

Seals and more



» We're really pleased that you are interested in our family company and we would like to take the opportunity to tell you more about it.

SPÄH is an innovative group of companies whose expertise extends far beyond seal manufacture. Today, more than 5,000 satisfied customers around the world who are working in the engineering industry and trade rely on us. For five decades, this has been the healthy foundation for our success in this business and it is the best ingredient for growing further together.

We would like to inform you about our services and products with this company brochure and provide you with fresh motivation for working together successfully and with the future in mind. We look forward to meeting you. «

Best wishes from Scheer,

Alfred Späh

Sandra Späh



Continuous success since 1964

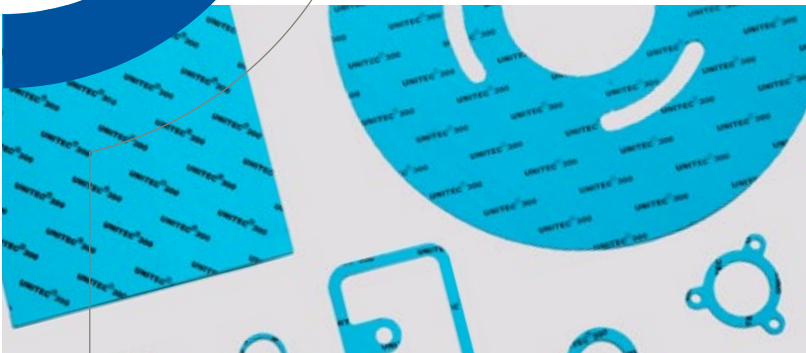
It has been fifty years since Karl Späh, the company founder, cut out his own first seals in his cellar at home. Over the last five decades, SPÄH has grown to be a company group that is now active and successful across the world. Now well into the second and third generation, the company group continues to be directed by Alfred Späh and his daughter, Sandra Späh, the owners and managing directors of the company group.

Just eight years after the company was founded, its overwhelming success allowed it to take over the POPP company in Bad Bevensen and then, three years later, to take over QUADRIGA in Norderstedt. By introducing water jet technology into the seals industry to produce high quality precision components, SPÄH soon became a pioneer within the industry. SPÄH has been certified as a company with the DIN EN ISO 9002 QM standard since 1993.

In 2006, the company took over the HSS® yellow seals business division from Edmund Hermsen in Hamburg. In 2007, the business continued to expand by making the largest purchase so far by buying SCHIPPL in Welden as well as Klinger's production unit for screen printed seals in Idstein.

Along with developing various bespoke parts, SPÄH developed a new business division to focus on design by using WAVE acoustic components which have been marketed since 2009. In addition, by installing a photovoltaic system and by linking its company site to a biogas plant, the company's headquarters became even more ecologically-friendly.

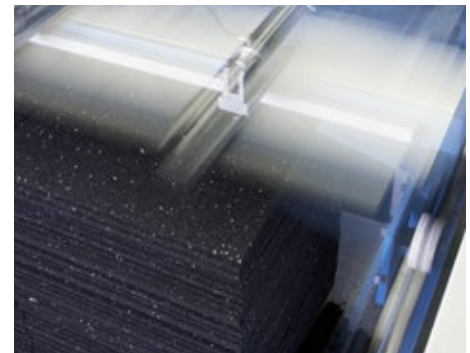
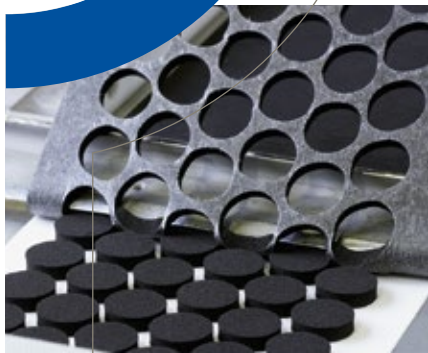
Today, over 500 skilled, committed and highly motivated employees are working to continue this remarkable success story at the SPÄH group's four different sites.



The SPÄH group – giving you more

SPÄH, POPP, QUADRIGA and SCHIPL: the four pillars of the SPÄH group. The company group possesses comprehensive skills in mechanically processing non-metal materials and provides a complete range of bought-in parts which can be available from just one source, whether it's technical advice or managing C-parts. Our wide range of materials and processing methods as well as the fact that we make our own tools and moulds, mean that we see ourselves primarily as a service provider and a problem-solving company for all branches of the industry. Quality and customer satisfaction are our highest priority and we can guarantee these thanks to our comprehensive certified quality management within our whole group.

Partnership is at the heart of SPÄH's company philosophy. We focus on the services we provide, from the consultation we offer on applications during the preliminary stages to delivering products on schedule. We offer our customers our expertise as well as our best solutions. Partnership also encompasses the relationship we have with our employees. Our principles include fairness, securing the jobs at our sites as well as forward-looking working methods so that our customers, employees and companies remain happy.



Karl Späh GmbH & Co. KG

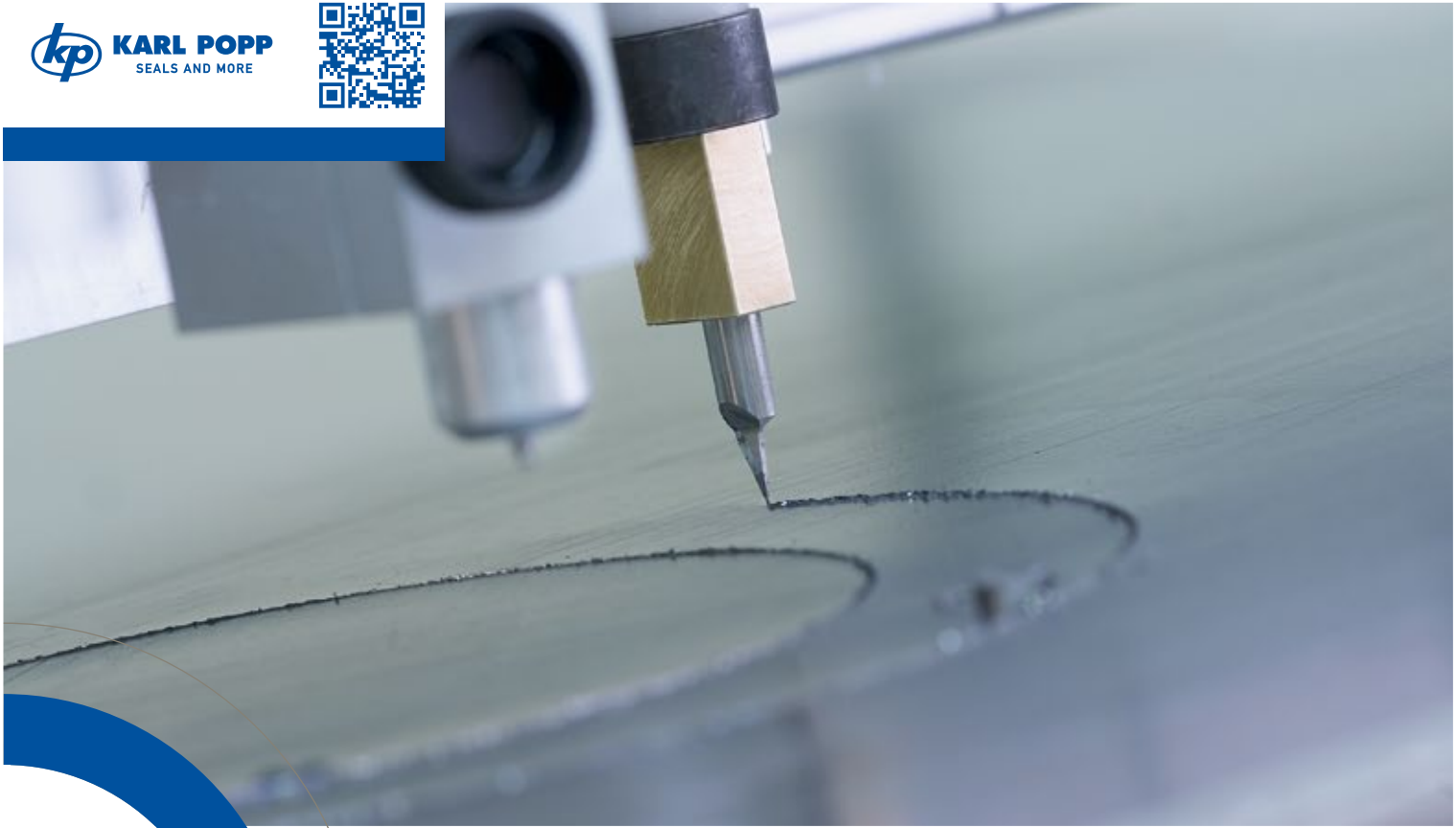
SPÄH is the group's parent company and employs approximately 340 qualified employees to manufacture orders for all kinds of bespoke parts.

Main areas of expertise

- Technical advice for seal technology.
- Manufacturing stamped parts – single orders to large-scale production.
- Producing cut parts and strips in line with the customer's specifications.
- Manufacturing precision parts and filigree seals using water jet technology.
- Producing CNC turned, milled and cutted parts.
- Manufacturing special parts using seal technology from our partners.

Specialties

- Self adhesive stamped parts left on the belt to make assembly easier.
- Manufacturing screen printed seals, i.e. making flat seals with a silicon beading.
- Own materials UNITEC® 300 with allround features and NBR HSS® yellow for the petrol industry.



Markus Bauer
Deputy managing director

Karl Popp GmbH & Co. KG

POPP was first founded as a trading company in 1919 in Hamburg and has belonged to SPÄH since 1972 having approximately 100 employees. As a member of the association of technical dealers, most of its revenue is generated through trading with wholesalers from northern Europe.

Main areas of expertise

- Producing seals and stamped parts from non-metal materials (predominantly elastomers).
- Manufacturing precision parts using the latest technology such as water jet cutting equipment, milling and cutting machines.
- Stocking and selling semi-finished sheets and rolls to processing companies.

Specialities

- Bonding elastomers and cellular materials to make sleeves, covers and special parts of all kinds.
- Conveyor belts with as many hole patterns as is required.
- Processing delicate materials such as graphite.
- Various anti-abrasion protection materials ex stock.



Wolfgang Hofmann
Managing Director

QUADRIGA Dichtungs-GmbH

QUADRIGA has been a member of the SPÄH group since 1975 and has over 35 years of experience and expertise marked by manufacturing of high-quality, cast polyurethane products.

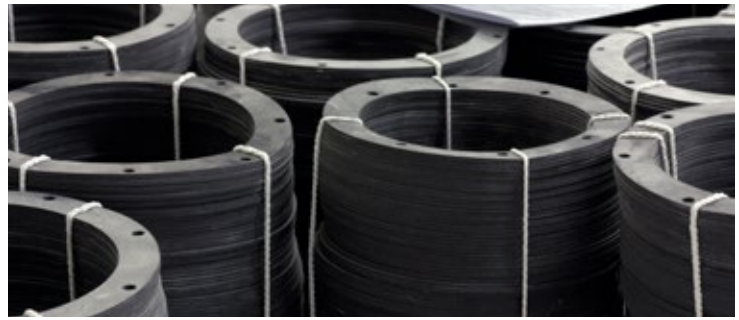
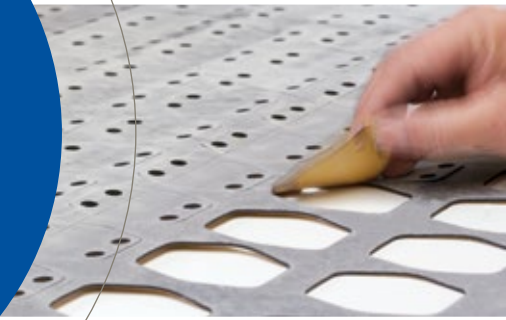
Main areas of expertise

- Wide range of semi-finished polyurethane products in stock.
- Reinforced sheets with metal inlay, sheets containing chamfers and drillholes, snow plow blades.
- Manufacturing precision, customised cast and moulded items out of Vulkollan®, polyurethane and other PUR composites.
- PU coating for metal wheels, pulleys and rollers.

Specialities

- Producing elastic spring parts, clutch packages and protective vice jaws.
- PUR semi-finished products and parts in special colours as well as with customised hardness settings and special types of sheets on demand.

Vulkollan® = registered trademark of Bayer AG, Leverkusen, Germany



Manfred Koch
Deputy managing director

SCHIPPL Dichtungen GmbH

SCHIPPL has been part of the company group since halfway through 2007. The company was founded in 1961 and originally manufactured sanitary gaskets. Employing approximately 50 people, SCHIPPL is a flexible partner in the technical trade and is equipped to deal with urgent orders.

Main areas of expertise

- Seals and stamped parts mainly produced with steel rule dies.
- Strips and cuts produced using cutting machines.
- Cut parts using water jet technology.
- Wide range of semi-finished products directly ex stock.

Specialities

- Rubber-steel seals ex stock.
- Graphite seals.
- 24 hour service using existing equipment and clearance stock.



Service that stands out

We at the SPÄH group place great emphasis on partnership. Our customers' needs and requirements are right at the heart of our work. In the consultation phase, we develop customised solutions in the form of suitable materials and efficiently manufactured products.

Our materials and patterns brochure, which includes technical specifications, or even our compact pattern portfolio are useful guides for all designers and purchasers. They assist the technical dealers by providing unbiased advice.

Excellent stamping and cutting equipment as well as moulds from our very own tools and moulds construction provide the basis for achieving utmost precision in parts manufacture.

The variety of rubber and plastic materials that we can produce is almost unlimited. Products are manufactured according to what the customer requires. We guarantee that stamped parts will be processed simply and easily by, for example, leaving the parts on the belt or strips.



When manufacturing "screen printed" seals, there is the option to coat the seals with silicon beading either partially or on both sides in order to increase surface pressure. In addition, all stamped parts can be with self-adhesive properties in order to facilitate assembly. Parts can be identified on request either with a print or embossing.

Our completely automatic read out machine ensures that all specifications required for component tolerance are adhered to in the most efficient way. Moreover, there is also the option to have the exact number of items packaged in PE bags and for each shipping unit to have different information printed onto it. Depending on what the customer requires, we also place supply parts in our warehouses on time and either presorted in containers or boxes or loose.

During the entire production process, the customer has the option to see the current status of their order on the internet. In addition, there are also many documents available for the customer in the customer portal. Once the bespoke parts have been despatched, the customer can also track their goods via the order tracking feature online.



Responsibility for high performance

Each machine and system used to create our seals must function impeccably so that people and the environment remain unharmed. That is why we place such strict criteria on all our sealing, insulation, elastomer and plastic products. Quality and customer satisfaction are the SPÁH group's highest priority.

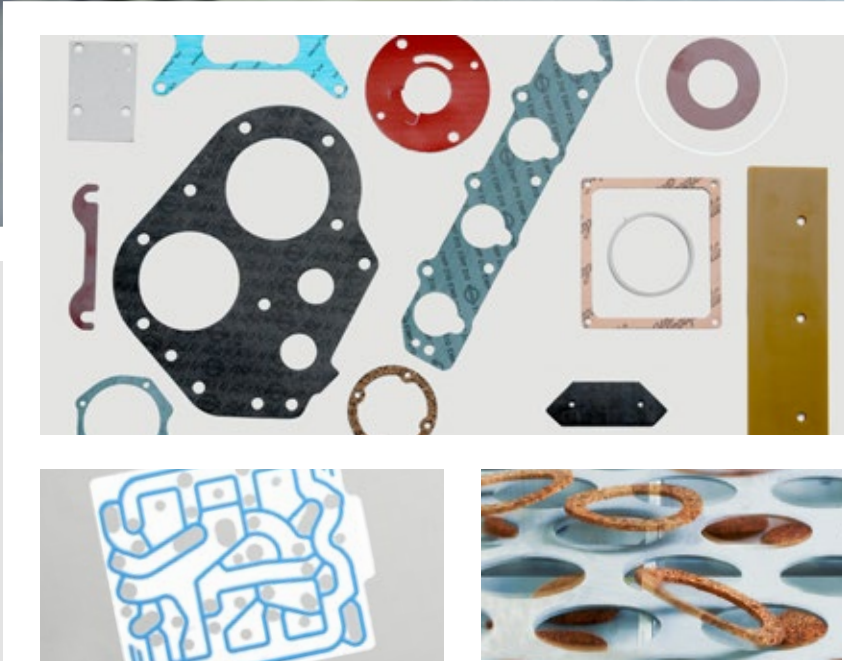
Meeting all of our customers' needs and requirements is a daily challenge for us. From creating the templates, to carrying out inspections throughout the manufacturing process and delivering items in batches, we meet all of our customers' specifications. We are happy for you to speak with us about this. Along with qualified and motivated employees, we also have the latest equipment which allows us to complete such a variety of orders. By using optical metrology, we are not only able to measure manufactured parts based on CAD data, but are also able to fashion templates by using designs created through reverse engineering. Our employees test our manufactured parts independently using the optical 2D and 3D measuring machines which are integrated into the production process. By connecting the machines to the CAQ system, measurement results for each specification can be archived centrally in relation to individual orders. This enables there to be permanent access to all data that is relevant to quality and ensures that the requirements' traceability process is smooth.



Material testing can be carried out in-house using our own inspection systems. In addition, we stay in close contact with leading testing laboratories. In this way, unusual tests can also be carried out. Many of our materials used in production are certified in line with all present requirements, such as BAM, DVGW, FDA, HTB, KTW, WRC and different automotive standards.

As one of the first companies in the industry, the Karl Späh GmbH & Co. KG enterprise was awarded the DIN EN ISO 9002 certificate in 1993. All SPÄH companies have been certified by TÜV SÜD [German association for technical inspection] in accordance with ISO 9001 since 2011. We always monitor our processes so that, if necessary, we can counteract them straight away, or make continual improvements. All of our workflows, procedures, interfaces and interactions are then displayed on the intranet in complete transparency.

One of our goals as a company is to contribute towards protecting our environment. This requires us to take economical, ecological and legal issues into consideration all at the same time. In implementing our procedures, we are striving to constantly improve how environmentally friendly we are. Furthermore, these goals contribute positively to the economic efficiency of our workflows.



Seals and stamped parts

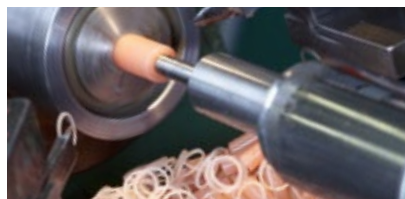
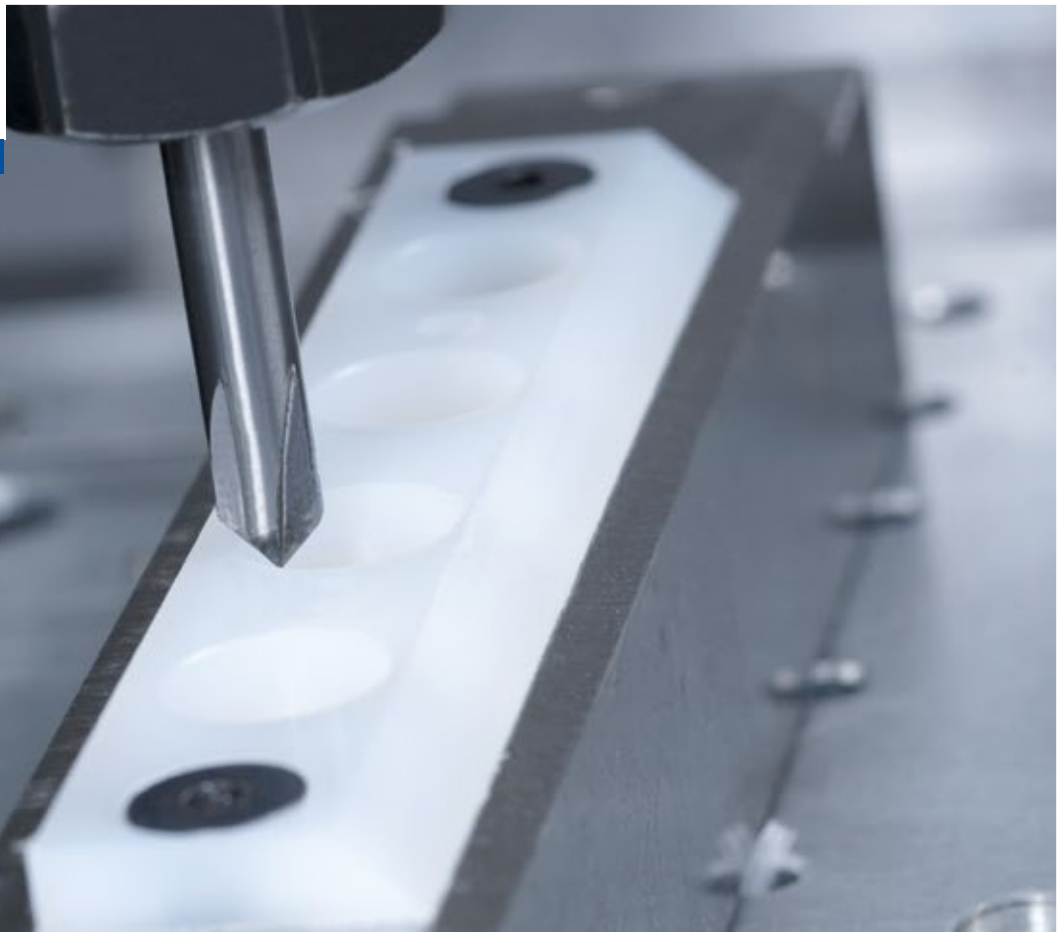
Since the company was founded in 1964, our main focus in manufacture has been in producing stamped bespoke parts of all kinds mainly flat seals and stamped parts made from rubber and plastic materials. Depending on the material, quantity of items and the design, we produce these parts using different stamping tools that have been made in our own tool shop. We cover a whole range of bulk quantities – starting from a batch size of 1 up to several million items. Our well stocked semi-finished product depots at each of our sites, contribute significantly towards delivering items on time. Our purchased parts play important roles at all of our branches.

Materials

All non-metal materials such as butyl, EPDM, CR, NBR, SBR, silicone, FKM, membrane material, AFM, EWP, Klingersil, Novapress, polyurethane, Vulkollan®, PTFE, graphite, Abil, Faserflex, cork rubber, laminate, phenolic paper, polyamide, polycarbonate, polyethylene, polystyrene, cork board, vulcanized fibre, Inducon, foam rubber, PE foam, Cellasto®, closed cell rubber. We are happy to process other materials on request or as part of the fee.

Forms, dimensions, applications

We deliver stamped parts of all kinds to order in every shape according to technical drawing, sample or specification. We offer a wide range of options when it comes to measurements, starting from 1mm to approx. 10m in diameter. Strips and cuts round off our range. All seals are cut to suit the next processing procedure. Various services are available as and when necessary. We are happy to advise you on these matters.



Turned and milled parts

Processing standard and high-quality thermoplastics, such as elastomers, in a precise and mechanical way has been a distinct strength of the company since 1986. Our efficient CNC turning machines as well as our milling and processing centres cover a large range of efficient processing procedures for rods, tubes and sheets. A constant flow of material prevents bottlenecks occurring and keeps the whole process on schedule. As multi-functional construction components, SPÄH's turned, milled and cutted parts play important roles in many industries.

Materials

All plastics, particularly PA, PC, PE, PEEK, POM, PP, PS, PTFE as well as PUR (polyurethane, Vulkollan®). We will process other materials on request.

Forms, dimensions, applications

We manufacture seal rings, support, spiral and O-rings, as well as other circular shapes and/or technical parts using CNC precision for: bar processing of up to 100 mm in diameter, feed processing up to 3,000 mm in diameter, sheet processing up to 3,000 x 2,000 x 70 mm (L x W x H), milling processing centre 410 x 280 x 160 mm (L x W x H).



Cast and moulded parts

By using efficient casting equipment and by constructing their own moulds, QUADRIGA, located in Norderstedt, can offer a range of highly flexible polyurethane products whether as individual items or large batches. Their services include a broad range of semi-finished products made of PUR elastomers. QUADRIGA's cast and moulded parts are used in all sectors of the industry as construction and bespoke parts.

Materials

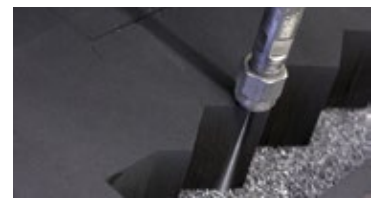
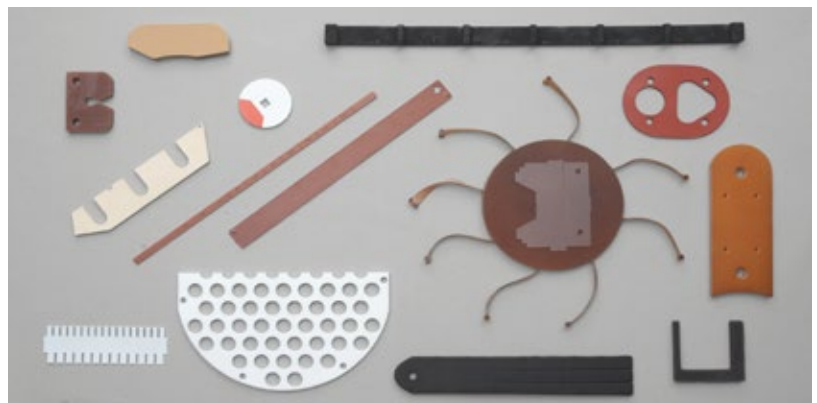
Vulkollan[®], polyurethane and PUR metal compounds.

Moulds, dimensions and applications

Semi-finished products as 0.5 - 50 mm thick sheets, blocks, square rods, round rods from 5 to 230 mm \varnothing , ground rods from 5 to 34 mm \varnothing , pipes, including cutting service and mechanical finishing.

Special products: other thicknesses, oversize formats up to 4,000 x 2,000 mm and/or up to 7,000 x 1,000 mm. Reinforced sheets with metal inlay, customised degrees of hardness and special colours.

Moulded parts such as those subject to wear, e.g. snow removal equipment, bumpers, rollers, membranes, mixed linings and PU coatings in screen plants. Also items for drive and materials handling technology such as couplings, metal wheels, rollers and more.



Water jet cut parts

This cutting process, which doesn't use tools, has been our alternative to stamping since 1991 and is a feature that makes us even more flexible. It enables us to manufacture simple and more demanding 2D prototypes with precision cutting for testing purposes. We require CAD data, preferably DXF or DWG which are then converted into a CNC programme. SPÄH's, POPP's or SCHIPPL's precision parts which are cut using water jet technology play many different roles in all areas of industry.

Materials

Besides other materials this includes elastomer and plastic materials, all foam materials, leather, felt, cork, sandwich materials. We will also cut special materials and materials provided by you.

Forms, dimensions

We are able to cut almost all non-metallic materials – except for those with a paper base – in sizes of 3 x 2 metres. Depending on the material's strength, we can process materials with thicknesses up to a maximum of 70 mm. We recommend carrying out a test cut in advance on borderline materials. Another advantage of water jet technology is that thick, cellular materials can be cut without deforming them. Even very soft materials can be cut parallel.



Special parts sealing technology

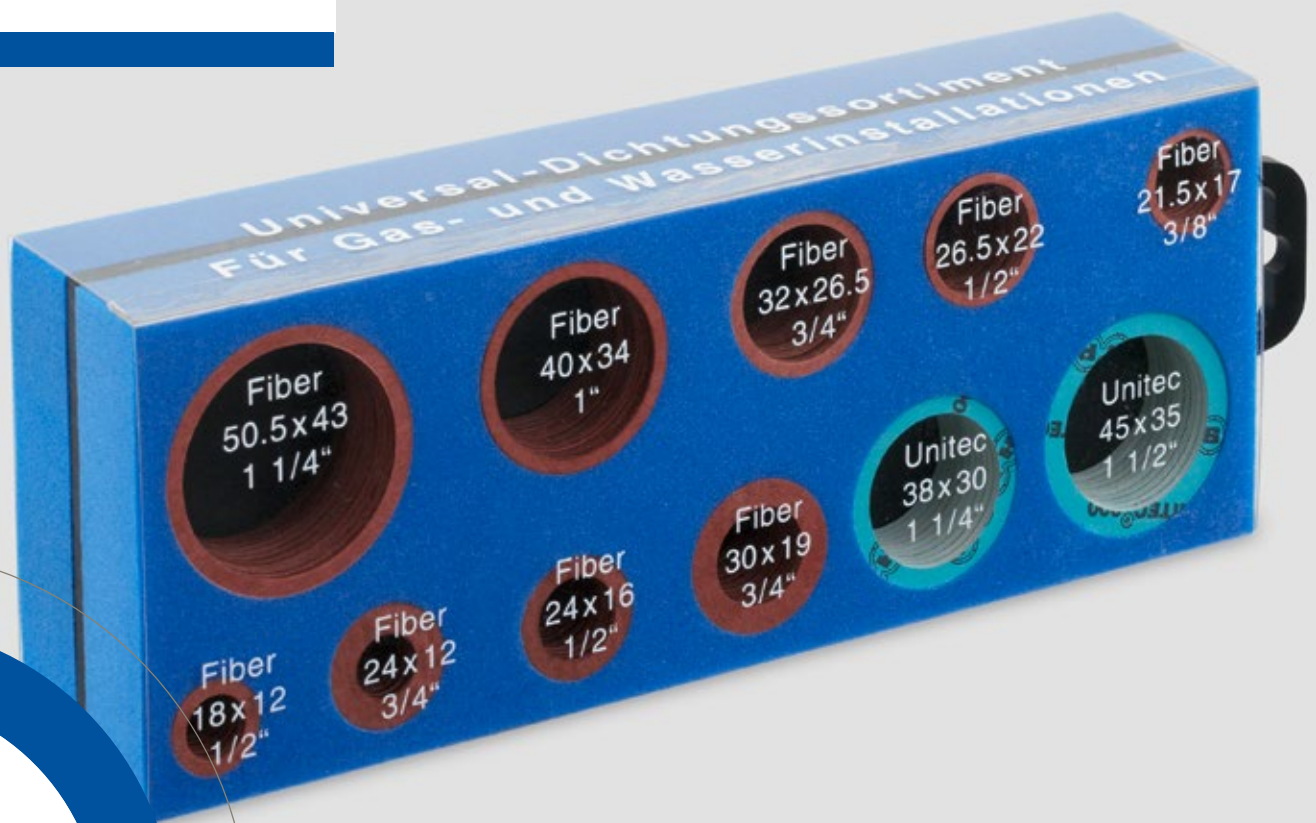
SPÄH's delivery program includes the extra range of services provided by our long-standing market partners in special seals and technical parts. You are given access to new materials such as metals, non-ferrous metals, metal reinforced materials, graphite, high-performance elastomers, cellular plastics and composite materials. Special seals and even more diverse parts such as tube or copper rings, profiles, O-rings, Cellasto® seals, moulded rubber items, and metal parts can be delivered. In addition, we can make use of additional manufacturing processes such as extrusion, injection moulding, vulcanising, laser, pressing, bending, stamping, and many more. We therefore give you the opportunity to purchase all of your bespoke parts from one source, both for new applications as well as for the widest variety of existing.

Materials

Non-metal and metal materials.

Forms, dimensions

In addition to the universal SPÄH programme, we supply special seals and parts of all kinds which are designed in line with the customer's specifications and within the bounds of manufacturing capabilities.



Special parts and more

Over the years, along with the current applications available, other ways of using our range of bespoke parts made of rubber and plastic have arisen. These market-specific SPÄH items are currently in use in construction, in DIY stores, in the home, in automobile accessories, in the plumbing industry and are used for securing cargo.

'Special parts and more' can currently be broken down into four areas:

- Anti-slip and building protection mats
- DIY store and plumbing products
- Household items
- Miscellaneous

Should you require new and/or other special parts which we are able to produce using our techniques in mechanical processing, i.e. stamping, turning and cutting elastomers, plastics and other non-metal materials, please get in contact with our Product Management Department. We are happy to create new products according to your specifications.



Thomas Späh
Assistant of the production management
and WAVE product manager

WAVE acoustic modules

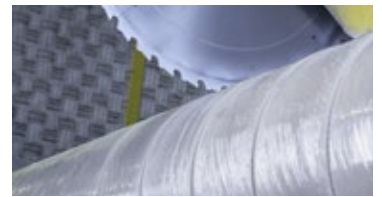
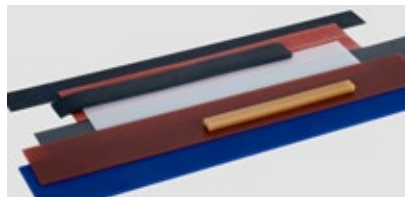
Rooms with bad acoustics are, unfortunately, fairly common. For a long time, planners often neglected acoustics. But how acoustics seem to affect the quality of work and quality of life is a highly relevant issue, both when redesigning and retrofiting rooms.

An interdisciplinary team has therefore set themselves up to develop a technically and visually flawless acoustic absorber made from foam. This aesthetically demanding design has excellent sound-absorbing qualities and is marketed by SPÄH under the name, WAVE. The product range currently comprises:

- Acoustic absorbers
- Room dividers
- Baffles

You can find more information, product brochures and press commentaries at www.wave-acoustics.com.





Semi-finished product range

All members of our group have a wide well stocked range of semi-finished products.

Materials

All current elastomers and plastics, Vulkollan® and polyurethane made from our own production, sealing and insulation materials, high-pressure materials, high-performance materials, cellular materials, electric insulation materials and many special materials based on the customer's requirements. We have a total of 12,000 different material variants available ex stock.

Forms, dimensions

Foils, sheets, rollers, blocks, tubes, round and square rods for producing commissioned parts as well as for further processing and/or further resale. We have the following dimensions in stock for these materials:

Foils and sheets: from 0.01 mm up to 60 mm thickness • Round rods: 2 mm up to 450 mm diameter • Tubes: 10 mm up to 450 mm external diameter

For cuts and strips that are made to order, we use the following processing techniques depending on the material and the dimensions: cutting, trimming, sawing, water jet cutting, milling, grinding or splitting.

SPÄH group



Karl Späh GmbH & Co. KG
Industriestraße 4-12
72516 Scheer / Germany
Phone: +49 (0) 7572 / 602-0
Fax: +49 (0) 7572 / 602-167
info@spaeh.de
www.spaeh.de



Karl Popp GmbH & Co. KG
Eppenser Weg 9
29549 Bad Bevensen / Germany
Phone: +49 (0) 5821 / 9802-0
Fax: +49 (0) 5821 / 9802-2576
info.popp@spaeh.de
www.spaeh.de



QUADRIGA Dichtungs-GmbH
Gutenbergring 47
22848 Norderstedt / Germany
Phone: +49 (0) 40 / 528704-0
Fax: +49 (0) 40 / 5237324
info.quadriga@spaeh.de
www.quadriga-polyurethane.de



SCHIPPL Dichtungen GmbH
Haldenloh 2
86465 Welden / Germany
Phone: +49 (0) 8293 / 9611-0
Fax: +49 (0) 8293 / 9611-330
info.schippl@spaeh.de
www.spaeh.de



Representation in China



Späh family of entrepreneurs