

RAMPF & GUSSTECH – Holistic Composites Expertise for the Polish Market

High-performance board materials for high-quality lightweight construction in the aerospace, automotive, marine, and wind energy industries

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Grafenberg, Germany / Kraków, Poland, April 6, 2021. Holistic composites expertise from a single source – RAMPF Tooling Solutions and its Polish partner GUSSTECH provide customers with high-performance epoxy board and liquid materials as well as encompassing technical support for cutting-edge composites construction.



Lightweight construction in perfection – RAMPF Tooling Solutions delivered high-quality RAKU[®] TOOL board materials that were used to create molds for producing various lightweight parts for the legendary Callaway Competition Corvette C7 GT3-R.

Fiber-reinforced composites have established themselves as the go-to-material for the manufacture of high-performance parts such as aerospace components (tails, wings, fuselages, propellers), boat and scull hulls, bicycle frames, and racing car bodies. Other uses include fishing rods, storage tanks, swimming pool panels, and baseball bats. By combining strength, stiffness, and low weight, composites engineering is in demand when weight must be minimized and mechanical strength maximized.

The composite material is made up of reinforcing fibers and a resin matrix. The fibers provide structure and strength to the composite, while the resin matrix holds the fibers together. The resin also protects the fibers from abrasion and environmental impact. By choosing an appropriate combination of reinforcement and matrix material, manufacturers can achieve properties that exactly fit the requirements for a particular structure and purpose.

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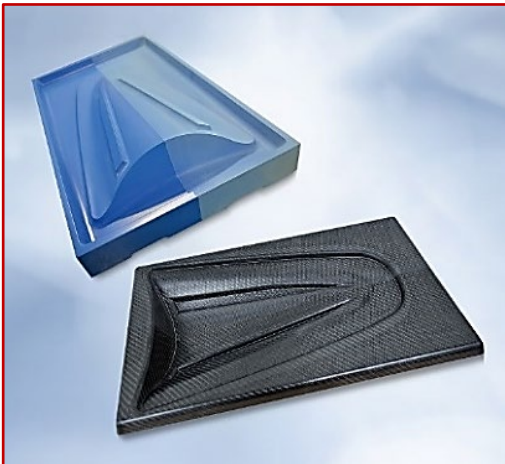
High-Performance board materials for high-quality lightweight construction in the aerospace, automotive, marine, and wind energy industries

RAKU[®] TOOL epoxy board range for cutting-edge composite manufacturing



RAMPF Tooling Solutions based in Gafenberg, Germany, offers a wide range of high-performance RAKU[®] TOOL epoxy boards for mold, lay-up tool production, and direct tooling. By using these materials in the production process, outstanding part quality is achieved in a very short time.

The boards are dimensionally stable and exhibit a linear coefficient of thermal expansion over the entire temperature range (110 °C – 200 °C). They are easy to mill with very little dust and no isostatic chips. Adhesives that are specially matched to the boards are available for bonding.



One of the many standout products is the RAKU[®] TOOL WB-0890 epoxy board. Its extremely fine surface structure significantly reduces both finishing and the amount of sealer that has to be used. Furthermore, the surface finish can be transferred from the master model to the prepreg mold, so that no re-sanding of the mold is required and the service life of the prepreg molds is significantly increased.

RAKU[®] TOOL WB-0890 is easy and quick to machine and compatible with all industry-standard paints, release agents, and epoxy prepreps. Glass transition temperature T_g is 110 °C.

RAMPF Tooling Solutions also develops and produces liquid materials for various composites manufacturing techniques, build-up methods, and applications. These include

- > Gelcoats: easy to apply, sandable, abrasion, chemical, styrene-resistant, and polishable versions available, fabric protection, high temperature resistance up to 190 °C.
- > Laminating resins: good wetting properties for easy application, good strength after room-temperature cure (no brittleness), easy demolding of parts without distortion, solvent free.
- > Infusion and RTM systems: good flow properties under vacuum when building larger parts, long fluid lines possible, minimizing of pin holes, good strength after room-temperature cure (no brittleness), easy demolding of parts without distortion, long pot life (process safety), solvent free, wide temperature resistance range (75 – 170 °C).

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Team of experts at GUSSTECH provide encompassing customer support



Artur Wojcik, CEO of GUSSTECH – “Our team of tooling experts look back on over 20 successful years in the model and mold industry in Poland. By working together with leading national and international machinery and material suppliers, we offer our customers professional advice, customer-specific service, and encompassing technical support for their projects. Lightweight construction with composites has rapidly gained in popularity, and RAKU[®] TOOL products from

RAMPF Tooling Solutions are the number one brand on the market. The high-performance epoxy materials are unbeatable in terms of performance and quality. We look forward to working together with our customers on many more exciting lightweight projects using these innovative materials.”

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www.rampf-group.com



RAMPF Tooling Solutions GmbH & Co. KG 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 Tooling Solutions is the world's largest producer of styling, modeling, and working board materials, which demonstrate excellent quality and the best mechanical properties.

High-quality Close Contour Pastes, Close Contour Blocks, and Close Contour Castings guarantee excellent and cost-effective solutions for modeling and mold engineering.

The company produces and develops pioneering systems for the composites industry that cover a wide variety of production procedures and a broad range of temperatures.

RAMPF Tooling Solutions also provides expert advice, customer-specific service, and prompt technical support.

RAMPF Tooling Solutions is a company of the international **RAMPF Group** based in Grafenberg, Germany.

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