

DRIVEN BY **INNOVATION**





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FOCUSED ON WHAT WILL GET US MOVING TOMORROW

We live in an age in which people are becoming increasingly mobile due to mega trends such as globalisation, urbanisation and individualisation. For us, as a manufacturer of seats for buses and trains, this is a challenge that we are only too happy to accept: because it is our mission to make every single journey as safe and comfortable as possible for the passengers – regardless of whether it lasts just a few minutes in the city tram or underground or several hours cross-country in a long-distance coach. But it is not only the travellers who have specific requirements for our seats: our customers, the manufacturers of railway vehicles and buses, expect us to produce seats that are increasingly economical, robust and light and cover all eventualities, from basic to luxury features, depending on the intended purpose.

Premium thanks to experience and innovation

At Kiel, more than 70 years of tradition and experience are brought together every day in the work of around 1,300 employees throughout the world with a focus on the future and a very high level of innovation: the German company has worked with passion to make premium seats for the international bus and train industry since 1945.

With our products, we cover the entire range of local, regional and intercity transport and offer extremely modern, durable, robust and economical seats and seating systems, which are sophisticated in terms of their design and technology. We also offer customer-oriented, individual seat solutions for special requirements. Bus seats account for around 60 % of our business; train seats represent 40 %, and this segment is gaining in significance.

The heart of the Group is in Nördlingen, where around 300 people are employed: this is where the headquarters and the management board are based, and the entire product development takes place here. Traditionally, an important role is played by production in Nördlingen: today, we primarily manufacture various seats for trains and automotive applications here.

In addition, we produce different models in our other locations throughout the world – often adapted to country-specific wishes and requirements. Thus, Kiel has a presence in almost all European markets, as well as in North America, Australia, the Middle East and Asia. This allows us to offer our variety of products throughout the

world and to guarantee the greatest possible proximity to the customer, efficient coordination and short delivery periods.

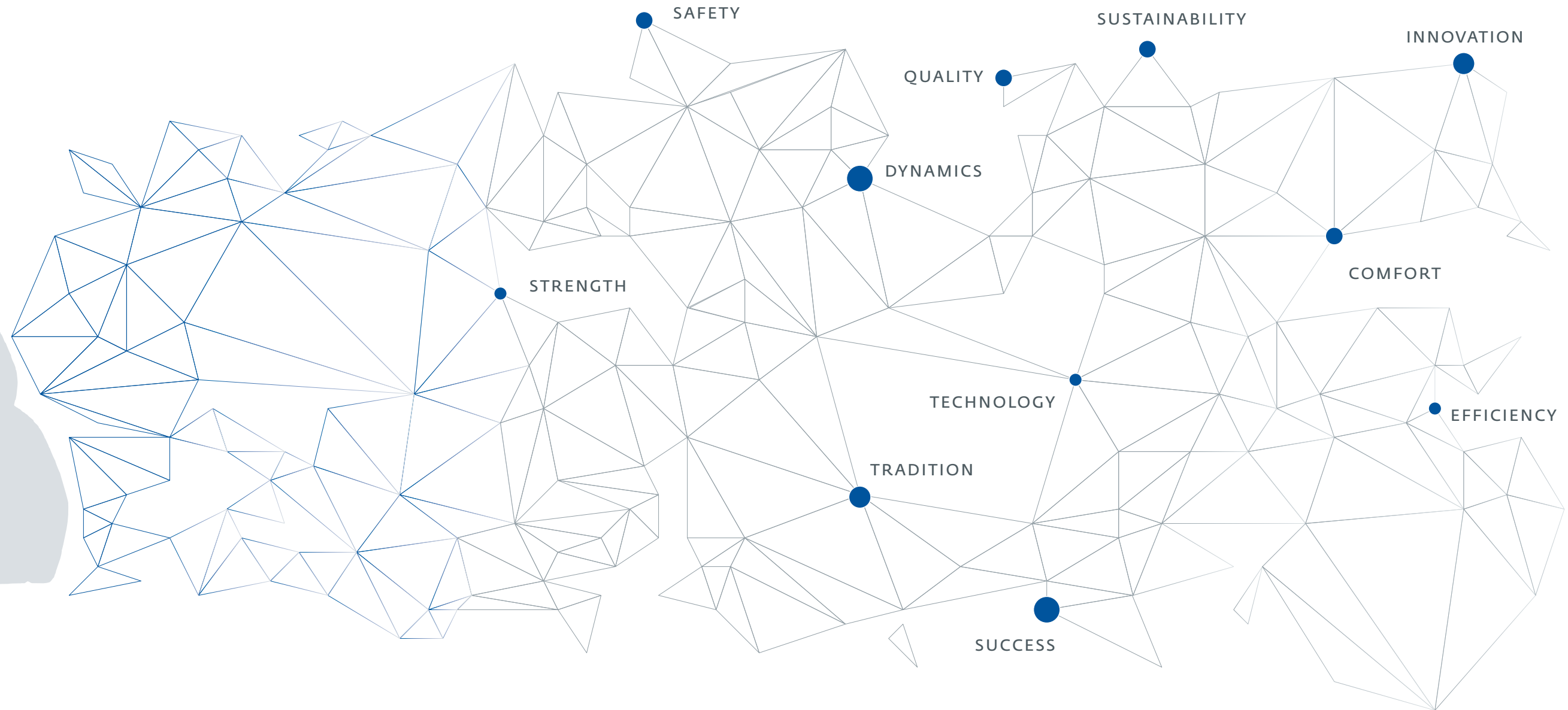
One step ahead of the future

With experience, professionalism and passion, a competent team, a powerful international network and the best possible technical conditions at the production sites, we at Kiel are optimally positioned and more than ready to accept the challenges of the present and, above all, of the future.

Aspects such as digitalisation, universal access, ergonomics, safety and not least a conservation of resources are important, dynamically changing areas which define our development work. Our goal is to have the answers today to the mobility questions of tomorrow and to always be a decisive step ahead with innovative and intelligent products.

That is what we live for here at Kiel – every day.

WHAT WE STAND FOR AT KIEL





BUS SEATS

Kiel offers its customers an extensive range of bus seats for every requirement: this includes numerous models for the three areas of local transport, regional transport and intercity transport. To suit the customers' wishes, we manufacture both entire seating systems for buses and customised seat solutions.

In all our models, we attach great value to a modern, brand-specific design, innovative extras and the utmost ergonomomy and safety for the passenger.

Our seats comply with the important desire for cost-effectiveness by using modern materials to reduce the weight as much as possible.

A major advantage for our customers is, in addition to the wide selection, the varied options for customisation, which go far beyond the determination of the cover material: thus, the seats can be individually adapted to the requirements of the customers or of their passengers.



LOCAL TRANSPORT:



versatile
robust
lightweight
durable
economical

- › CITOS
- › IDEO
- › ESOS



REGIONAL TRANSPORT:



comfortable
attractive design
economical
flexible

- › LEXXO
- › LEXXO CT
- › LIGERO



INTERCITY TRANSPORT:



luxurious
with many variations
comfortable
ergonomical
safe

- › AVANCE VIP
- › AVANCE 1020
- › AVANCE 1022
- › AVANCE 1030
- › AVANCE 2010
- › AVANCE 2050
- › AVANCE 3010
- › AVANCE X



TRAIN SEATS

In the train seats segment, Kiel offers a wide range of seats and seat systems for local transport, regional transport and intercity transport. Common to all the seats: in the best Kiel tradition, they combine quality, individuality, cost-effectiveness and safety with innovative ideas and an attractive design.

As in the bus segment, a low weight is an important criterion for seats for railway vehicles. The available space in the carriage should also be used as efficiently as possible due to a skilful construction. In many models, a number of elements and attachments allow individual requirements to be met exactly. Robustness and protection against vandalism are also required in local railway transport, in particular. At Kiel, we accomplish all this with a wide range of seat models, from a simple plastic or wooden bucket seat to a luxury seat for long-distance passenger trains with the full range of features.



LOCAL TRANSPORT:



versatile
robust
lightweight
durable
economical

- › LIFELINE
- › CENTRAAL
- › INTRA
- › SIMOS



REGIONAL TRANSPORT:



comfortable
attractive design
economical
flexible

- › EDGELINE
- › VARIO RELAX
- › MATCH G2
- › TREND | TREND R

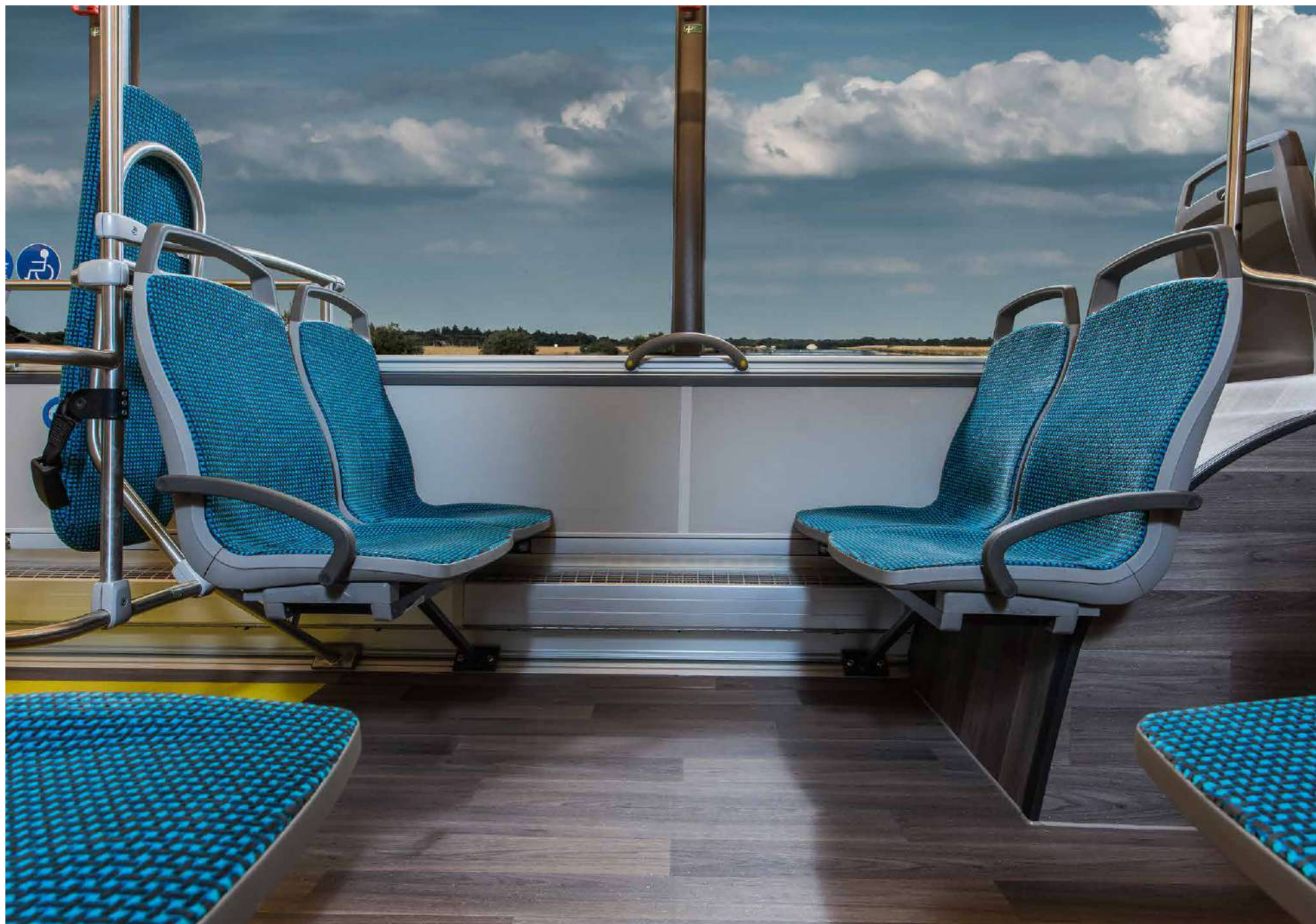


INTERCITY TRANSPORT:



luxurious
with many variations
comfortable
ergonomical

- › COMFORTLINE
- › MATCH G2







DESIGNED BY **QUALITY**

The requirements placed on passenger seats today are completely different from those of several years ago. It is necessary to reconcile safety, comfort and functionality for the passenger, on the one hand, and quality, cost-effectiveness and efficiency for the vehicle manufacturer and transport operator, on the other hand.

In addition: not all seats are the same. Seating systems in intercity transport have to satisfy completely different requirements to those in local public transport. Seats for short journeys need robust and durable materials; due to

the short stay of the passengers, comfort is a lower priority. In intercity transport, however, the focus is on comfort. Here, back and seat cushion angle adjustment, for example, and additional features such as pull-out tables or USB-connections for individual mobile devices are of great significance, and visual aspects have much more weight.

In both the bus and train seats segments, a low weight is also important for the greatest possible energy efficiency and a low power consumption.

Design aspects and the feel of the materials are also gaining in significance. We satisfy this requirement with the dynamic, modern lines of the seats, an attractive colour scheme and high-quality materials. All of this helps to determine whether a passenger feels comfortable on their journey – whether it lasts a couple of minutes or several hours.

And that is our daily goal.



INNOVATION THANKS TO KNOW HOW

3D DESIGN

MODULAR
CONSTRUCTION

LIGHTWEIGHT
TECHNOLOGY

EXTENSIVE
TESTING

PROTOTYPE
CONSTRUCTION



The development of new seats and seating systems at Kiel is characterised by extensive specialist knowledge and many years of experience, as well as by fresh ideas and, wherever possible, the aspiration to satisfy customers' requirements.

At the start of the development process, we undertake intensive design and ergonomics studies and initially let the new design take shape on a virtual level. Using the latest software, we create an animated image of the product in a realistic environment even at this early stage. This "digital mock-up" is an essential element of the entire development process. After the production of a volume or surface model in the CAD programme, we carry out a so-called

FEM analysis ("finite element method"), which will provide precise information about a component's stability before it is constructed, as well as information about potential weaknesses, if applicable. This step also plays an important role in the optimisation of the weight of the respective component. Our goal is to reduce the weight as far as possible, without compromising on the quality, through the use of modern materials, such as lightweight structures made of steel or special plastics.

In the final stage, the seat must prove itself as a model or prototype in various stress, fire protection and crash tests, as well as in trial installations, before it finally goes into production.



EFFICIENCY ALL OVER THE WORLD

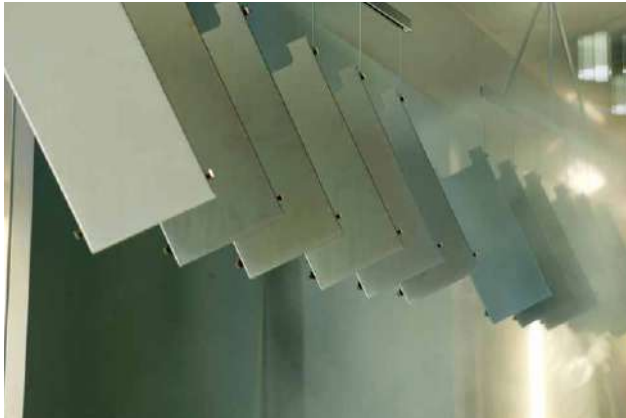
At our production locations around the globe, we work together every day with the same objective: to produce the perfect seat for every use for our customers.

A high degree of efficiency is ensured by our modular construction system, which enables us to manufacture even complex seating systems quickly, with a wide variety of options and to a high quality.

Our production process starts with the manufacture of the aluminium and metal components: in the stamping shop, the metal parts are processed with a CNC laser cutter, and the tubular frames are bent in the bending shop. In the welding shop, modern robots work on backrests and legrests. The unmachined parts are then powder-coated

in our paint shop. Here, we can realise individual colour requirements. The next step is to cover backrests and seat cushion supports with foam. CNC-controlled cutters use digitalised templates to cut the cover fabrics to size, and our tailoring room cuts the covers for the backrest and seat cushion foam parts to size. A machine handles the covering. The next step is to fix attachments such as a handle, a table and a magazine net on the backrest. In the final assembly, we combine the underframe with components such as the belt system, side runners and armrests and install the backrest.

If everything is in order in the final inspection, the seat starts its journey to the customer.



SUSTAINABILITY THROUGH QUALITY

TESTS

CERTIFICATION

SUSTAINABILITY

TEST SYSTEMS

At Kiel, quality manifests itself in a number of details. Our passenger seats satisfy all the standards of environmental protection, fire safety and German and international road traffic law as a matter of course. But they also go far beyond these legal requirements: thus, we increase passenger safety through innovative frame and material concepts which significantly reduce injuries in the event of an accident. We achieve this with seats which are as stable as possible and securely anchored in the vehicle, but are,

at the same time, so soft that they absorb the dynamic energy of the person in the seat behind in the event of an accident.

At Kiel, we take environmental protection into account not only with the lightness of our products, but also with their modular construction. This makes them easy to repair and, broken down into their basic elements, 100 % recyclable.

We are also committed to developing and using innovative, environmentally friendly materials and, wherever possible, producing them in line with environmentally friendly procedures. This also includes using materials as efficiently as possible and handling energy and natural resources economically overall. Thus, we heat our production hall in Nördlingen, for example, with renewable energy such as district heating and biogas. Our environmental management system is certified according to ISO 14001.



KIEL – A GLOBAL PLAYER



Whilst the bus seat industry was still shaped by a number of national providers in the '90s, Kiel decided in favour of international expansion at an early stage. Both through collaborations with seat manufacturers in Italy or Spain and through its own locations, Kiel has gradually tapped into important markets: in 1996, the first subsidiary in Turkey was founded, followed by a subsidiary in Poland in 1997, in the Netherlands in 2000, in the USA in 2009, and a joint venture in Russia in 2011. Thus, Kiel now has a presence in almost all European markets, as well as in North America, Australia, the Middle East and Asia.

This allows us to offer a varied product range which is adapted to national requirements and individual customer wishes and to guarantee the greatest possible proximity to the customer, efficient coordination and short delivery routes and periods.

All of this guarantees our consistently high, typical Kiel quality – throughout the world.

HEADQUARTERS

1	GERMANY	Franz Kiel GmbH
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SUBSIDIARIES

2	MACEDONIA	KIEL Macedonia DOOEL
3	TURKEY	FKT Koltuk Sistemleri A.Ş.
4	SPAIN	Emar Kiel
5	USA	Kiel N.A. L.L.C.
6	POLAND	Kiel Polska Sp. z o.o.
7	FRANCE	Kiel France s.a.r.l
8	NETHERLANDS	Franz Kiel B.V.

JOINT-VENTURE

9	RUSSIA	KF Kiel ooo
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SERVICE AT KIEL IS MULTI-FACETED

Kiel's understanding of quality does not just extend to our products, but also includes an extensive after sales service with the goal of the greatest possible proximity to the customer: in Germany and in the countries where we have subsidiaries, we maintain a nationwide network of key account staff and special service teams which provide the customers with comprehensive support in all issues relating to operation, cleaning or repairs.

In addition, the central Development Department in Nördlingen provides the specific technical customer service if necessary.

For the lifetime of our seats, we guarantee the constant availability of the appropriate spare parts, which are delivered via a central warehouse. This underlines how important we find the cost-effectiveness of the products for our customers, as well as sustainability and the protection of the environment.

In terms of logistics, we attach great value to delivery routes which are as short as possible, in order to conserve resources, serve customers quickly and save costs. This aspect and our personal proximity to important customers based abroad have been and are still an important motivation for our international expansion.



READY FOR THE MOBILITY OF TOMORROW

We have the answers today to the mobility questions of tomorrow – and we are doing all that we can to ensure that this remains the case in the future.

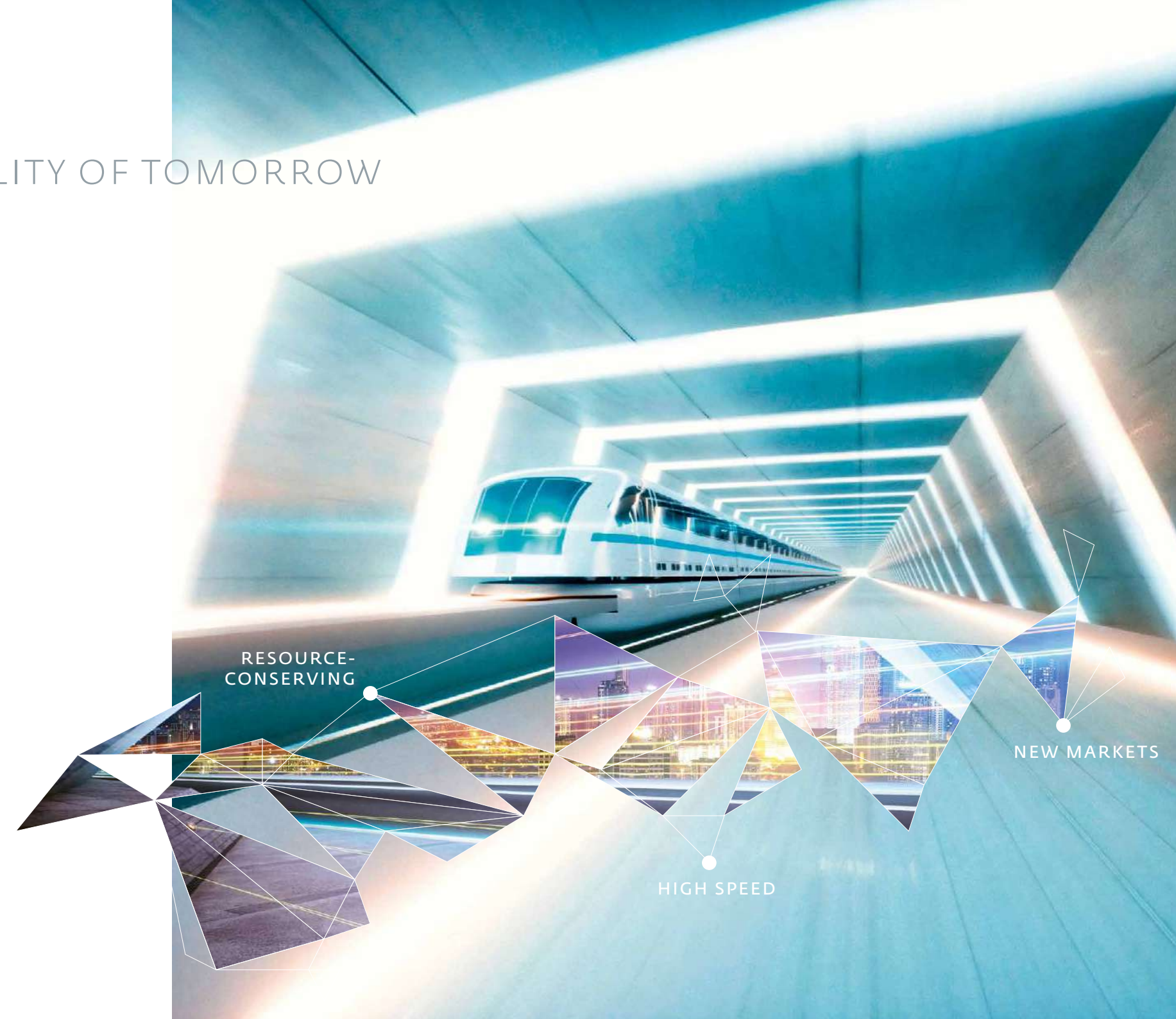
Thus, it is important to protect our economic strength and stability and, at the same time, to intensively promote our international growth. We are currently tapping into the markets in China and India; we will soon also have a stronger presence in Central America.

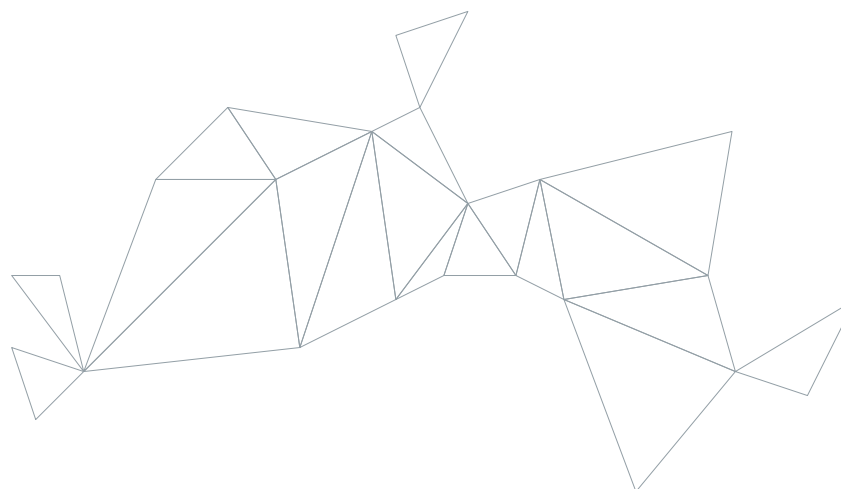
Everything is pointing towards expansion with respect to our product range too: we are constantly moving into new areas of application for new products, such as the M2, the Sprinter and high-speed trains, for which we develop special solutions.

Another important aspect of our activity is sustainability. We meet our constantly growing commitment to our environment today with our modular recyclable construction systems. In all the divisions of the company, we are also continuously working towards even more resource-conserving and environmentally friendly operations.

We also consider our ability to deal with our employees, suppliers and customers in a cooperative and respectful manner to be an important criterion for our future sustainability.

We want to preserve and extend all this – for we are certain that this is how we can best position ourselves to deal with future challenges.





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