

RAMPF – Material and Machine for Filter Production

Filtech 2019 – Customized sealing foams, adhesive systems, and casting resins / Automated production systems with integrated dispensing technology

Grafenberg, Germany, October 7, 2019. Material and machine for filter production – The international RAMPF Group is presenting its portfolio of reactive resins systems and production systems with integrated dispensing technology at Filtech 2019 from October 22 - 24 in Cologne – Hall 11.1 / Booth B19.

Air and HEPA filters as well as oil and hydraulic filters are manufactured in a wide variety of designs and must always perfectly fit the application. Sealing foams, adhesive systems, and casting resins together with the respective processing technology are decisive both for the efficiency of the filters and the cost-effectiveness of the manufacturing process.

The international RAMPF Group offers filter manufacturers both the material – reactive resin systems made of polyurethane, epoxy, and silicone from RAMPF Polymer Solutions – and the machines for processing – mixing and dispensing technology with automation solutions from RAMPF Production Systems.

Reactive resin systems for air and HEPA filters

> Sealing foams:

Before being installed in ventilation systems, air filter elements are sealed using RAMPF's RAKU[®] PUR liquid and thixotropic sealing foams. The polyurethane systems exhibit fast curing and short processing times as well as a good compression set. Sealing foams with antibacterial properties are also available.

> Conductive casting resins:

For filter elements, which are used in ATEX environments (explosion-proof environments), RAMPF offers soft (Shore A 85) and hard (Shore D 80) systems. These exhibit good flowability, are machineable, have a conductivity of 0.03 MOhm/cm and good chemical resistance.

> Casting resins and rigid foams:

Compact, two-component RAKU[®] PUR casting resins are used to fix the filter elements in the filter frame. The polyurethane systems exhibit good flowability, are silicone-free, and can be equipped with antibacterial characteristics. Due to the good adhesion to plastic, especially ABS and PS, the connecting bridges can be used as a supporting element, which increases the stability of the filter elements.

Filled RAKU[®] polyurethane rigid polyurethane foams are used to fix the filter medium in the frame. Here, high mechanical strength, a highly abrasion-resistant surface, and very good adhesion and chemical resistance are a must.

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Reactive resin systems for oil and hydraulic filters

For the manufacture of oil and hydraulic filters, RAMPF has developed numerous adhesive systems and casting compounds based on polyurethane and epoxy. They exhibit good adhesion to plastic and metal as well as optimized hardening properties and fast process times, which increase the productivity and efficiency of production.



RAMPF Polymer Solutions develops and produces a wide variety of high-performance products for a filter systems.

Production systems with integrated dispensing technology

Mixing and dispensing systems developed and manufactured by RAMPF Production Systems guarantee for the reliable processing of the reactive resin systems used in filter production.

> Casting:

Components with windings, narrow gaps, or shapes that are difficult to vent can be cast without air bubbles under vacuum. This facilitates the manufacture of products that meet high insulation requirements and guarantees their long-lasting performance, also in extreme conditions. Furthermore, the vacuum technology enables the manufacture of optically transparent connections.

> Bonding:

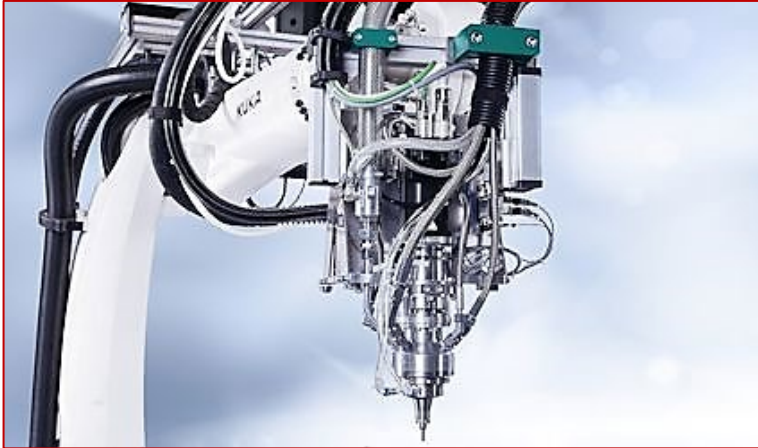
RAMPF processes all kinds of multi-component adhesives into precisely reactive products and applies these to the joints after first activating the latter. The joining process can be done manually or automated. The crosslinking process occurs under defined conditions.

> Automation:

In addition to the core competence of mixing and dispensing technology, RAMPF provides product-specific automation concepts with integrated parts transport and heat treatment, assembly and joining technology as well as logistic and quality assurance solutions.

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Process expertise combined with customized automation solutions generates the highest customer benefit – RAMPF Production Systems is an expert for the development and manufacture of innovative production systems with integrated dispensing technology.

Hartmut Storz, CEO RAMPF Production Systems – “The synergy effects that result from our chemical and engineering know-how in Polymer Solutions and Production Systems benefit our customers directly in form of tailor-made reactive resin systems and processing technologies.”

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www.rampf-group.com



The RAMPF Group stands for **engineering and chemical solutions** and caters to the economic and ecological needs of industry.

The range of competencies includes:

- > production and recycling of **materials** for modeling, lightweight construction, bonding, and protection;
- > technical **production systems** for precise, dynamic positioning and automation, as well as technologies for complex composite parts production;
- > comprehensive range of **solutions and services**, particularly for innovative customer-specific requirements.

With this know-how, RAMPF helps its customers to achieve profitable and sustainable growth.

The Group secures its presence on the international markets with more than 900 employees and six core competencies:

- > **RAMPF Machine Systems** based in Wangen (Göppingen), Germany, develops and produces multi-axis positioning and moving systems, trunk machines, and basic machines based on high-precision machine beds and machine bed components made from alternative materials.
- > **RAMPF Production Systems** based in Zimmern o. R., Germany, develops and produces mixing and dispensing systems for bonding, sealing, foaming, and casting a wide variety of materials. The company also offers a wide range of automation skills relating to all aspects of process engineering.
- > **RAMPF Composite Solutions** based in Burlington, Ontario, Canada, is a holistic composites supplier to companies in the aerospace and medical industries. The company offers a complete suite of services including composite part design and engineering, metal-to-composite conversion engineering, and composite manufacturing to very tight tolerances.
- > **RAMPF Eco Solutions** based in Pirmasens, Germany, develops chemical solutions for the manufacture of high-quality alternative polyols from PU and PET waste materials. This expertise is also put to use in the planning and construction of customer-specific facilities for manufacturing polyols.
- > **RAMPF Polymer Solutions** based in Grafenberg, Germany, develops and produces reactive resin systems based on polyurethane, epoxy, and silicone. Its product portfolio includes liquid and thixotropic sealing systems, electro and engineering casting resins, edge and filter casting resins, and adhesives.
- > **RAMPF Tooling Solutions** based in Grafenberg, Germany, develops and produces board and liquid materials for cutting-edge modeling and mold engineering. The range of skills includes made-to-measure services and products such as pastes, large-volume and full-size castings for Close Contour models, and prototyping systems.

RAMPF has subsidiaries in Germany, the U.S., Canada, Japan, and China.

All RAMPF companies are united under a holding company – RAMPF Holding GmbH & Co. KG – based in Grafenberg, Germany.

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