

**SCHÜTZ**

**PASSION FOR TECHNOLOGY**



# SCHÜTZ

PACKAGING SYSTEMS	04   07
ENERGY SYSTEMS	08   11
COMPOSITES	12   15
INDUSTRIAL SERVICES	16   19
CENTRE OF EXCELLENCE IN WESTERWALD	20   21
GLOBAL NETWORK	22   23
INDEPENDENT PRODUCTION SYSTEM	24   25
INNOVATION AND DEVELOPMENT	26   27
RELIABILITY AND SECURITY	28   29
RESPECT AND OPPORTUNITIES FOR THE FUTURE	30   31
BROAD TRAINING PROGRAMME	32   33
ECOLOGICAL SUSTAINABILITY	34   35

# *What sets us apart*

Mastering technology in depth, continuously taking it forward and profiting from the latest innovations are the driving forces behind our company's growth.

Our belief in the power of technically superior solutions firmly puts the focus of our worldwide operations on our customers' applications and needs, and on our commitment to protecting the environment.

We are a leading international manufacturer and service provider in the field of industrial packaging systems and have a long tradition in building services and technology.

We harness the power of our technological competence to make our own tools, machinery and plants, in our industrial services and as a supplier of innovative lightweight and composite materials.

# PACKAGING SYSTEMS

Secure and efficient packaging for filling products offers vast potential to save costs in the supply chain and conserve natural resources.

From chemicals to hazardous materials and sensitive goods such as food – thanks to our global production and service network, we offer our customers a dependable supply of sustainable packaging solutions.

By perfectly matching the respective application requirements, our products offer added value, for example, by ensuring more efficient use of space, lower tare weight or simplified processes along the application chain. We are also continually opening up new fields of application thanks to our technical innovations and the ongoing development of our packaging and optional accessories.



# SCHÜTZ

## PACKAGING SYSTEMS



### **INTERMEDIATE BULK CONTAINER**

With the invention of the IBC we revolutionised the transport of liquid filling products. Today, our ECOBULK/RECOBULK system with all its variants is the preferred style of packaging for a wide range of industries, and millions of these containers are used every day around the world.

### **PLASTIC DRUMS**

Our comprehensive portfolio of modern plastic drums includes multi-layer open-head and tight-head drums in sizes from 30 to 220 litres filling volume.

### **PLASTIC JERRYCANS**

The new SC1 jerrycan series expands our product portfolio to include storage and transport solutions for small filling quantities.

The different sizes are available in a choice of configurations and colour variants.

### **STEEL DRUMS**

We produce this classic type of industrial packaging in open-head or tight-head versions on state-of-the-art production lines, and offer a wide range of variants.

# Resource-saving closed-loop systems



As a pioneer in the circular economy, from the very outset we have addressed the question of what happens to our IBCs after they have been emptied. As a result, we set up the **SCHÜTZ TICKET SERVICE** – a global service scheme where we collect used containers from the user free of charge and even in very small quantities.

To order a collection, all the user needs to do is scan the QR code on the SCHÜTZ label plate and enter a few details. Our app makes this process even easier. Here, users can find all past orders, which can be copied, edited and sent back quickly and easily.

# *Packaging* **reconditioning and recycling**



The collected containers are reconditioned in our own certified facilities according to the strictest environmental standards. In a globally uniform, resource-saving reconditioning process, the inner bottles including screw caps are replaced with new ones. The steel grids and pallets are repaired, cleaned and reused.

In a multi-stage process, pure recyclate is obtained from the removed inner bottles; all of this is reused for the production of new packaging components such as pallets and corner guards. Every year, IBCs reconditioned by SCHÜTZ save several hundred thousand tons of CO<sub>2</sub> emissions.

With our new SCHÜTZ GREEN LAYER packaging, we are increasing the recycled content even further by using 30% of our high-quality recycled material to produce inner bottles and drum bodies – without compromising on packaging safety and quality.

# ENERGY SYSTEMS



The very first SCHÜTZ product was a heating oil tank. Since then our name has been synonymous with the very highest quality in building technology.

## **SMP SEALING**

The nose also plays a role in determining whether we feel comfortable in a particular environment. This is why we use patented technology in the production of our heating oil storage tanks to ensure that odours remain safely contained where they belong – in the tank. The SMP process developed by SCHÜTZ seals the inner and outer walls of the heating oil tanks using fluorination treatment. The resulting protective layer, similar to Teflon, improves the chemical resistance of the plastic to highly flammable, toxic or corrosive substances and prevents their permeation.

**We develop and manufacture single- and multi-walled storage containers made of plastic or steel, which offer optimum solutions for different requirements and areas of application.**

For the storage of heating oil, our modern TANK IN TANK systems offer the highest quality and make optimal use of space. Their intelligent compact design and flexible sizes ensure a minimised footprint, freeing up space for other uses. The clever design means that traditional safety measures such as a concrete or brick containment basin, triple protective coating or a separate heating oil storage room are no longer required.

### **TANK IN TANK PLASTIC**

**The integrated unit consisting of an inner tank and containment tray guarantees double safety; a special version is also available for use in areas prone to flooding.**



### **TANK IN TANK STEEL**

**Where conditions or legal requirements make it necessary, we combine galvanised steel and high molecular weight plastic to create exceptionally durable container solutions.**



# Efficient underfloor heating systems



Modern underfloor heating systems play a key role in opening up the benefits of future-proof HVAC systems. They guarantee the optimal distribution of radiant heat and enable low flow temperatures in the heating circuit. As well as energy efficiency, these systems provide a pleasant indoor temperature and free up living space.

We provide the highest manufacturing quality and all components are fully compatible. Due to our high vertical range of manufacture, we are not only independent, but can also react very flexibly to individual customer requirements.

**As a system provider, we produce all key components ourselves, from insulation and heating pipes to control technology.**



## *Heating. Ventilation. Cooling.* **In one system.**

**Pleasant indoor temperatures at home and at work – thanks to the intelligent combination of three functions, AIRCONOMY® meets the highest demands in residential and commercial buildings.**

Odours and pollutants in the room air are eliminated as the air is permanently exchanged. Filtered, fresh air and the perfect temperature ensures

comfort and prevents moisture and mould. For more complex projects our customers benefit from the know-how we have acquired over decades. For example, our planning service provides detailed AIRCONOMY® cost estimates, and our highly qualified technicians are on hand to provide individual technical advice, even on site. If required, we also provide comprehensive assistance with installation and commissioning.



# COMPOS



Lighter, faster, more stable – SCHÜTZ has been developing and producing lightweight and composite materials since 1985.

# COMPOSITES

**Our proprietary CORMASTER® is an innovative honeycomb material that is used in the aerospace industry as well as in vehicle and ship construction.**

The outstanding properties of CORMASTER® are high mechanical strength and resistance and an extremely low weight. The honeycomb material developed by SCHÜTZ consists of thin layers of Nomex® or Kevlar® reinforced with resin in a patented process and subsequently shaped into hexagonal or overexpanded honeycombs. The honeycomb panels can be further processed by milling, forming or laminating, making them suitable for use in many applications.

In addition to the production of honeycomb blocks and panels in a variety of designs, as a built-to-print supplier SCHÜTZ also offers honeycomb finishing and can manufacture complete structural elements. For example, we produce sandwich panels that meet even the highest requirements in the aviation industry.

## Model and mould manufacturing

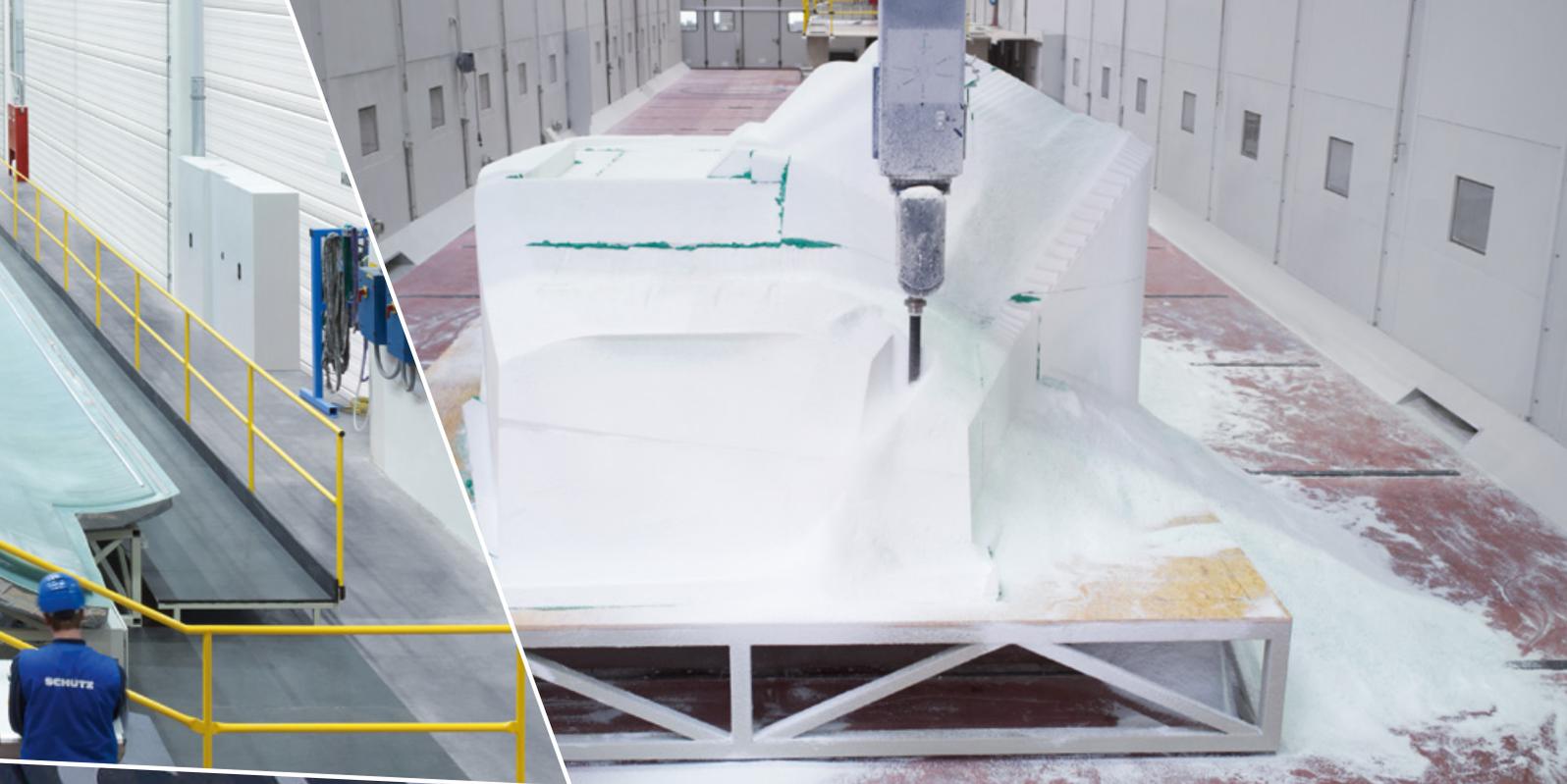
With our efficient tool, model and mould construction services, we are constantly opening up new areas of application for our composite material solutions. We manufacture moulds for the production of parts ranging from minute injection-moulded parts to 75-metre models, and specialise in moulds for large components such as boat hulls or rotor blades.

The equipment we use to make these components includes a 5-axis milling cell with the dimensions 56 m x 8.5 m x 4.5 m and two gantries working in parallel, a setup which is also suitable for machining very large components. We produce according to the latest aerospace specifications to comply with the very highest standards.

With our comprehensive know-how and as Official Technical Partner, we were responsible for building the entire deck mould for Boris Herrmann & Team Malizia's new racing yacht. Our expertise and engineering services also flowed into the further development and construction of the foils, which give the boat its incredible speed. Key structural parts were made from our CORMASTER® material, which we provided to the shipyard as the Official Supplier.

Boris Herrmann's new boat is in the direct tradition of our "CONTAINER" racing yachts, which were built entirely in-house and with which we have already celebrated great sporting successes.





Early on in SCHÜTZ's company history, we realised that our all-encompassing quality philosophy and passion for technology could only be met by using our own process technology as broadly as possible.

Today, our technological expertise in toolmaking, mechanical engineering and plant engineering is focused in the **INDUSTRIAL SERVICES** division, which provides these skills to our other business divisions as an internal service provider.

#### **Tool and model making**

On more than 7,500 square metres of hall space, we employ around 150 specialists in blow moulding technology, injection moulding and injection compression moulding technology, stamping and forming technology and extrusion technology. Based on the 3D simulations and CAD data supplied by our technical design department, we also make complex, high-quality, ultra-precise components in our machine park. For our worldwide packaging production, as well as building new moulds, we also handle the on-going maintenance and optimisation of the more than 750 existing moulds with a weight of up to 20 tonnes centrally from our site in Selters.

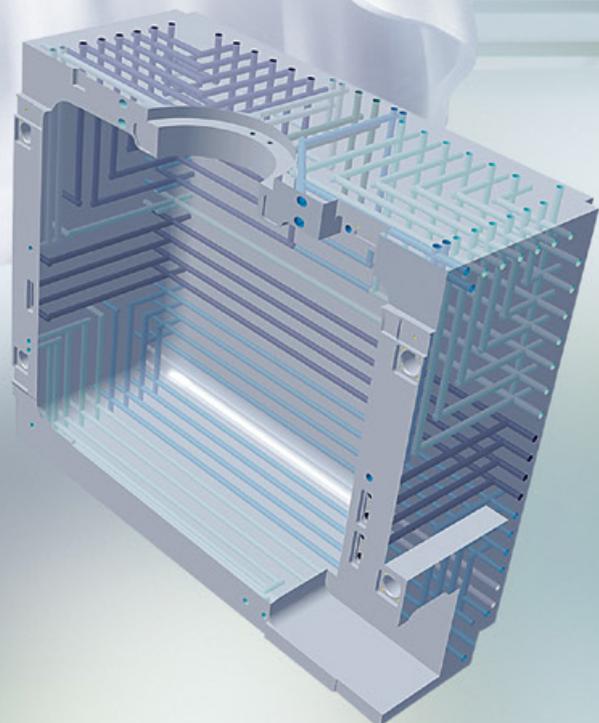
#### **Machine and tool engineering**

Our customers know that they can rely on the uniform quality and performance of our products anywhere in the world because we use our own production technology. For example, we manufacture all production lines for the global production of our IBC system entirely at the Selters site – using the world's most advanced blowing systems, fully automatic welding, bending and joining stations for our steel grids and base assemblies, sophisticated assembly lines for individual components and the final assembly of the finished container.

# IND SER



# INDUSTRIAL SERVICES



**SCHÜTZ**  
INDUSTRIAL SERVICES



**The SCHÜTZ Group is one of the largest sheet metal processors in Europe.**

Our state-of-the-art Steel Service Center shapes several hundred thousand tons of flat-rolled steel annually, producing custom orders and supplying steel-processing companies from a broad range of sectors with high-precision pre-products.





We source our high quality material directly from leading steel manufacturers all around the world.



Because we are not contractually bound to a supplier, we can offer customers the best choice of grades and the very best value for money across the range. The Steel Service Center has its own railway sidings, and coils of up to 30t can be delivered direct to the plant; these are then registered with the latest warehousing software and processed according to customer orders with our high-precision cutting and splitting units.

From custom pieces to standard formats, split strips and coils: our state-of-the-art production facilities guarantee clean cuts, immaculate surfaces and the tightest dimensional tolerances in all of our products. Optimum results are also ensured by our expert technical support, which ranges from development and material selection to individual on-site advice by our field sales team.



**SELTERS, GLOBAL HEADQUARTERS**

# CENTRE OF EXCELLENCE IN WESTERWALD



**SIERSHAHN**





With three locations in the Westerwald region, we are deeply rooted at the heart of Germany.

Our headquarters in Selters, the largest facility, is also the engine and hub for all activities of the SCHÜTZ Group. From this centre of excellence we supply our global network with tools, machines and equipment, we monitor and control our worldwide production, supply key components and provide technical support.

**SELTERS, GLOBAL HEADQUARTERS**

Production and centre of excellence for all divisions

Main administration

IT centre

2,700 employees

**SIERSHAHN**

Production Composites and Steel Service Center

220 employees

**RANSBACH-BAUMBACH**

Production and administration for Building Services

150 employees



**RANSBACH-BAUMBACH**

# GLOBAL NETWORK

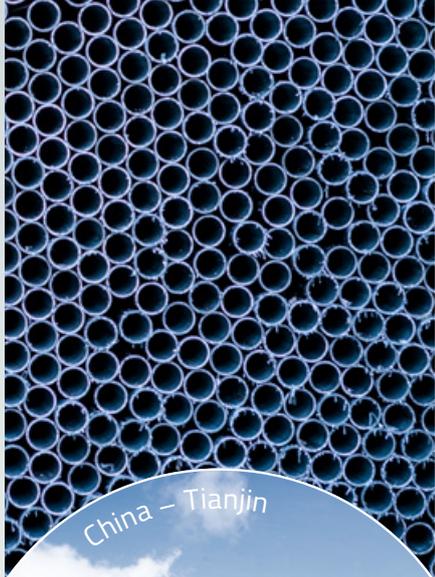


Short distances are an essential factor for economic and economic efficiency, especially in the packaging market.

This is why we are constantly investing in the further expansion of our global network of production and service locations.

On average, we expand our global network by adding one or two new plants each year. As the final step in our largely independent production process, we implement all site expansions ourselves and build complete plants in-house.





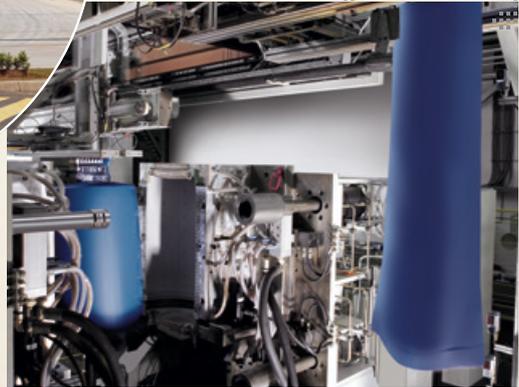
China – Tianjin



Japan – Hadano



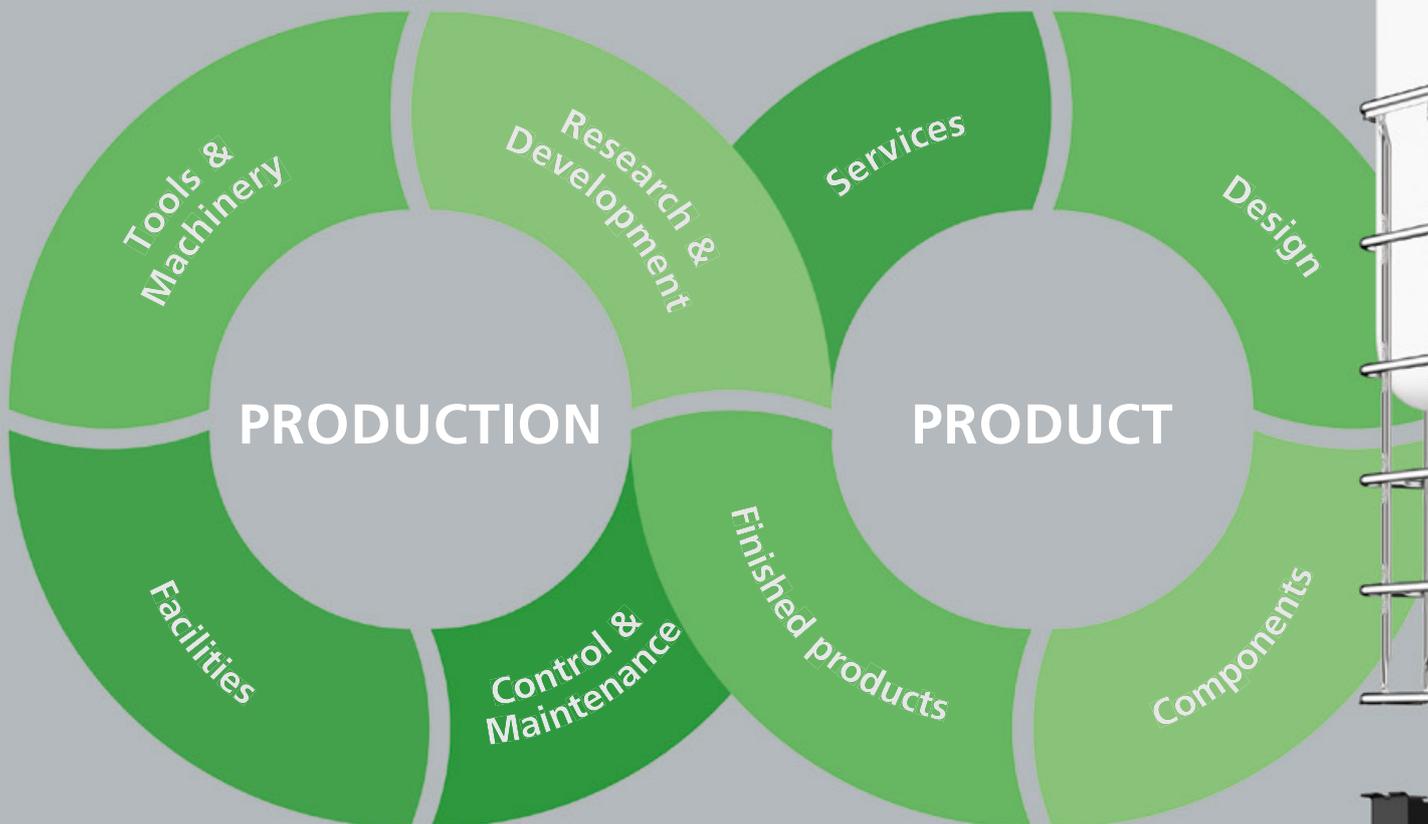
Indonesia – Karawang



# INDEPENDENT PRODUCTION SYSTEM

Having full control over our own processes is crucial to our ability to offer customers enduring benefits thanks to our smart innovations and superior performance standards. This is why SCHÜTZ is committed to investing in a fully independent production system – with a unique combination of product and manufacturing expertise.

We not only develop and design our products in-house, but also design and manufacture all the systems and resources required for production ourselves. This maximum vertical integration makes us largely independent of suppliers and is the key to our swift flexibility and the continuous improvement of our products and manufacturing processes.



# Maximum vertical integration: over 90%

In many product areas, our vertical integration is over 90%. For example, we produce our IBCs, including all key components, starting with the raw materials; the only materials we buy in are steel and plastics.



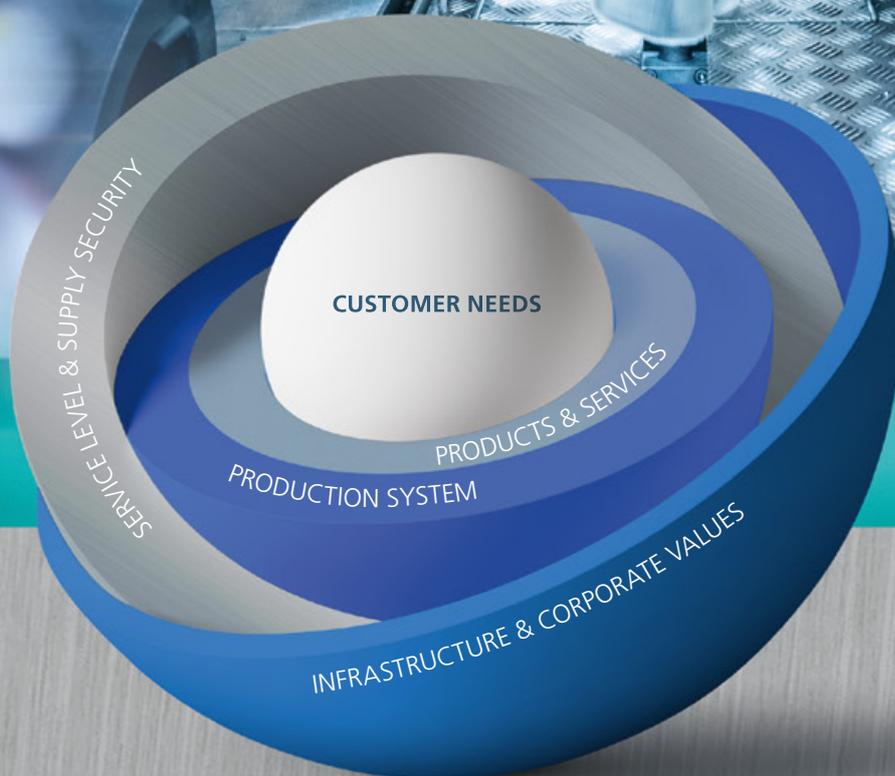


# INNOVATION AND DEVELOPMENT

**As an agile company, we see change as an opportunity and actively embrace it. We always take the needs and wishes of our customers as our starting point.**

In our research and development departments at our headquarters in Selters, we work with over 200 engineers, designers and specialists from a wide range of fields to continuously refine today's products and processes and develop tomorrow's innovations. The close collaboration between our in-house disciplines enables us to quickly roll out complex development projects, from initial concept phase to series production.

Over the decades, we have built up a wide range of technical expertise around our core competence of metal and plastic shaping. Harnessing the most advanced technologies, innovative processes and new materials, we are constantly pushing the boundaries of what is possible and are proud to be technology leaders in many fields.



## Our own patented processes

The key technology for the production of our plastic containers is continuous extrusion blow moulding, a process that we are constantly developing and for which we are the global leaders. This technology allows us to produce IBC inner bottles with up to six layers and thus offer unique packaging properties. The current generation of production equipment saves valuable plastic by optimising the distribution of wall thicknesses and allows us to incorporate reclaimed material.

# DEPENDABILITY AND SAFETY

Ultimately, all our processes, our entire infrastructure and organisation are focused on being a reliable partner for our customers. In particular, the secure supply of transport packaging to a wide variety of industries has a broad macro-economic importance.



## ISO 50001

Energy Management

## ISO 14001

Environmental Management

## ISO 45001

Health and Safety Management

## ISO 9001

Quality Management

## FSSC 22000

Food Safety Management

### Strategic material supplies

As one of the world's largest processors of flat steel and plastic, the on-going procurement of raw materials is an elementary requirement for us. Our procurement strategy is global, long-term and direct. Across all regions of the global economy we work with selected strategic raw material partners with whom we have long-term supply contracts for fixed purchase volumes.

### Uniform standards and norms

Our fully integrated safety, health, environment and quality management system (SHEQ) and comprehensive risk management in accordance with FM Global is the basis for SCHÜTZ's globally standardised production. The highest international standards and norms are implemented consistently at all locations.

### Security thanks to our network

Thanks to the close network and overlapping delivery zones, our plants can back each other up. In the event of a backlog of orders or a breakdown at one location, several neighbouring plants can usually step in by supplying materials, components or spare parts and even taking on the order and supplying the customer with the required packaging.



# RESPECT AND OPPORTUNITIES

Alongside our great passion for technology, there's one other aspect that makes a major contribution to the success and performance of our company: our SCHÜTZ employees. We are immensely proud of our open corporate culture, which celebrates flat hierarchies and entrepreneurial spirit.





As an innovation and quality leader with subsidiaries on all continents, we offer international career opportunities and inspirational working conditions, including attractive remuneration packages with profit-sharing schemes. We promote individual professional development by offering a wide range of training programmes – from technical training and further education to language courses.



**In addition to the commercial professions, as a technology company, we offer positions in a variety of specialised technical disciplines.**

**To drive our strong growth, we offer future opportunities to computer scientists, engineers, constructors, planners, designers and skilled technical workers.**

# BROAD RANGE OF TRAINING SCHEMES

A group of young people, including a woman in the foreground, are sitting at desks in a computer lab, looking towards a screen. They are using keyboards and mice. The background is bright and slightly blurred.

## Internships & holiday jobs

A first glimpse into the world of work

## Vocational training

Technical professions, IT-related and commercial professions

## Dual study courses

Perfect combination of theory and practice

## Tomorrow's skills are learned today.

As our aim is to offer our customers innovative solutions now and in the future, at an early point in our company's history we started investing in a broad range of in-house training programmes. This has made us one of the largest training companies in Rhineland-Palatinate, offering over 120 youngsters a wide choice of vocational options and career

opportunities every year. A high standard of training quality and practical relevance are central to our programmes. We have our own technical training workshop, where the required knowledge and skills are taught with the aid of state-of-the-art equipment. In cooperation with several universities of applied sciences, we also offer a wide range of dual study models. In addition to electrical engineering and mechanical engineering, these include IT-focused subjects such as computer science, infotronics and application management.



**As part of our trainee programme, we foster high-performing graduates in engineering, business, industrial engineering, natural sciences or computer science and give them the best possible preparation for future management tasks at SCHÜTZ.**

# ENVIRONMENTAL SUSTAINABILITY

## CLIMATE BLOG



2023 BORIS HERRMANN

Heading to Cape Town: The second leg of The Ocean Race has started

26. Januar 2023



BORIS HERRMANN

The Ocean Race: Team Malizia finishes the first leg in third place

24. Januar 2023



wins the first In-Port Race of the

10. Januar 2023



BORIS HERRMANN

The Ocean Race: around the world in six months

19. Dezember 2022





## A RACE WE MUST WIN CLIMATE ACTION NOW!

We firmly believe that excellent products are also characterised by the contribution they make to the environment. This is why we optimise the entire life cycle and minimise the use of materials and energy per manufactured unit by applying intelligent product design, the most advanced production processes, robust product quality and closed material cycles.

A passion for the technically superior solution and the conservation of our earth's natural resources have been the constants in our company's activities for decades. These are convictions that connect us with the CLIMATE ACTION NOW project initiated by the successful sailor Boris Herrmann & Team Malizia, and they form the solid basis of our partnership.

In all four divisions, SCHÜTZ offers products and services that support our customers in their sustainability goals, helping them to become more efficient, save material and energy and thus reducing their carbon footprint. Our solutions in this field include sustainable packaging solutions, modern underfloor heating systems for low emission living comfort and lightweight materials for energy-efficient vehicles.



©Pierre Bouras

Follow Boris Herrmann's journey on our CLIMATE BLOG and find out how SCHÜTZ products and services are helping to protect the environment and the climate  
[www.schuetz.net/climate-action](http://www.schuetz.net/climate-action)

# SCHÜTZ

**Schütz GmbH & Co. KGaA**  
Schützstraße 12  
D-56242 Selters  
Phone +49 2626 77 0  
Mail [info1@schuetz.net](mailto:info1@schuetz.net)  
[www.schuetz.net](http://www.schuetz.net)

