



wevo

WEVO RESIN SOLUTIONS ENERGY



WEVO ALLOWS ENERGY TO FLOW FREELY

Plants for generating, transporting and storing electricity from conventional and renewable resources are often exposed to harsh environmental conditions. Wevo casting compounds and adhesives protect and insulate electrical and electronic components, including transformers, chokes and capacitors, and ensure uniform heat removal from parts.

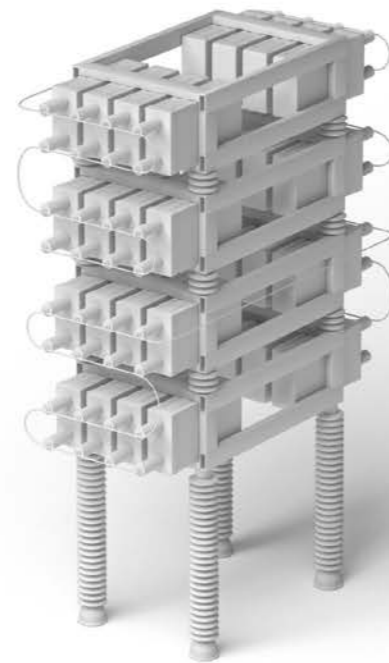
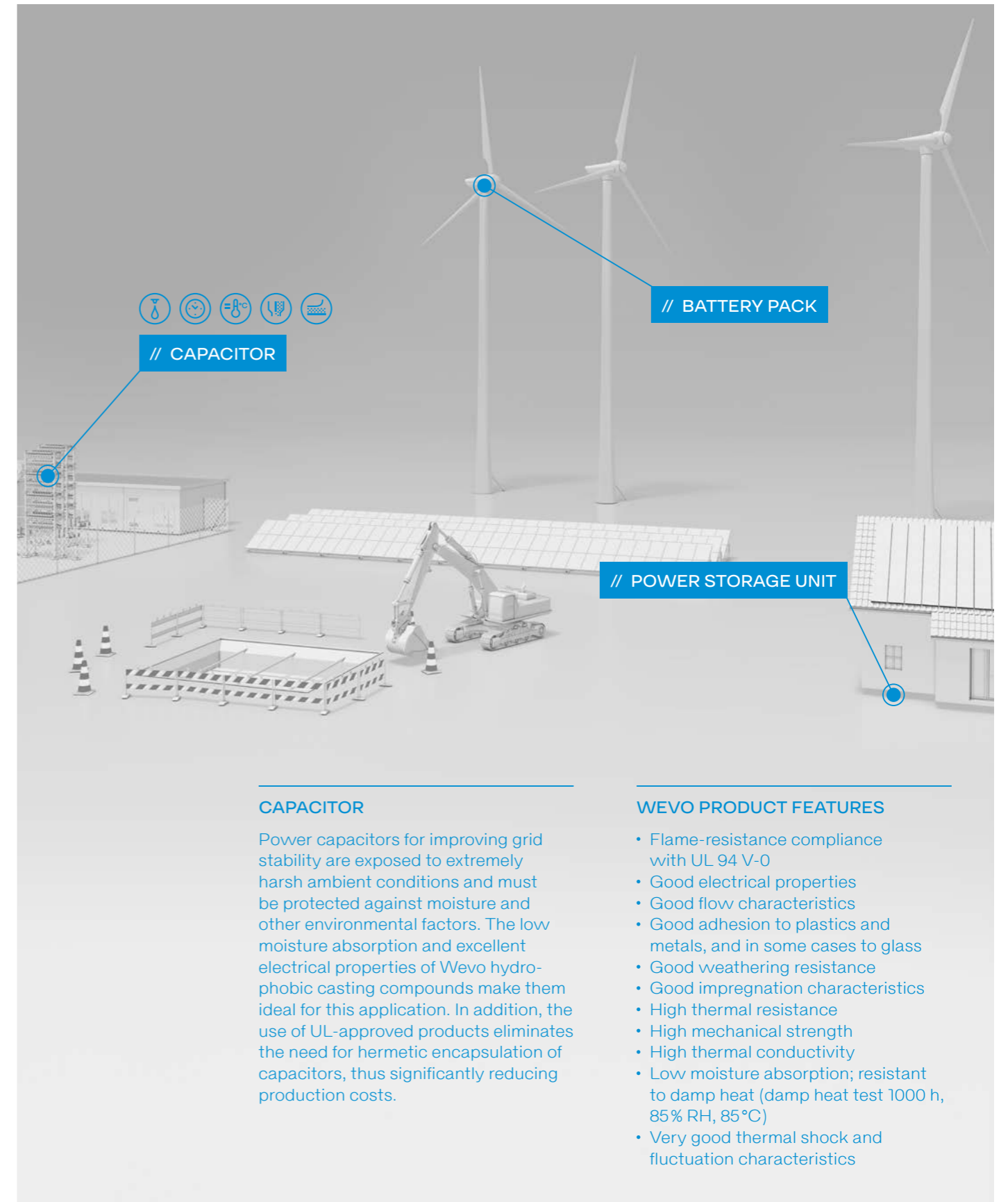
Our tailored casting resins for the energy sector are used in numerous applications. Wevo works – in every detail.


WEVO WORKS — IN STORAGE SOLUTIONS

Today's smart power plants are capable of storing generated electricity for subsequent use. Large cascades of encapsulated capacitors are used for interim storage and filtering of electricity in transformer substations and substations for connecting wind turbines to the power grid.

Here, Wevo casting compounds provide insulation and protect against hazards such as leakage currents and electrical arcing.

In power capacitors Wevo casting resins provide electrical insulation and protection against humidity.



// CAPACITOR

// BATTERY PACK

// POWER STORAGE UNIT

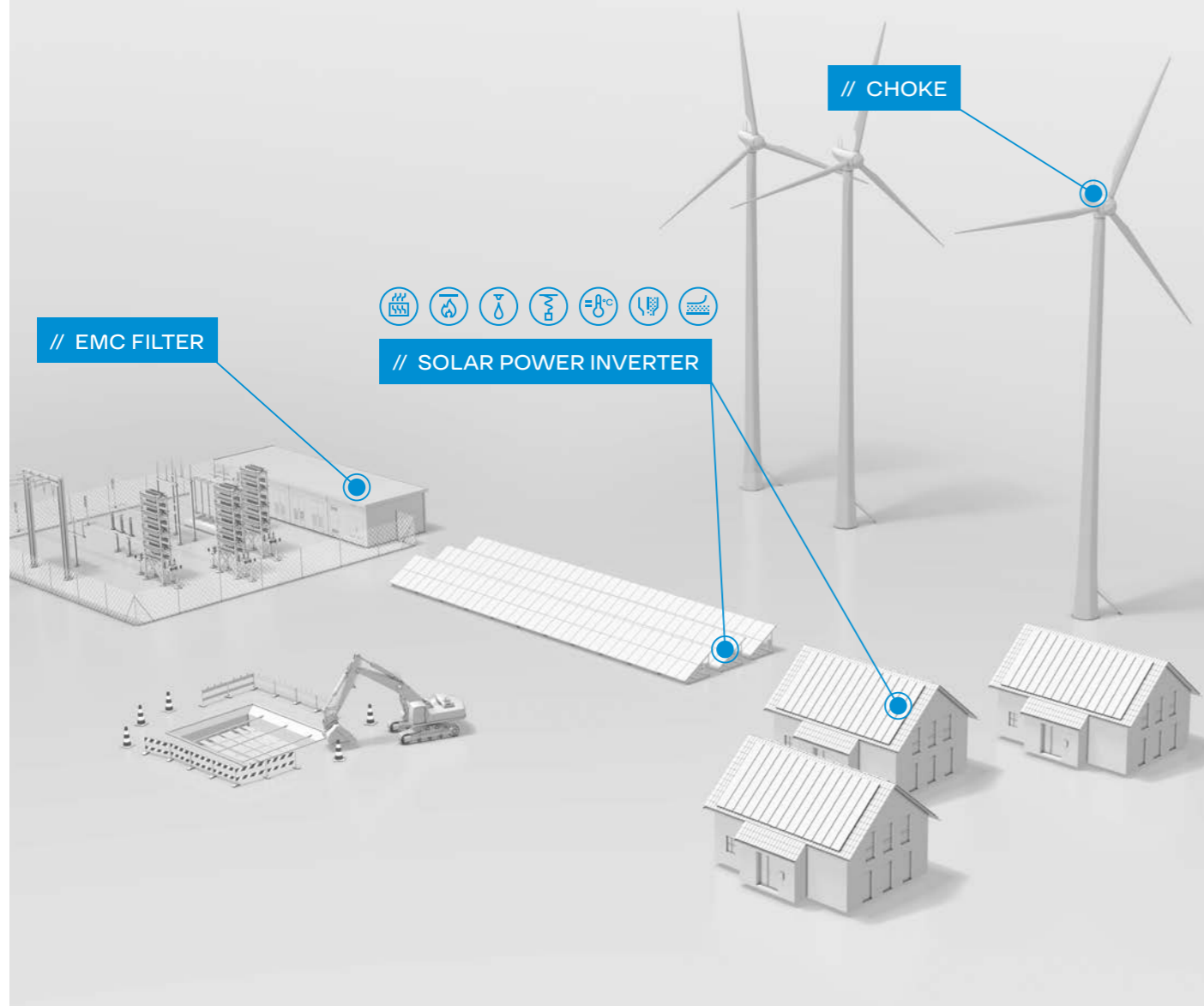
CAPACITOR

Power capacitors for improving grid stability are exposed to extremely harsh ambient conditions and must be protected against moisture and other environmental factors. The low moisture absorption and excellent electrical properties of Wevo hydrophobic casting compounds make them ideal for this application. In addition, the use of UL-approved products eliminates the need for hermetic encapsulation of capacitors, thus significantly reducing production costs.

WEVO PRODUCT FEATURES

- Flame-resistance compliance with UL 94 V-0
- Good electrical properties
- Good flow characteristics
- Good adhesion to plastics and metals, and in some cases to glass
- Good weathering resistance
- Good impregnation characteristics
- High thermal resistance
- High mechanical strength
- High thermal conductivity
- Low moisture absorption; resistant to damp heat (damp heat test 1000 h, 85% RH, 85°C)
- Very good thermal shock and fluctuation characteristics

WEVO WORKS – IN RENEWABLE ENERGY SYSTEMS



Wevo casting compounds are used in photovoltaic systems to insulate the terminal boxes of solar modules, for bonding and frame sealing, and in string and distributor boxes. In voltage conversion applications, our casting compounds provide flame protection as well as fast, uniform heat removal from transformers and chokes in solar power inverters to ensure system durability. Our resins provide reliable flame protection and electrical insulation for the sensitive capacitors of solar power inverters used for interim power storage. Our casting compounds protect electrical components against overvoltage and switch off PV systems if fire breaks out.

In wind turbines our casting compounds are used to bond permanent magnets, encapsulate generator windings, provide essential electrical insulation and protect against ambient conditions, e.g. salt mist in offshore farms. An emergency power supply ensures rotors are feathered in a storm, with power capacitors or battery modules also sustainably protected.

Our casting resins provide optimal heat removal and flame protection for power conversion in solar power inverters.

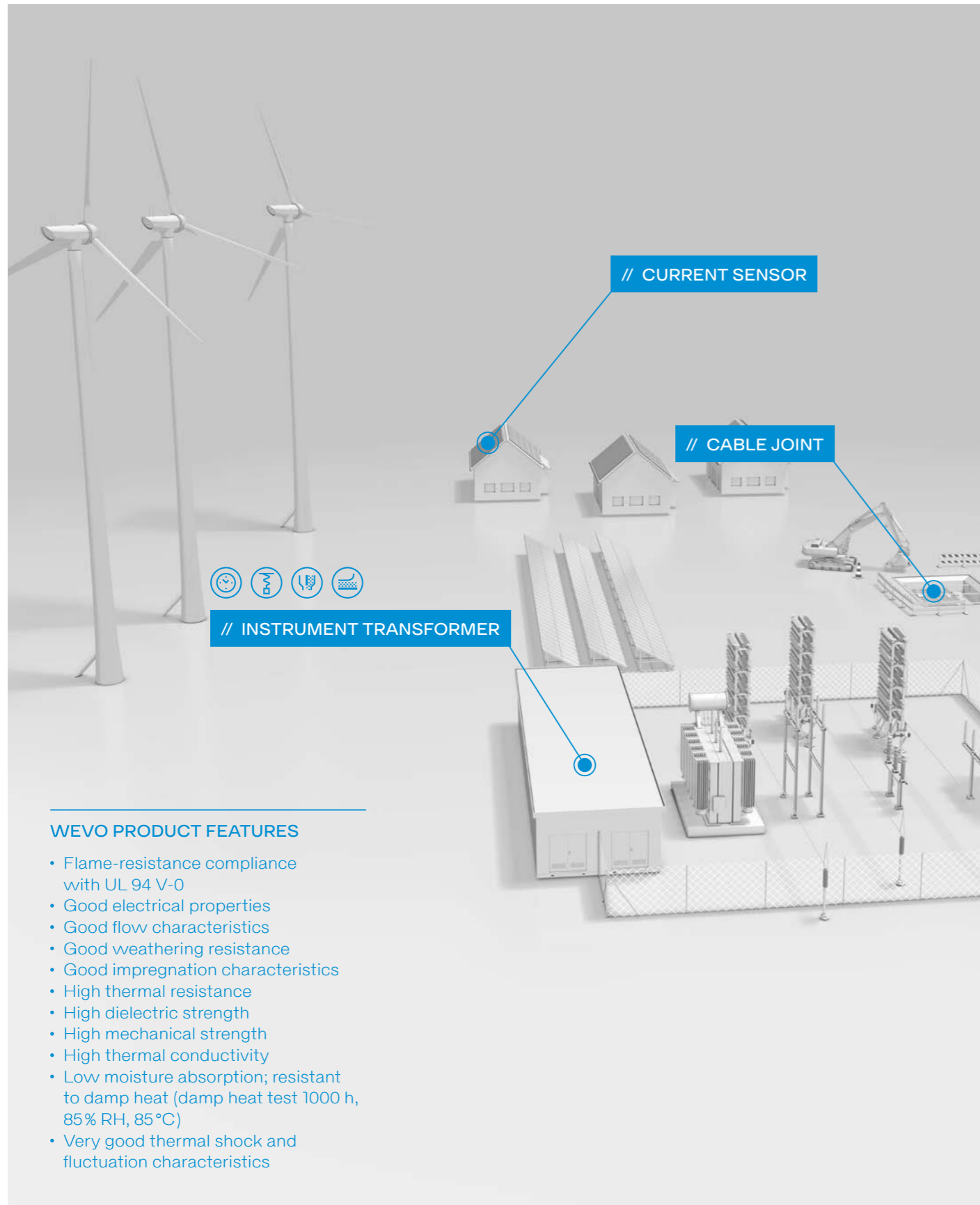


SOLAR POWER INVERTER

Solar power inverters, which are a key part of every photovoltaic system, contain very sensitive inductors in the form of chokes and transformers. Wevo casting compounds provide effective heat removal to prevent components' overheating. These compounds must be thermally conductive and able to withstand continuous operating temperatures up to 130 or 155°C. In addition, Wevo casting compounds dampen irritating noises and vibrations, keep components firmly in place and thus ensure the durability of the entire unit.

WEVO PRODUCT FEATURES

- Flame-resistance compliance with UL 94 V-0
- Low power dissipation
- Good electrical properties
- Good flow characteristics
- Good adhesion to plastics and metals, and in some cases to glass
- Good weathering resistance
- Good impregnation characteristics
- High thermal resistance
- High mechanical strength
- High thermal conductivity
- Dielectric coefficient largely independent of frequency
- Low moisture absorption; resistant to damp heat (damp heat test 1000 h, 85% RH, 85°C)
- Very good thermal shock and fluctuation characteristics



WEVO WORKS – IN POWER DISTRIBUTION

Encapsulated mains filters and capacitors smooth out and eliminate voltage surges and leakage currents to ensure the consistent quality of electricity fed into the grid. Here, it is especially important to use dimensionally stable casting compounds with a long service life – for example our polyurethane, epoxy and silicone resins. Sensitive voltage sensors and instrument transformers for measuring current and voltage are also mould-casted with durable and temperature resistant Wevo casting resins.

INSTRUMENT TRANSFORMER

Instrument transformers, which are used to measure voltages and currents, e.g. in measuring equipment, are galvanically isolated from live plant components. Wevo casting resins provide reliable insulation and mechanical stability for instrument transformers. The properties of the casting system are chosen to exactly match the requirements profile of the transformer and the process parameters (e.g. vacuum or pressure gel casting).

Dimensionally stable casting resins with a long service life are required for power distribution components in instrument transformers.



PRODUCT GROUPS

Wevo develops tailored polyurethane, epoxy and silicone casting and adhesive resins for electrical and electronic components in a wide range of industries.



WEVOPUR

VERSATILE POLYURETHANE SYSTEMS

Our Wevopur products feature flexibly adjustable reactivity and flow characteristics. Their good adhesion to a wide range of substrates guarantees reliable bonding and permanent protection of electronic components from aggressive ambient conditions. With a high thermal resistance of up to 165°C, flame-retardant properties in accordance with UL 94 V-0 and a wide range of mechanical properties, Wevopur systems are ideally suited for demanding applications in all areas. Adjustable thermal conductivity and, if required, high UV stability also enable use in various electronic and LED applications.



WEVOPOX

CUSTOMISABLE EPOXY SYSTEMS

Our Wevopox products are ideal for applications requiring high mechanical strength, good resistance to a wide variety of media and an operating temperature range up to 180°C. They have an exceptionally flexible properties profile, including UL 94 flame-resistance compliance and special adhesive properties. Epoxy resins offer distinct handling advantages and are highly resistant to external influences. They also have good impregnation characteristics thanks to their flexible application and curing conditions. Some of these systems can also be used in the food industry. Cycloaliphatic systems are additionally suitable for outdoor use.



WEVOSIL

HIGH-PERFORMANCE SILICONE SYSTEMS

Our Wevosil products are used in all applications requiring a wide operating temperature range and high elasticity. Along with high thermal conductivity, this makes Wevosil ideal for thermal management applications and targeted heat removal from modules. Some Wevosil products are flame resistant and have UL 94 approval. Their good adaptability for process and curing time makes a high degree of flexibility in production processes possible. Very good compressibility also makes them suitable for use in mechanically demanding applications.

INDUSTRY SOLUTIONS

Our customized resin systems for electrical and electronic components have become indispensable in the automotive, energy, household and industrial sectors.



AUTOMOTIVE

WEVO MAKES PROGRESS TANGIBLE

The automotive industry is a major driver of technological progress. Modern vehicles are equipped with many technological innovations and additional functions, which is why they contain highly sensitive electronic components that need to be protected from heat, moisture, oil, chemicals, foreign particles and vibrations. Many international vehicle manufacturers and their suppliers rely on Wevo casting, bonding and sealing resins to perform these tasks.



HOME

WEVO MAKES HOMES SAFER AND SMARTER

Household appliances, garden tools, LED light fixtures, basement meters – everywhere you look, electrical and electronic devices make our lives easier and more convenient. But to ensure smooth and safe operation they need protection from hazards like moisture or fire, and from improper use and counterfeiting. Wevo offers an extensive portfolio of casting, bonding and sealing products along with matching expertise to ensure everything in and about the home is safe.



ENGINEERING

WEVO SAFEGUARDS INDUSTRIAL INNOVATION

Since industry entered the electronic age, many components have become smaller and more accurate, but also more complex and sensitive. In addition, electronic components are often deployed in very harsh environments, such as engines and control devices. Wevo casting compounds provide reliable protection in these environments and ensure unimpaired functionality.

UNCOMPROMISING QUALITY – MEETING THE CHALLENGES OF TODAY’S AND TOMORROW’S WORLD

Wevo is an independent family-owned company with an international presence. Founded in 1945, we have launched numerous widely used innovations in recent decades. We are specialists in casting, bonding and sealing.

Wevo stands for uncompromising quality and maximum safety. Our tailored casting resins for electrical and electronic components have become indispensable in the industrial, energy, household and automotive sectors.

With our custom products and services, continuous product development and regular transfer of know-how, we create tailored solutions to meet the challenges of today’s and tomorrow’s world.

EXPERTISE

The basis of our success are our customized solutions, uncompromising quality and pace-setting innovations.



SERVICE

We are proud of the fact that we can offer our customers service solutions tailored to their specific needs. Starting with customer-specific polyurethane, epoxy and silicone systems, our service offering also encompasses first-class technical advice as well as outstanding logistics. Customers in over 50 countries of the world value our expertise – and know that we either have an immediate solution at hand or will develop a customised product to meet their individual needs.



INNOVATION

Innovation is at the heart of our tradition. For us, any idea that cannot be broadly implemented as a practical solution is not an innovation. That has been our guiding principle for decades. We apply sound know-how and new ideas to create solutions for the rapidly developing electrical and electronic market. And in this way we also support our customers in improving their own performance.



QUALITY

Top performance and first-class products have always been our most important benchmark. We accept no compromises. The quality and reliability that have always characterised our company made our outstanding market position possible. We enjoy long-term business relationships with numerous international corporations and our partner companies come from a wide variety of industries, ranging from automotive and machine tools to solar energy.



KNOW-HOW TRANSFER

At Wevo technical and chemical experience goes hand in hand with the know-how gained from practical applications. We cultivate a proactive transfer of know-how. We advise our customers individually and conduct annual seminars to instruct them on how best to use our casting systems. Over 1,500 customers have already participated in our training courses and seminars.



WE ARE MUCH MORE THAN A SUPPLIER

From development to volume production – we offer customer support every step along the way.



WE PIONEER PROGRESS

We are a proven partner in project-driven innovation with a decades-long track record.



WE INITIATE INNOVATION

We develop new ideas for every area of electrical component bonding, casting and sealing.

The manner in which you use and the purpose to which you put and utilise our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information, in particular all technical data and assistance, is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorised and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No licence is implied or in fact granted under the claims of any patent.

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