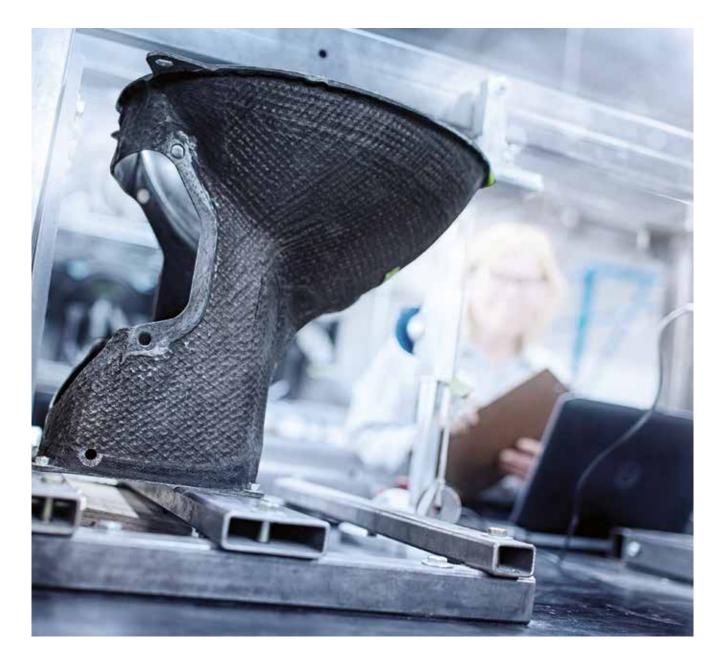


Materials | State of the art solutions

High-performance materials – Cutting-edge technologies

Having developed innovative materials that meet the strictest aerospace industry requirements, we produce a wide range of structural and non-structural aerospace parts, e.g. fairings, engine cowls, camera/aircraft interfaces, and interior parts such as business jet seating components. We also manufacture products and components for the medical industry that require precision tolerances.





Quality commitment

Our highest priority is customer satisfaction. That is why we adhere to best practices in quality and work towards continuous improvement in every process. Registrations to globally recognized standards include:

ISO 9001:2015 and AS9100D

The quality management systems enhance consistency and help ensure the overall performance of the company.

Our process controls consist of 100 % critical point inspection as well as the use of standardized-build instruction documentation that is issued for every part.

As a result, we have been able to establish and maintain a reputation for delivering outstanding products.

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

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

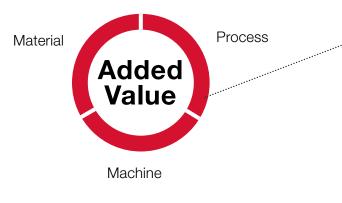
From a one-man operation to an international group with twelve sites spread across three continents – with our products and solutions centered around reactive resins, machine systems, and lightweight construction with composites, we rank among the market leaders in a whole host of industries.

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.

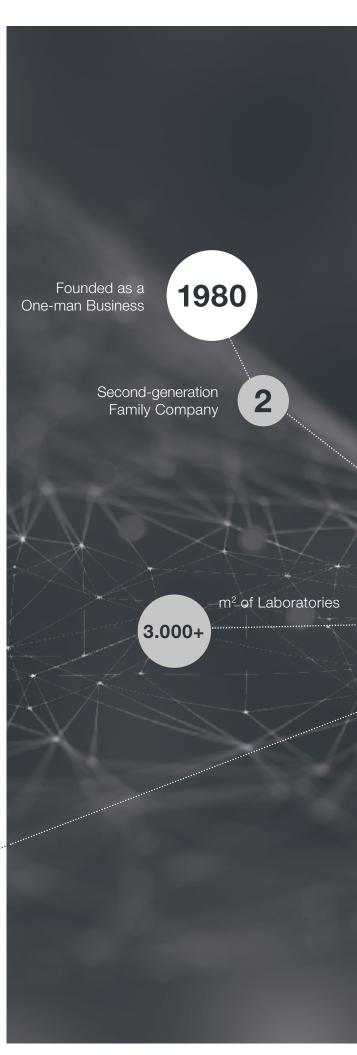
Sustainability has been a priority right from the outset. This is no mere buzzword but an integral part of our day-to-day activities. As pioneers of chemical recycling, we have been contributing to an effective circular economy for decades. The raw materials that we recycle are used both by our customers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

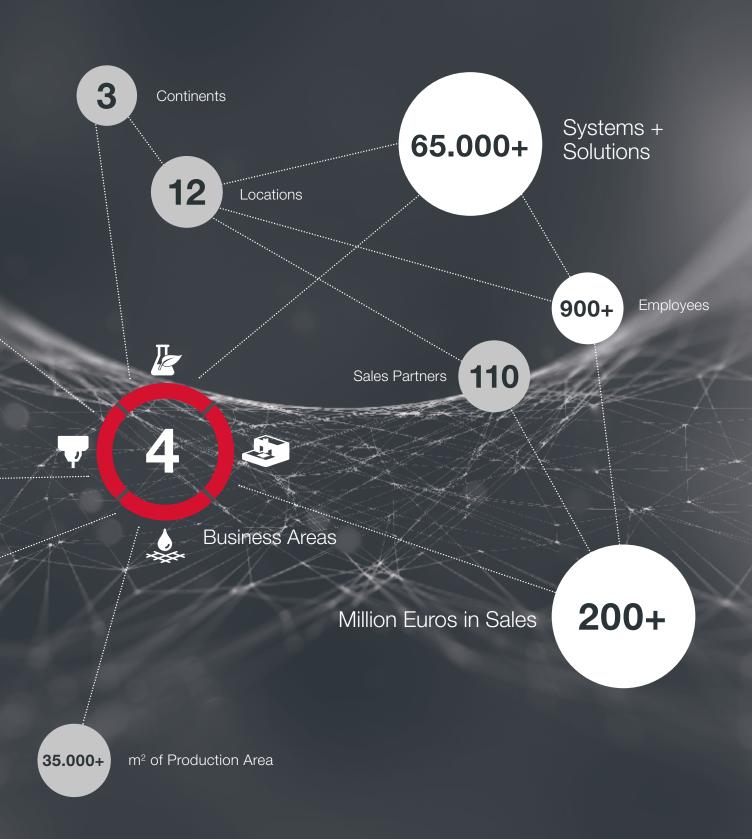
We are also a sustainable employer. RAMPF grows with its employees – we invest in our staff and are keen for them to work with us in the long term. We achieve this by openly showing appreciation and offering extensive training and development opportunities.

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.

+1.905.331.8042 composite.solutions@rampf-group.com

Mass production? Not at RAMPF.

We engineer made-to-order solutions.

www.rampf-group.com