RAMPF
discover the future

EPUSELF | **Do-it-yourself mineral casting for industrial and leisure applications**

Machine Systems

EN

Innovative solutions for highly dynamic production technology

RAMPF Group

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

Our 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

This know-how helps our customers achieve profitable and sustainable growth.

Trusting relationships are of utmost importance to RAMPF. They are a vital part of the success story of the family-owned company, which now spans over 35 years.

RAMPF thinks globally and acts locally. The company has production facilities strategically located in Germany, in the United States, Canada, China, and Japan.

RAMPF Machine Systems

Based in Wangen (near Göppingen), Germany, the company is the market-leading development partner and system supplier of complete machine bed solutions and machine systems.

Its service portfolio includes system solutions, trunk machines, basic machinery, and multi-axis positioning and moving systems based on machine beds and machine bed components made from alternative materials such as mineral casting, hard stone, ultra-high performance concrete, aluminum foam, and fiber composites.

High-precision machine systems are created using innovative replication, grinding, and lapping processes in temperature-controlled production environments.

This makes RAMPF Machine Systems the full-service partner for developing and manufacturing future-oriented machinery and production technology for a wide range of industries.

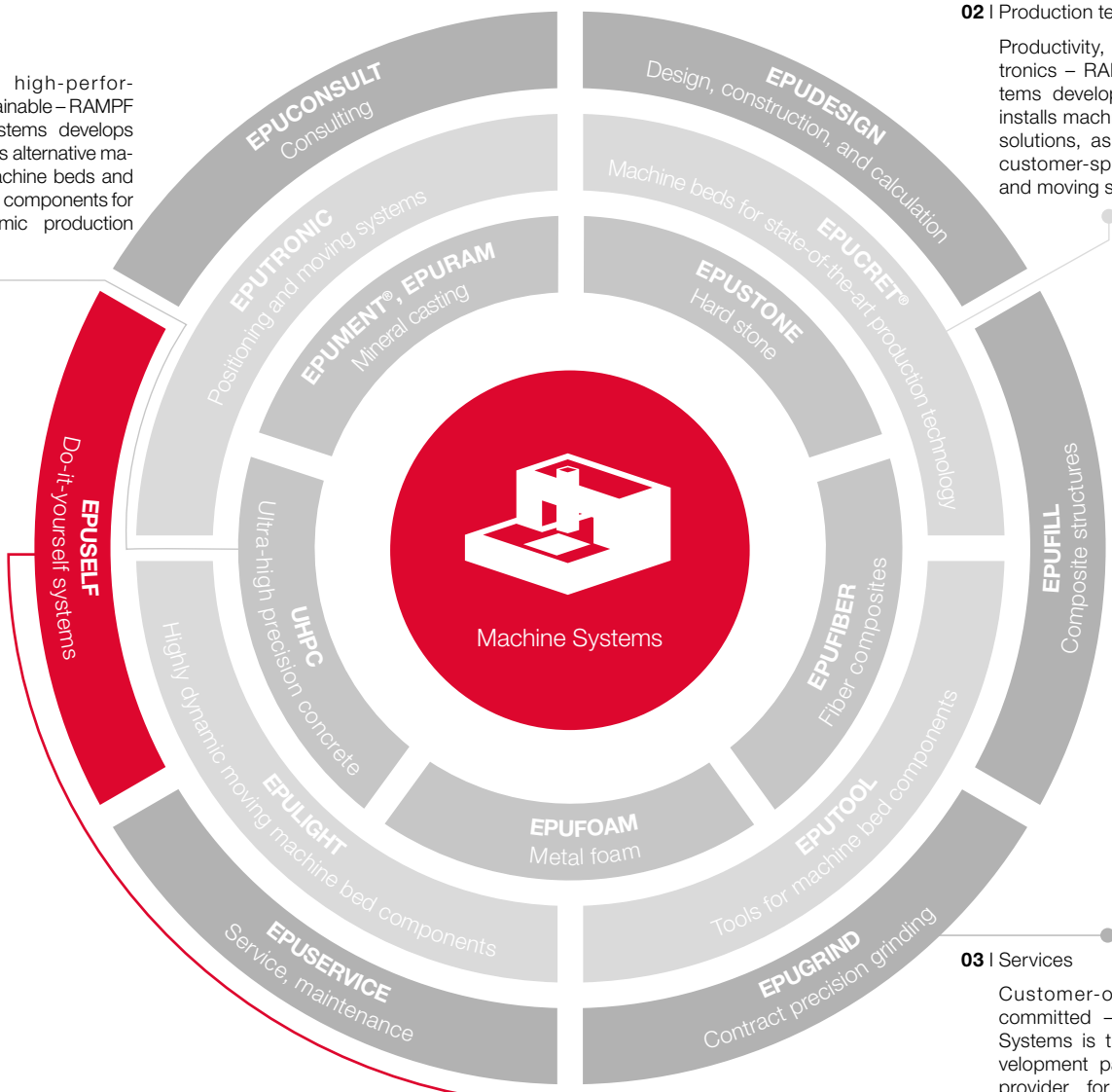
Range of products and services

01 I Materials

Innovative, high-performance, sustainable – RAMPF Machine Systems develops and produces alternative materials for machine beds and machine bed components for highly dynamic production technology

02 I Production technology systems

Productivity, precision, mechatronics – RAMPF Machine Systems develops, produces, and installs machine beds as system solutions, as well as complete, customer-specific positioning and moving systems



03 I Services

Customer-oriented, skilled, committed – RAMPF Machine Systems is the end-to-end development partner and service provider for innovative production technology solutions – from machine base to basic machinery

» The high-performance mineral casting system for do-it-yourself filling and casting of vibration-damping components and products. Selected minerals and a low proportion of binding agents form the basis for a casting material for a wide range of technical and artistic applications. The EPUSELF brand brings together over 40 years of experience in mineral casting technology and makes it available to institutes, mechanical engineers, tradesmen, artists, and hobbyists for do-it-yourself manufacture. «


Benefits

EPUSELF I Do-it-yourself mineral casting

wide range of applications in the industrial and leisure sectors

Material expertise:

Our chemists and physicists have been developing high-performance, epoxy resin-bonded mineral casting materials for over 40 years. We ensure reproducible material parameters to DIN 51290.

Production expertise:

State-of-the-art production methods and equipment ensure cost-effective, environmentally compatible, and high-quality manufacturing and filling in containers.

Consulting expertise:

Highly qualified designers act as your consultants and problem solvers for casting-compatible design and processing. We will be pleased to support your project with cutting-edge 3D-CAD.

Your benefits

> **Ready-to-use:** Pre-metered 30 kg containers and easy mixing in the provided bucket make light work of do-it-yourself mineral casting manufacture. The material provided bucket is designed so that it can usually be cast without compaction.

> **Protecting the environment:** EPUSELF materials can be processed without danger, are environmentally friendly, and can be disposed of as demolition waste. The information on the technical data sheets must be followed.

> **Outstanding properties:** Mineral casting has a high material damping capacity, a good mass/rigidity ratio, and a perfect ecological balance. Components made of EPUSELF materials feature optimal thermal stability and high media resistance.

Ready-to-use delivery in 30 kg containers consisting of mineral grading curve, resin, and hardener

Easy mixing in the provided bucket using slow-running stirrer

Direct filling of sheet metal assemblies or casting in molds / simple shells

Applications

EPUSELF I High-performance mineral casting systems

for do-it-yourself filling and casting of vibration-damping components and products

EPUSELF, the tried-and-tested mineral casting technology for do-it-yourself manufacture, offers a wide range of applications in the industrial and leisure sectors thanks to easy handling of the three pre-metered components supplied with each order (resin, hardener, and minerals). The required reaction is produced by completely mixing these three components together.

As well as casting and filling vibration-damping machine components such as beds, stands, and gantries, there are also interesting applications in the acoustics, design, construction, and art sectors.

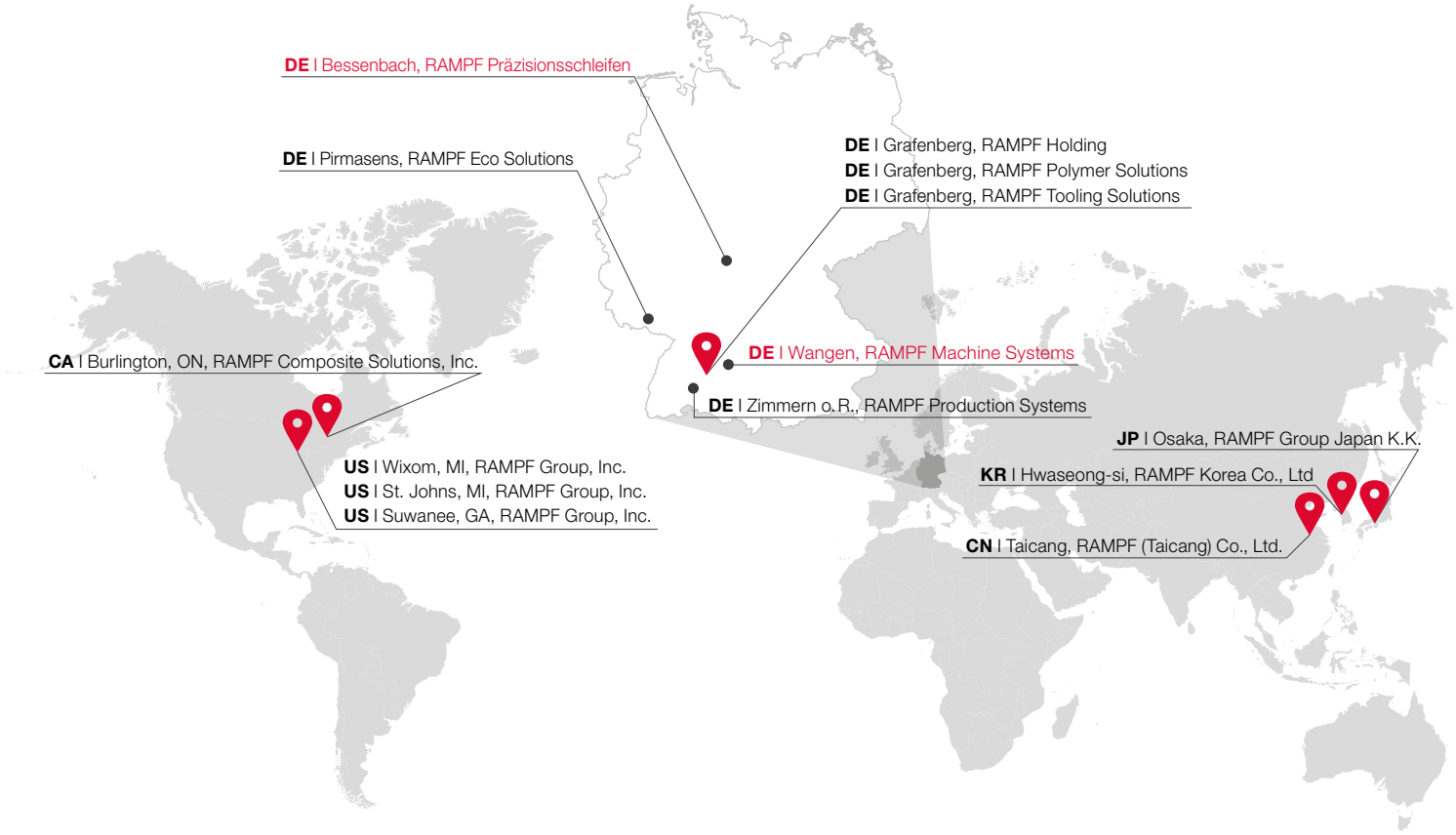
Additional information

- **Image bottom left and on opposite page:** vibration-damping machine beds for customized production technology
- **Image bottom center:** optimum sound quality thanks to vibration-damping loudspeakers made of mineral casting
- **Image bottom right:** artwork made of weather- and moisture-resistant mineral casting

	Measure	EPUMENT® 140/8B	EPUMENT® 140/5	EPUMENT® 130/3
Density	g/cm³	ca. 2.3	ca. 2.3	ca. 2.3
Modulus of elasticity (compression testing)*	kN/mm²	> 35	35–40	> 25
Compressive strength *	N/mm²	> 130	140–160	> 130
Flexural strength *	N/mm²	> 30	35–45	> 35
Coefficient of thermal expansion (20 °C)	$10^{-6}K^{-1}$	ca. 17	ca. 19.5	ca. 20
Damping (logarith. decrement)		0.03	0.035	0.038
Maximum particle size	mm	8	5	3
Minimum castable wall thickness	mm	40	25	15

* Measured on Form + Test Seidner testing machine, model 502/3000/100SP

RAMPF Group | Locations



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