



wevo

WEVO RESIN SOLUTIONS 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.

Our tailored resin systems for the automotive sector are in use in countless vehicles. Wevo works – in every detail.

WEVO WORKS – IN ELECTRICAL AND ELECTRONIC COMPONENTS

// WINDOW REGULATOR

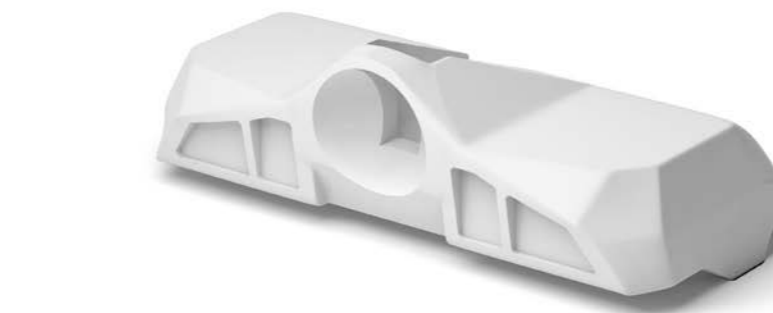
// SMART KEY



// TYRE PRESSURE MONITORING SYSTEM

Advances in drive systems, the widespread use of sensor and monitoring technology, and the spread of driver assistance systems mean that vehicles nowadays contain ever more electrical and electronic components. With its high-performance casting systems Wevo is responding to increasingly demanding technical and manufacturing requirements for the insulation and protection of these components.

Wevo casting systems can be configured as hard or soft, offer outstanding chemical and thermal resistance, penetrate into miniaturised components and cure quickly, enabling shorter cycle times.



Casting resins must fulfil numerous requirements to protect sensitive electronic components like in e.g. tyre pressure sensors.

TYRE PRESSURE MONITORING SYSTEM (TPMS)

Tyre pressure sensors monitor inflation pressure in vehicles to avoid unsafe driving conditions and excessive fuel consumption. A wireless alarm signal is sent with the ID code to the central control unit and displayed as a yellow warning symbol on the dashboard. Wevo casting resins protect sensitive electronic components in the sensors against moisture, chemical corrosion, road salt, vibration and other ambient conditions.

WEVO PRODUCT FEATURES

- Low mechanical stress
- Good adhesion to thermoplastic and metallic materials
- High weathering resistance
- Good, individually adjustable flow characteristics
- High thermal resistance
- High thermal conductivity
- Short curing time
- Excellent oil resistance
- Very good thermal shock behaviour
- Flexible at low temperatures

WEVO WORKS — IN ELECTRO- MOBILITY

HIGH-VOLTAGE BATTERY

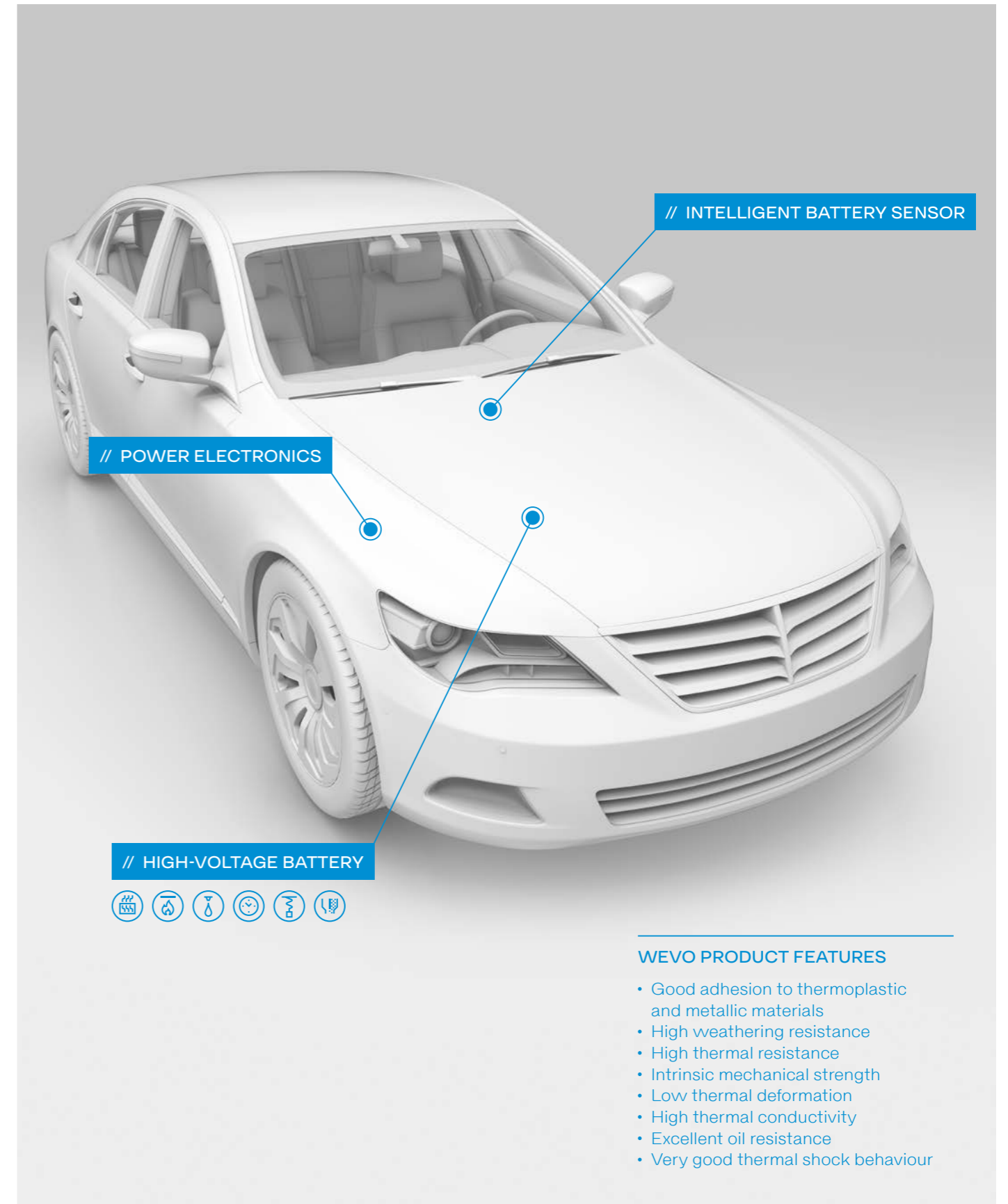
Batteries only deliver stable output voltage within a limited temperature range. As a result, continuous temperature management is essential for the optimal operation of high-voltage batteries. Wevo thermally conductive polyurethane casting resins help prevent power fluctuations and are designed to support fast charging and good starting characteristics in cold weather. This is one example of how Wevo develops just the right polyurethane resin solutions to meet even fundamental changes in application requirements.



Driven by the goals of energy efficiency and zero emissions, electro-mobility is on the verge of breaking through into the mass market. This demands new capabilities and insights from the automotive industry, e.g. more efficient and affordable batteries, wide-ranging modifications to the drive systems, and establishment of a battery-charging infrastructure. And all this requires innovative, high-performance resins.

For everything from reliably removing heat from electric motors to securely bonding the cells of high-voltage batteries, Wevo's tailored casting and bonding resins are part of the solution.

High currents and power levels in the compact components of a high-voltage battery make special demands on resins.



// INTELLIGENT BATTERY SENSOR

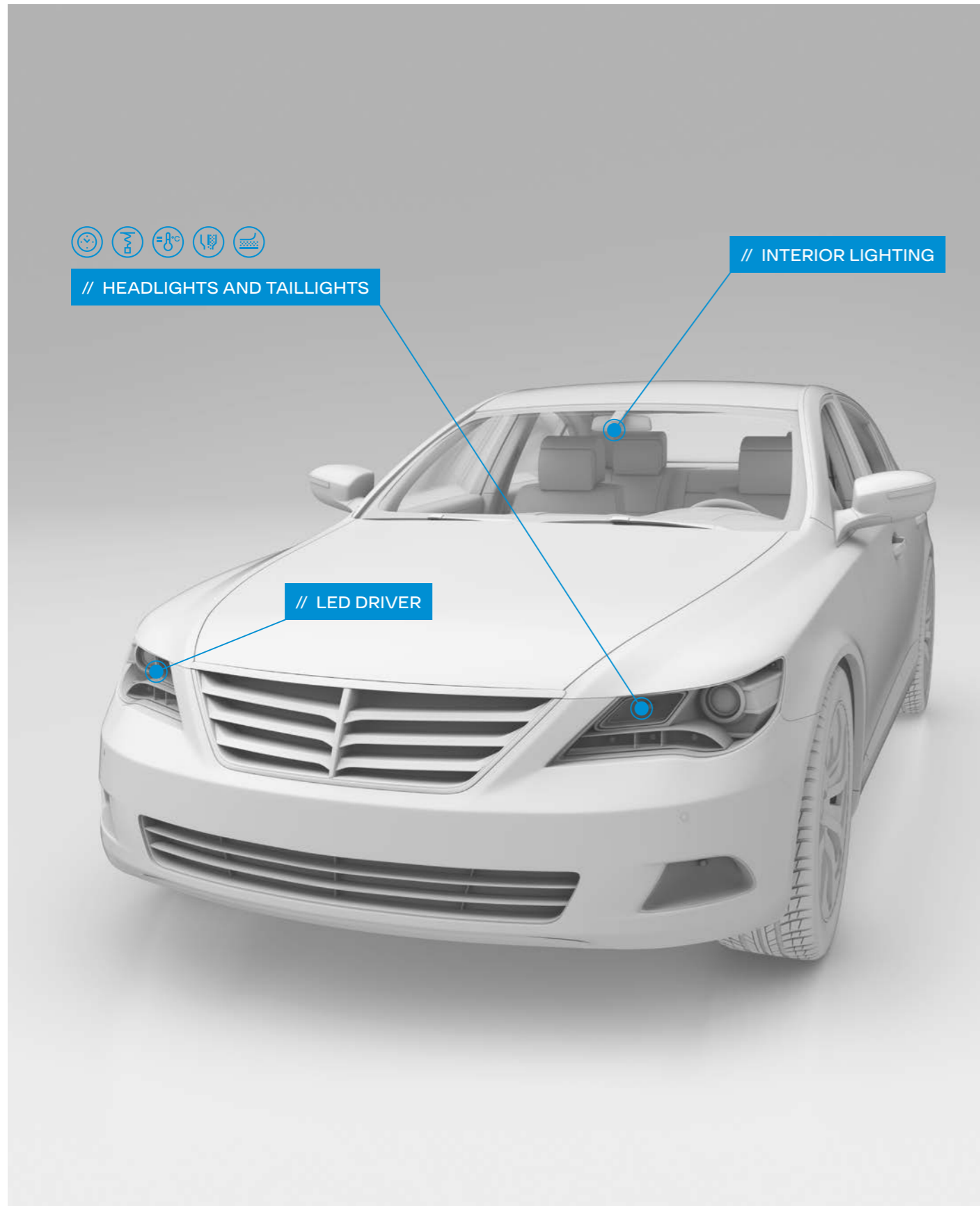
// POWER ELECTRONICS

// HIGH-VOLTAGE BATTERY



WEVO PRODUCT FEATURES

- Good adhesion to thermoplastic and metallic materials
- High weathering resistance
- High thermal resistance
- Intrinsic mechanical strength
- Low thermal deformation
- High thermal conductivity
- Excellent oil resistance
- Very good thermal shock behaviour



WEVO WORKS – IN LIGHTING

Lighting and light-based assistance systems in vehicles are indispensable for safe travel. But vehicle lighting systems pose major challenges for designers and material developers, not just in safety terms, but also in view of the related diversity of their materials, geometries and appearance.

Wevo bonding systems not only support technological innovations and functions but also boost the performance, comfort, safety and environmental compatibility of vehicle lighting systems.

Also designers of headlights and taillights profit from the special properties of Wevo adhesive resins.



HEADLIGHTS AND TAILLIGHTS

Headlights and taillights are brand signatures that give every vehicle model an unmistakable appearance. For reliable bonding of different thermoplastic substrates in headlights, e.g. polycarbonate or polypropylene, Wevo polyurethane adhesives are the perfect choice for secure bonding and short curing times.

WEVO PRODUCT FEATURES

- Low moisture absorption
- Good adhesion to low-polarity thermoplastic materials
- Short curing time
- Long-term reliability
- Low-turbidity, low-VOC formulations
- Flexible at low temperatures

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.



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.



ENERGY

WEVO LETS THE ENERGY FLOW

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.



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 utilize 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 unauthorized 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 license is implied or in fact granted under the claims of any patent.

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