

**We assume part of your product quality.**

Contract production for gasket, gluing and potting applications.



AUTOMATED SEALING SOLUTIONS

## Sonderhoff Services: the flexible contract manufacturer.

### WE CARE FOR SAFE SEALING, GLUING AND POTTING OF YOUR PARTS.

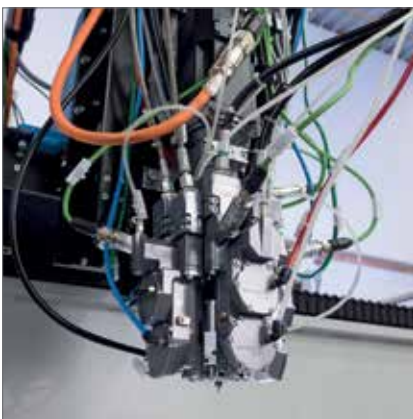
Sonderhoff Services offers you the entire range for precise application of foam gasket, gluing and potting systems. This is applied on or in your parts using Sonderhoff's own mixing and dosing systems.

Sonderhoff, the world's leading system supplier, has been successfully active on the sealant market for more than 55 years. Our chemical and technical expertise, as well as ultra-modern machinery is the basis for solutions and services for foam sealing, gluing and potting your parts and system elements.

Would you like to take the first steps towards a new technology together with an experienced partner? With Sonderhoff Services, you are relying on an experienced contract production service provider for foaming, gluing and potting a whole host of components. From consultancy and training, over pilot and small series, to taking over large-scale production within contract production, we are on hand to assist you. Furthermore, other companies in Austria, Italy, the US and China, as well as partners in Poland, Great Britain, Thailand, Japan, Korea and Brazil, offer this contract service, too.

Besides the necessary knowledge and Sonderhoff's decades of experience, we provide a certified quality management system to form the basis for high-quality contract production of your valuable parts and qualified handling from supply to dispatch. Quality that pays off – for a fail-safe sealing, bonding or encapsulation of your products using precise mixing and dosing technology from Sonderhoff!

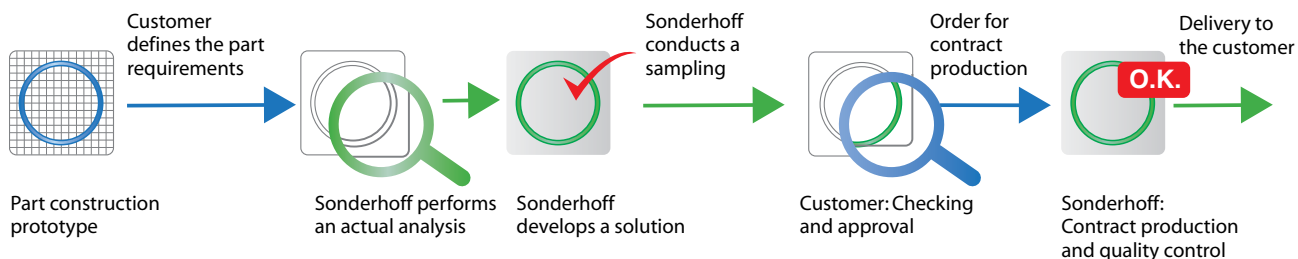
In addition to the broad range of parts for foam sealing, gluing and potting applications (2 – 100 g/s), Sonderhoff Services applies micro-gaskets and micro-potting using output quantities of 0.05 to 2 g/s in the very narrow contours of extremely small parts. On request we can also set up an ESD-compliant contract manufacturing according to DIN EN 6130-5-1. We are pleased to tailor our products and services to suit your requirements and satisfy all of the applicable production standards.





## WE ACCOMPANY YOU ALL THE WAY – FROM CONSTRUCTION TO SERIES PRODUCTION.

Even during the stage of construction, the requirements and properties are defined for the right gasket profile. Following an intensive analysis, the Sonderhoff Application Technology team will develop a suitable material selection process and the component-specific gasket shape and size in consultation with you. We sample your parts in our Technology Centre. Only once we have achieved the ideal solution for you and you have released the tested sample, do we proceed to serial production of your part.



When it comes to foaming, gluing and potting, we leave nothing to chance. Ultimately, your product is only as good as its fail-safe gasket, bond or seal. Sonderhoff offers you the complete range of gasket, gluing and potting services, from consultancy, over solution development, to sampling.



## WE PROVE QUALITY EVERY DAY!

Consistent quality management is the basis of our success.

We can even prove this: with our ISO 9001 certificate for TÜV-tested quality. Numerous certifications within the Sonderhoff group of companies, for occupational safety (OHSAS 18001:2007), environmentally responsible behaviour and ecological sustainability in production (ISO 14001:2004), and the ISO/TS 16949 quality standard for the automotive

Our certificates prove that our work is based on perfect quality.

industry are an expression of our quality standard and form part of our corporate philosophy.

The continual improvement process for quality, service and security is part of our strategy, which ensures compliance with the highest standards. In this way, we give you the assurance of optimum quality for an important part of your product: the sealing, bonding or encapsulation.



## WE SEAL YOUR PRODUCTS USING KNOWLEDGE OF YOUR REQUIREMENTS.

The requirements of the perfect gasket, gluing and potting systems are as vastly different as the markets we work for. Decades of experience in the most diverse applications make us extremely well-suited to your task. We are familiar with the demands your sector places on the perfect gasket system and provide you solutions that have been proven in practice.



### AUTOMOTIVE

Cars are subjected to extreme weather conditions and load demands; parts and system elements have to maintain their durability once they have been assembled. Especially here, the gasket requirements as regards temperature resistance and external mechanical and chemical influences are extremely high. Sonderhoff offers more than 350 different automotive applications for sealing, gluing, moulded foaming or potting, from the third brake light, over door carrier plates, to parking sensors.



### ELECTRONICS

Function-controlling electronic components have to be protected from dirt and moisture by potting directly on the components or foam sealing of housings. 2-component polyurethane cast resins from Sonderhoff that are cross-linked at room temperature can perfectly comply with these tasks. Whether you are looking for foam gaskets for electronic housings or potting for electronic assemblies, Sonderhoff has the right solution for every application and remit.



### FILTERS

Filter systems have extreme tasks to fulfil; polluted air flows in on one side, and flows out cleaned on the other. This means constant load for the gasket that it has to withstand – both for filters used in vacuum cleaners and air filters in cars. For leading manufacturers of filter systems, Sonderhoff offers foam gasket, gluing and potting solutions that ensure filters also keep what they promise, are well-bonded and perfectly sealed.



### AIR CONDITIONING AND VENTILATION SYSTEMS

Since the revision to the German Infection Protection Act in 2012, more stringent requirements have to be satisfied as regards improving room hygiene. Sonderhoff develops anti-microbial foam gaskets, which prevent harmful micro-organisms from accumulating on the gaskets of air conditioning and ventilation systems thanks to special additives.

**Your request  
determines our solution.**



### **HOUSEHOLD**

Dishwashers, vacuum cleaners, sinks, ovens or ceramic glass stovetops: Especially in the household, gaskets and bonds ensure maximum security – even if you cannot see them at first glance.



### **LIGHTING**

The perfect gasket performance of street lights, wet room lamps or information display lights is demonstrated literally on every corner. Sonderhoff is thus the first choice among all the leading light manufacturers who have to accomplish strict requirements as regards the IP protection classes of their products. Sonderhoff also offers sealings with ATEX, PTB or UL approvals for explosion protection lights.



### **PACKAGING**

For black plate, tin plate, steel or plastic packaging, Sonderhoff offers perfect protection against leakages or contamination, even if it is dropped or knocked. Only in this way does the packaging remain sealed if something goes wrong. In addition to silicone-based gaskets, Sonderhoff also produces polyurethane-based foam sealants, which are approved for food packaging by independent institutes.



### **SWITCH CABINETS AND DISTRIBUTION BOXES**

Dry and clean switch cabinets are a prerequisite for a functioning electrical distribution board. Using FERMAPOR® K31 and FERMASIL® gasket systems, Sonderhoff satisfies the highest IP protection classes for outdoor use of switch cabinet gaskets subjected to extreme weathering. Special product types are also tested for fire and explosion resistance in line with the NEMA, ATEX and UL standards.



### **PHOTOVOLTAICS AND SOLAR HEAT**

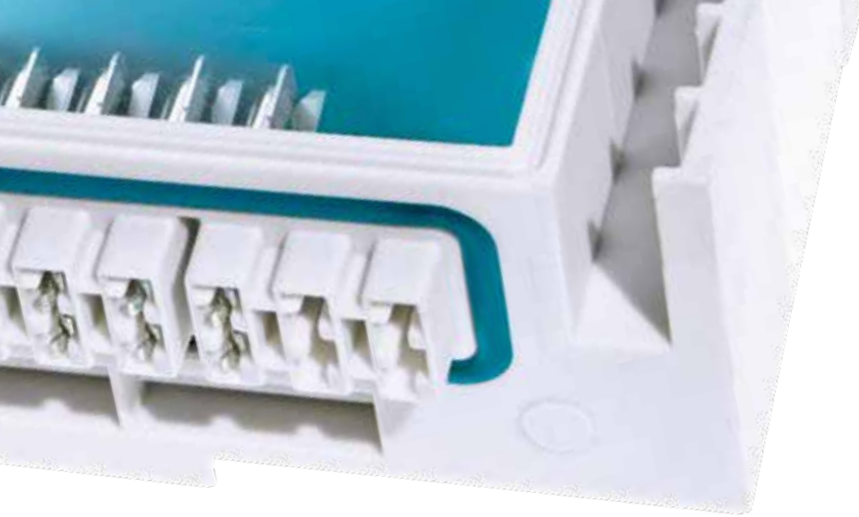
Used outdoors, photovoltaic and solar thermal installations are exposed to the effects of the weather without any protection. With special gasket solutions from Sonderhoff, dust, moisture and harmful media do not stand a chance. Using silicone- or polyurethane-based foam gaskets and PUR potting, Sonderhoff offers solutions that satisfy these high requirements. The functional capability of the installations is thus ensured.

# Chemicals, Engineering and Services. Everything from a single source.



## 10 GOOD REASONS TO USE SONDERHOFF FOR CONTRACT PRODUCTION :

1. Sonderhoff, with more than 60 years of experience, is the leading system supplier of machine, material and service for foam sealing, gluing and potting.
2. Sonderhoff Services takes over the contract foaming, gluing and potting of your components from small to large series as your extended workbench. We are flexible in taking on peak orders and lacking production capacity. Sampling of material applications on prototypes and sample parts are carried out in our technology center.
3. Sonderhoff Services is the expert in the entire process of Formed In-Place (FIP) technology for the fully automatic application of foam seals, adhesives and potting to the customer components..
4. With more than 1,000 formulations from Sonderhoff Chemicals, Sonderhoff Services offers a wide range of individual product solutions for sealing, gluing and potting of components from a great variety of industrial applications..
5. Sonderhoff Services uses high-precision mixing and dosing systems from Sonderhoff Engineering. The exact interaction of the high precision of the Sonderhoff mixing head technology and the coordinated selection of materials are the optimal conditions for component sealings accurate in contour and dimensions.
6. Sonderhoff Services advises you already in the early phase of prototype development and component design, e.g. as in the constructive consideration of the material application, the design for an ideal height / width ratio of the seal, an optimal groove geometry and the most economical process technology for the sealing application..
7. Sonderhoff Services has a certified quality management system, from planning to series production, with complete documentation of all order-related contract production processes. .
8. Sonderhoff Services is synonymous with maximum customer focus and a high performance customer service.
9. Numerous affiliated companies offer a network for a global contract production service.
10. Decades of experience in the most diverse customer industries and access to all of the knowledge embodied by the Sonderhoff group of companies offer a real customer benefit – material, machinery and service from a single source!



## THREE COMPANIES – ONE TARGET: TO SUPPORT YOU IN THE BEST POSSIBLE WAY.



### INDIVIDUAL ENGINEERING FOR YOUR PRODUCTION.

Sonderhoff Engineering develops, manufactures and sells worldwide low-pressure mixing and dosing systems and creates automation concepts in line with your requirements, from stand-alone systems to fully automatic production lines for foam sealing, gluing and potting using the FIPFG / FIP technology. Highly specialised engineers advise you with regard to implementing automation solutions and dosing systems in your production environment. Polyurethane, silicone or other reactive materials are applied to 2- or 3-dimensional parts with inclines and declines in such a way that is true to the contours by way of a CNC-controlled 3-axis linear robot. The dosing and mixing systems ensure permanently consistent processing of the gasket, gluing and potting material used. Sophisticated complete solutions that impress!



### THE RIGHT MIXTURE FOR YOUR APPLICATION.

The right chemistry forms the basis of any perfectly working gasket, bond or seal. Only by selecting the right raw materials is Sonderhoff Chemicals able to manufacture sealant, gluing and potting products that have ideal physical and chemical properties. The Sonderhoff range consists of a wide spectrum of more than 1,000 product types for the most diverse applications. For special part sealings, Sonderhoff develops individual product solutions featuring optimal properties for the purpose defined by you. Rely on the knowledge and innovation of the leading system supplier of gasket, gluing and potting systems!






**We supply worldwide to more than 50 countries and our customers produce annually more than 300.000.000 seals with our products.**

\* The description of the possible fields of use of our products as well as the technical data and values only have a general character and do not mean that a certain product can be used under all conditions in the respective field of use. In this respect, the stated field of use is not a binding specification or usage provision.

Due to the great number of environment variables and their influences (e.g. temperature, test specimens, size, interaction with substrates, influence of machines, or the like) you as our customer must check whether the product is suitable for your specific field of use. We will be pleased to assist and advise you in this respect.

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