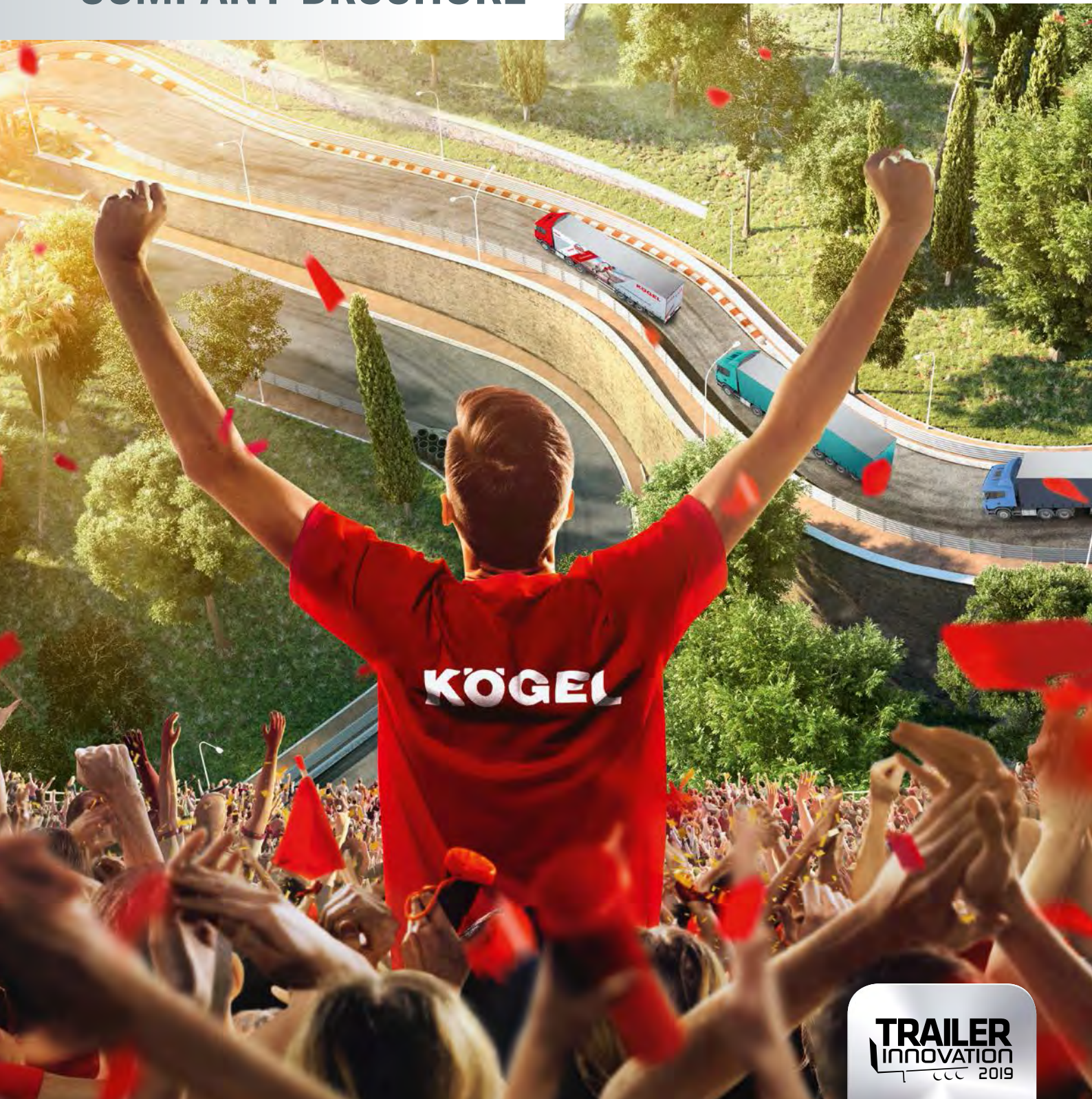


KÖGEL

NOVUM: LIGHT & STRONG

COMPANY BROCHURE



TRAILER
Innovation
CCC 2019

WINNER
CATEGORY
CONCEPT

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THE KÖGEL MANAGEMENT TEAM



Thomas Heckel

has a Bachelor's Degree in Business Economics (University of Applied Sciences).

Mr. Heckel joined Humbaur GmbH, the sister company of Kögel, in 1994. At first he was sales manager, but was later appointed as a member of the executive board and an authorised representative of the company with its headquarters in Gersthofen. Since 2009, he has been the managing director for the purchasing, human resources, controlling, finance, transport/foreign trade divisions and sales in Russia at Kögel Trailer GmbH.



Thomas Eschey

is a qualified mechanical engineer and mechanical technician.

He has been a Humbaur design engineer, and subsequently Technical Director, since 1995. Today he manages the technology, production, industrialisation, quality management and IT divisions as managing director at Kögel Trailer GmbH.



Massimo Dodoni

has a Master's Degree in Industrial Organisation.

Massimo Dodoni has been very successfully employed by Kögel since 2014, initially as sales manager for south-eastern Europe and most recently as international sales director. He has held the position of managing director since 2017. He is responsible for sales in south and eastern Europe, Public Relations, as well as the After Market division at Kögel.



Josef Warmeling

has many years of sales experience on top of a technical and commercial qualification.

He started out as a sales representative in 1987, before forging a career in the trailer industry in international key account management with the leading company on the European market. Today he holds the position of managing director at Kögel Trailer GmbH, where he is responsible for sales in north and western Europe, financing, full service and telematics, used vehicles and marketing.

EDITORIAL



MY DEAR READERS,

Kögel – a brand with over 80 years of tradition – is at the heart of things with its unmistakable experience and competence throughout Europe. With the takeover of Kögel in 2009, I have taken on an active entrepreneurial role that provides the brand and the company with the stability and continuity that they deserve. Success has proved us right – Kögel achieved an above-average growth rate in the past few financial years. It is our aim to continue to develop the existing product portfolio, so that our customers can benefit from the innovative Kögel products. We are securing the reputation of the brand at home and abroad with innovations that will define modern road transport and the construction industry. As the head of a medium-sized business, I am fully aware of my responsibility and our customers can rely on that.



Ulrich Humbaur, owner of Kögel



PASSION MEETS ENGINEERING

PASSIONEERING FOR OUR CUSTOMERS



What's more exciting than the transport sector? The future of the transport sector! We passionately believe that to stay profitable, you have to stay ahead of the game – and our experience has shown that to be true. Competitive pressure on our customers is building. That's why we want to lighten the load – along with the cargo that they transport with reliable Kögel trailers every day. A close, cooperative partnership with our customers is the starting point of all our innovations. Only then can we quickly identify their changing needs and requirements – and get the right solutions on the road. That's where engineering comes in, which we have loyally practised for over 80 years. Our commitment to uncompromising quality. And, of course, our dedicated professional team.

From practice to theory and from plan to practice: Passioneering never stops.

All our customers' challenges flow directly into the development process. We subject our innovations to intensive testing far beyond the usual requirements. Extreme driving manoeuvres, heavy loads, poor road surfaces, rain, ice, snow and scorching sun – our trailers have to withstand it

all without a hitch. Only then are we satisfied – for now, at least. Because only then can we be sure that our most discerning customers are satisfied too. But the end of every development process is only the beginning of something new. After all, everything we do is with the future of the transport sector in mind.

Find out more about passioneering and our exceptional quality standards at www.koegel.com



The most important innovation factor at Kögel is our competent, creative and committed staff.

KÖGEL PHILOSOPHY, VISIONS, AIMS

Innovative leader, Kögel: past present and future

As a leader in innovation, Kögel has been setting milestones in the development and manufacture of contemporary trailer solutions that find a lot of interest both nationally and internationally in the truck sector since 1934.

High points in the history of Kögel are the ground-breaking innovations with which Kögel has been setting the standards on the market until the present day. This includes the first refrigerated semi-trailer made entirely of plastics, the first swap body with support first, the first self-supporting aluminium round tipper body or the patented central-axle tipper trailer, the first lightweight semi-trailers

and the first cathodic dip-paint coating system for optimum corrosion protection on vehicle frames.

Innovations from Kögel have defined modern commercial road transport for decades and have finally become the industry standard. Kögel is often the pioneer in the sector: The fact that the ideas, concepts and innovations from the Swabian trailer maker turn up at other trailer manufacturers after many years confirms its leadership in innovation. In combination with in-house know-how, the requirements of our customers yield successful solutions on the market with added value in many respects. Kögel purposefully focuses on benefits and advantages to create long-lasting added value for the forwarding and construction sectors.

Innovations as was



First refrigerated semi-trailer entirely made of plastics



First self-supporting aluminium round-body tipper



Lightweight study Phoenixx:.....
Floor frame, throat, front wall and rear portal made of carbon fibre

Innovations as is



Kögel Euro Trailer:

- 1.3 m longer than normal trailers
- Flexibly applicable for various different sectors
- Increased transport volume at the same cost



The Kögel NOVUM Generation:

- Strong engineering for maximum stability
- Quite simply more payload
- Easy load-securing in next to no time

NOVUM – Profitability taken one step further!



Kögel Strong & Go:

The innovative NOVUM generation body combined with a Kögel integral roof tarpaulin reinforced with stiffening belts

Made-to-measure products

Kögel has always offered a product portfolio of made-to-measure solutions for the forwarding and construction industries, making it one of the leading global trailer manufacturers. Kögel has always responded rapidly and proficiently to customer requirements, providing the solutions for the transporting tasks of tomorrow. Kögel still relies on the strengths that once made the company big: A passion for transport. Quality characterised by engineering. Innovations worthy of the name because they provide the customer with benefits. And the reliability of an owner-managed family company with a long-term perspective. In addition, Kögel sets great store by the continuous devel-

opment of its products and services, enabling it to guarantee first class quality and optimum trailer availability. Our targets for the coming years are therefore already set: healthy growth with high-quality trailers at an optimum price-performance ratio.

Kögel Tipper Trailer in steel and aluminium design:

- Clever material mix: Hardox 450 steel tipper body and wear-resistant aluminium sheet
- 430 kg more payload thanks to aluminium drop sides and back wall



Kögel Port 45 Triplex:

- Front, centre and rear extension for 20, 30, 40 and 45-foot ISO containers as well as 40 and 45-foot Highcube containers
- Only 4,480 kg in the basic version



Kögel EasyFix – sliding roof stopper:

- Quick and easy securing of the roof when open
- Closing of the roof without having to unlock it again



Kögel FastFix – textile lattices:

- A 495-gram alternative to wood, aluminium or steel lattices
- Easy to insert and remove from the stakes
- Minimises the risk of personal injury

For the environment:



Energy efficiency



Reduction in CO₂ emissions

Kögel customers can benefit from our competence as the innovative leader in the market today and in the future. Stringent customer requirements, practice-orientated accessories and equipment solutions, and delivering attractive benefits in economy, quality and safety via sustainable innovations are what characterises the Kögel vehicles of tomorrow.

THE BENEFITS OF THE NOVUM GENERATION AT A GLANCE

PROFITABILITY TAKEN ONE STEP FURTHER!

Reinforced body

The new air and light panel on the front wall transmits the force that the body is exposed to when driving along directly into the frame via the side member. This provides support for the front wall to the front and extends the service life of the body.

Identical lattice length

Equally sized stake fields ensure flexible use of the lattices.

Diversity

Many variants of the Kögel platform trailers Cargo, Mega and Light^{plus} are already available in the NOVUM generation.

New external frame

Now more accessible thanks to the relocation of the Vario-Fix steel perforated external frame to the inside and simple load-securing thanks to an optimised lashing angle.

Secure loading process

Complete mounting surface for safe and simple loading and unloading from the side. Individual adaptation of the slat mounts is possible at any time.



Frame

Sturdy, torsion-resistant welded ladder-type frame with full-width cross beams for high payloads and concentrated loads.



Strong & Go body

Optional equipment.
Reinforced roof and side tarpaulin.
Load-securing of beverages
with a single row of lattices,
Daimler Directive 9.5 possible
without lattices.
See page 13.



User-friendliness

Thanks to levering aid when
opening the tarpaulins:
the "cake slice effect".

Door locks

Quick and
easy to open
with one hand.

Durability

A new 40 mm
narrower and
thicker end
plate at the rear
provides even
more stability.



Kögel FastFix textile lattice

Optional equipment.
Space-saving storage,
only 495 grams per textile
lattice, increased safety.

Easy handling

T-shaped lashing brackets
simplify handling
Increased tensile force
of 2,500 kilograms.

- 
- ✓ **Quick, easy** and **safe** handling during loading and unloading
 - ✓ **Improved safety** for driver and load
 - ✓ Optional equipment for **all NOVUM** trailers

OPTIONAL EQUIPMENT FOR NOVUM TRAILERS

KÖGEL STRONG & GO BODY



What is the Kögel Strong & Go body?

The new Kögel Strong & Go body consists of the innovative body of the NOVUM generation combined with a **Kögel integral roof tarpaulin reinforced with stiffening belts and a side tarpaulin**, compliant with Daimler Directive 9.5.

Which trailers is the Kögel Strong & Go body available for?

The Kögel Strong & Go body is available as an option for all variants of Kögel platform trailers: **Cargo, Mega and Light^{plus}** of the **NOVUM** Generation.

What benefits does the Kögel Strong & Go body offer?

Thanks to this solution, lattices are no longer required to comply with Daimler guideline 9.5 for the transport of pallet cages and strapped loads. For certified beverage transport, only one row of lattices at the height of the first beverage crate as prescribed by VDI 2700 Sheet 12 is required for single-level and double-level beverage crates on standard pallets with the Strong & Go body, instead of three or four rows with the normal body.

This means that Kögel not only complies with the requirements of the sector for shorter loading times, but that it is able to offer drivers **faster, simpler and safer handling during loading and unloading**.

In addition, safety is improved for the driver and the load, since falling slats and damage to the goods from the slats are now a thing of the past.



KÖGEL LOCATION OVERVIEW

KÖGEL

Kögel Trailer GmbH (Company Headquarters)

Location: Burtenbach, Germany

Trailer production, cathodic dip-paint coating

Kögel PurFerro GmbH & Co. KG

Location: Duingen, Germany

Premium sandwich panels

Kögel Trailer GmbH (After Market)

Location: Ulm, Germany

KÖGEL

Kögel s.r.o.

Location: Chocen/Czech Republic

Frame manufacture and trailer assembly

KÖGEL

Kögel in Spain

Locations: Gallur, Zaragoza, Spain

Trailer assembly

KÖGEL

Kögel Trailer RU

Location: Moscow, Russia

Trailer assembly

KÖGEL

Kögel in Bulgaria

Location: Burgas, Bulgaria

Trailer assembly

KÖGEL

Kögel ITALIA S.R.L.

Location: Verona, Italy

Sales and After Market

KÖGEL

Kögel in Portugal

Location: Mangualde, Portugal

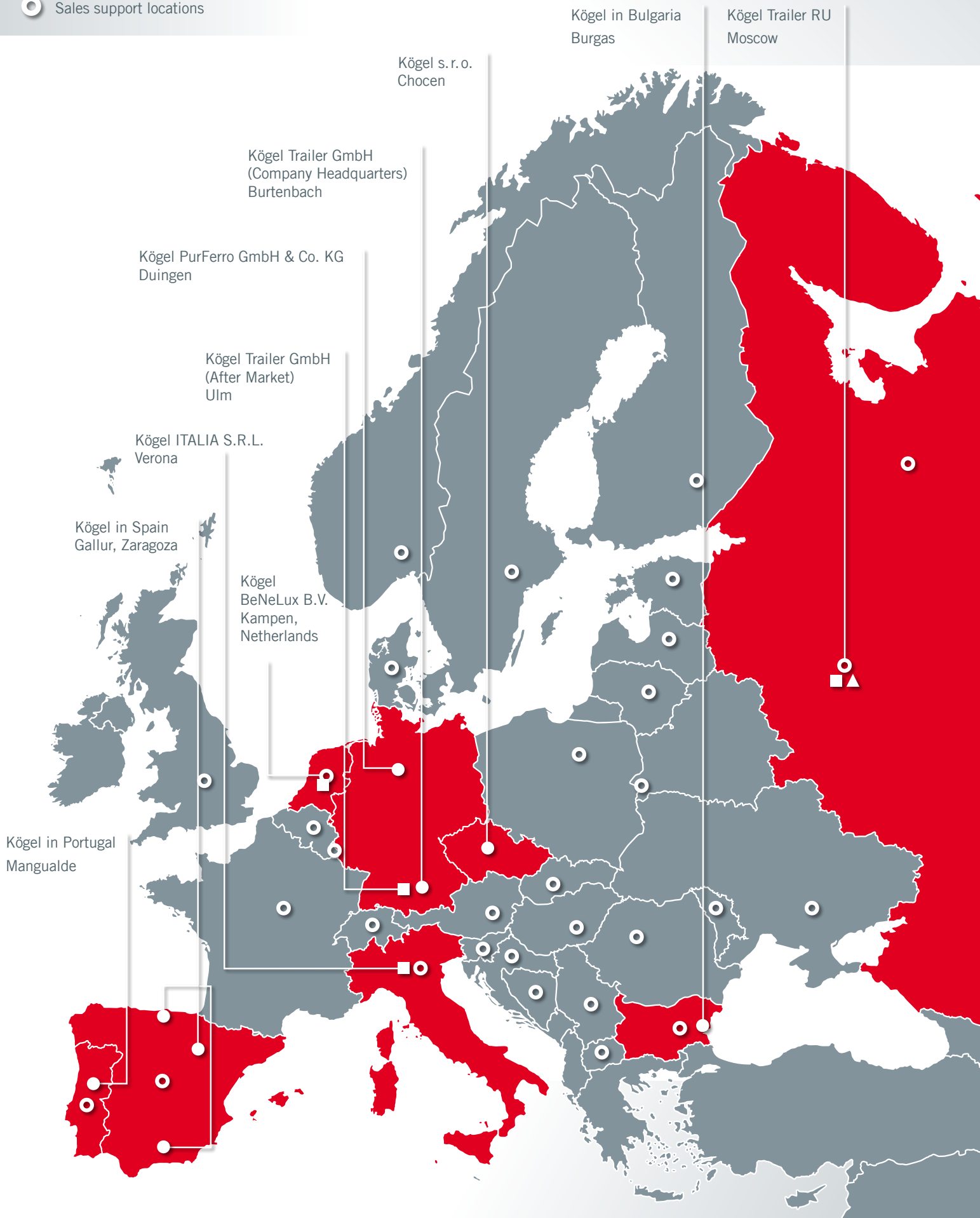
Trailer assembly

KÖGEL

Kögel BeNeLux B.V.

Location: Kampen, Netherlands

- Production locations
- ▲ Kögel Trailer Points
- Kögel After Sales
- Sales support locations





KÖGEL TRAILER GMBH

IN BURTENBACH (BAVARIA)

Products	Trailers
Total employees:	approx. 1,300 employees
Company premises:	465,000 m ²
Production area:	47,000 m ²
Production capacity:	17,500 trailers p. a.
Export proportion:.....	approx. 80%
Turnover:	approx. €530 million



Company Headquarters and Main Production Facility of Kögel Trailer GmbH

Since 1993, Kögel has been at the easily accessible location of Burtenbach. This is the heart of the company. Alongside the company headquarters with its offices, there is the main production facility with multiple assembly shops and the largest trailer cathodic dip-paint coating plant in Europe. The works premises also includes parking areas for trailers awaiting despatch and the despatch headquarters. Waiting truck drivers can use the sanitary facilities free of charge or can have a cup of coffee and a snack.

Our HQ in Bavaria is a top-level development and production site. Kögel is continuing to invest in the Burtenbach facility, including the production facilities, in order to supply its customers with products of the highest quality. The production facility in Burtenbach ensures that Kögel is optimally prepared for the coming years as well. This is because the Kögel premises, which were extended to almost 50 hectares in 2011, can be extended even further beyond the limits of the current premises if necessary.





CATHODIC DIP-PAINT COATING PROCESS

CATHODIC DIP-PAINT COATING

Nano Ceramic plus cathodic dip-paint coating

Before coating, the components such as the framework are passed through a blasting plant to remove the dirt, rust, layers of scale and laser-cut edges. After mechanical cleaning, the frames are ready for refinement – they then pass through a total of ten different baths:

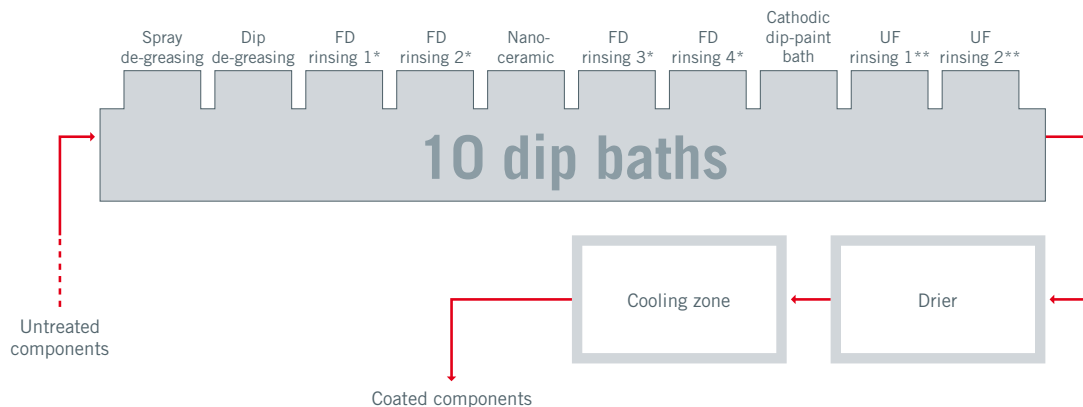
In the first step the components are chemically cleaned as well in two de-greasing baths and two rinsing baths. From there, they go directly to the nano-ceramic bath where a nano conversion layer is formed, consisting of copper and zirconium. This layer is responsible for corrosion protection and for the adhesion of the cathodic dip-paint coating. After rinsing twice, the components arrive at the cathodic dip-paint coating station. Here we apply a current to the components, and the pigments and binders are deposited on the components. The frames receive an even coating thickness of approx. 40 µm and a consistent surface quality from the cathodic dip-paint coating treatment. After two additional ultra-filtrate rinsing baths, the components are taken to the cathodic dip-paint coating drier. During baking, the special paint hardens and forms a stable structure. After this, the components easily withstand a 504-hour salt-spray test in accordance with DIN ISO 50021 SS.



The cathodic dip-paint coating plant is subject to strict testing and inspection procedures.



Continuous testing of the stipulated parameters of the baths is carried out in the cathodic dip-paint coating laboratory.



*Rinsing with FD water (fully desalinated water)

**Rinsing with ultra-filtrate from the cathodic dip-paint coating plant (FD water mixed with acetic acid, butyl glycol and solvents)



KÖGEL S.R.O.

IN CHOČEN

Products	Base frames for Kögel trailers
Company premises:	250,000 m ²
Production area:	27,785 m ²
Production:	Additional capacity for trailer assembly, around 450 frames per week; 80 per week

The Kögel factory in Chočen (Czech Republic)

The Kögel factory in Chočen is one of the most advanced production facilities for chassis frames and trailers. At the site around 150 kilometres from Prague, the frames for all vehicles in the Kögel product range are welded together in accordance with German quality standards, using the latest welding technologies. If necessary, there is also additional capacity for trailer final assembly. By the way, the factory has a long history: Opened in 1939 as a facility for aircraft manufacture, the Czech manufacturer produced refrigerated vehicles, among other things. Kögel then bought the factory in 1996. The works is outstanding for its long tradition, extensive know-how and high-quality workmanship. Chočen has a good name in the business and is known for top-quality chassis production.





FRAME MANUFACTURE

FRAME MANUFACTURE IN CHOCEN

The chassis for platform trailers, box trailers and tipper vehicles, as well as Euro Trailers and demountable systems, are produced here using the latest manufacturing processes and delivered to the main assembly works in Burtenbach.



Here we create the back wall of the Kögel tipper trailer.



Welding jigs help to achieve extremely precise welding.



Welding a welded assembly to the frame.

KÖGEL PRODUCT RANGES

Products for the forwarding industry

The semi-trailer programme, from 18 t to 40 t permissible total weight (combined traffic 44 t) for long-distance transport, the traditional core sector of Kögel, is constantly being optimised and expanded. Among other things, Kögel offers the tried and tested platform trailers Kögel Cargo, Kögel Light, Kögel Light^{plus}, Kögel Mega, Kögel Multi and the Kögel FlexiUse. A wide range of industry-specific solutions is provided by the box trailers from the Kögel Cool – PurFerro quality, Kögel Box and Kögel Box – PurFerro quality ranges. The demountable Kögel Swap, Kögel Combi and Kögel Port and the Chassis Cargo, Mega, Light, Light^{plus} and Cool systems round off the product range. The Kögel Euro Trailer has been extended by 1.3 m and is available in the Cargo, Mega, Box, Box – PurFerro quality and Cool – PurFerro quality variants.

KÖGEL PRODUCTS FOR THE FORWARDING INDUSTRY

KÖGEL BOX TRAILERS



KÖGEL PLATFORM TRAILERS



KÖGEL DEMOUNTABLE SYSTEMS



KÖGEL CHASSIS



Products for the construction industry

For the construction industry, Kögel produces the Kögel Multi flat semi-trailer, the Kögel flatbed trailer as turntable trailer in 3-axle or 4-axle design, as well as a 3-axle semi-trailer version. Kögel also offers 2-axle and 3-axle tipper trailers, available with a fully insulated 24-m³ or 27-m³ trough on request. Almost all Kögel frames are given long-lasting protection against corrosion by nano-ceramic technology and cathodic dip-paint coating with subsequent UV varnishing.

KÖGEL PRODUCTS FOR THE CONSTRUCTION INDUSTRY

KÖGEL FLATBED TRAILER (3-AXLE)



KÖGEL FLATBED TRAILER (4-AXLE)



KÖGEL TIPPER TRAILER



KÖGEL FLATBED SEMI-TRAILER



KÖGEL PRODUCT RANGES

Kögel Platform Trailers

The goods traffic of today and tomorrow demands highly efficient transport concepts for every application. The Kögel platform trailers offer high-quality workmanship, low maintenance costs and an enormously flexible range of use: Kögel Cargo, Cargo with reinforced chassis, Light, Mega, FlexiUse and Multi.

KÖGEL CARGO



Versions

- Sliding tarpaulins, TIR
- Drop side with full tarpaulin, TIR
- Sliding tarpaulin, 2-axle, TIR
- Rail-loading, sliding tarpaulin
- Coil, sliding tarpaulin, TIR
- Coil, rail-loading, sliding tarpaulin
- Also available with FlexiUse body

KÖGEL LIGHT^{PLUS}



Versions

- Sliding tarpaulin

KÖGEL FLEXIUSE



Versions

- Sliding tarpaulin

KÖGEL MEGA



Versions

- Sliding tarpaulin, TIR
- Drop side with full tarpaulin, TIR
- Coil, sliding tarpaulin, TIR
- Rail-loading, sliding tarpaulin
- Super-light, sliding tarpaulin, TIR
- Sliding tarpaulin, 2-axle
- Also available with FlexiUse body

KÖGEL MEGA – PERFECT HEIGHT



Versions

- Sliding tarpaulin

KÖGEL MULTI



Versions

- Frame throat height 120 mm
- Frame throat height 90 mm
- Frame throat height 90 mm, 2-axle
- Frame throat height 90 mm, Mega
- Frame throat height 120 mm, Coil
- Frame throat height 180 mm, Light

Kögel Box Trailers

The stringent demands of goods forwarding for the transport of sensitive goods is met by Kögel with its refrigerated and dry freight box bodies. Since the beginning of 2012, the bodies on the Kögel Box and Cool have come from our own sandwich panel competence centre in Duingen. Kögel can therefore guarantee the consistent high quality of its box trailers at an extremely attractive price.

KÖGEL COOL – PURFERRO QUALITY



Versions

- Freezer body
- Refrigerated body

KÖGEL BOX



Versions

- Dry freight, plywood, loadable onto rail transport
- Dry freight, plywood, 2-axle
- Mega, plywood
- Mega, plywood, 2-axle

KÖGEL BOX – PURFERRO QUALITY



Versions

- Dry freight, lightly insulated, loadable onto rail transport
- Dry freight, lightly insulated, 2-axle
- Mega, lightly insulated
- Mega, lightly insulated, 2-axle

Kögel demountable systems

Economic and efficient transport demands flexible concepts that are adapted to suit the requirements. Kögel offers versatile swap bodies for such applications in its product range. The Kögel demountable systems Swap, Combi and Port are genuine multitaskers that are characterised by their versatility.

KÖGEL SWAP (SWAP PLATFORM)



Versions

- Drop side with full tarpaulin, TIR
- Sliding tarpaulin
- Swap frame

KÖGEL COMBI SWAP BODY TRAILERS



Versions

- 22.5" tyres
- 19.5" tyres

KÖGEL COMBI CENTRE AXLE TRAILER



Versions

- 22.5" tyres
- 19.5" tyres

KÖGEL PORT (CONTAINER SEMI-TRAILER)

Versions

- 40'
- 40' Light
- Simplex, 40', rear extension
- Simplex, 40', rear extension 20' ISO central
- Simplex, 45', rear extension with overhang
- Duplex, 45', front and rear extension
- Tankplex 20', 1 x 20 ISO centred
- Port 45 Triplex



KÖGEL PRODUCT RANGES

Kögel Euro Trailer

The Euro trailer is an elongated trailer with an extra 1.3 m in length. This enables the transport of additional volume or extra pallets in order to reduce the fuel consumption and CO₂ emissions of truck fleets.



Versions

- Cargo Rail
- Mega Rail
- Box Rail
- Box – PurFerro quality Rail
- Cool – PurFerro quality Rail

Kögel Chassis

The manufacturers of special bodies like to work with Kögel chassis such as the Cargo, Mega, Cool, Light and Light^{plus}. Because the frames of the chassis, as with all Kögel trailers, have a nano-ceramic and cathodic dip-paint coating. This high-quality corrosion protection ensures a long service life.

KÖGEL CHASSIS CARGO



Versions

- Frame throat height 90 mm
- Frame throat height 120 mm
- Frame throat height 90 mm, 2-axle
- Frame throat height 120 mm, Coil

KÖGEL CHASSIS MEGA



Versions

- Frame throat height 90 mm

KÖGEL CHASSIS COOL



Versions

- Frame throat height 50 mm

KÖGEL CHASSIS LIGHT



Versions

- Frame throat height 180 mm

KÖGEL CHASSIS LIGHT^{plus}



Versions

- Frame throat height 120 mm

Kögel tipper trailer

The Kögel tipper trailer impresses with its low maintenance costs, excellent handling and high stability. The durable steel body can be changed more easily thanks to intelligent joining techniques and the tipper is ready for new deployment quicker. Also available with fully insulated trough on request.



Versions

- 3-axle, 24 m³ / 27 m³
- 2-axle, 24 m³ / 27 m³
- 3-axle, 24 m³
with fully insulated trough
- 2-axle, 24 m³
with fully insulated trough

Kögel flatbed trailers

Kögel offers several turntable flatbed trailers for the transport of diggers, construction machines and heavy working equipment for the construction industry. Whether it's with an offset plateau, such as for the transport of wheel loaders, or with a straight plateau for the transport of long cargo, the right flatbed trailer for you is certainly among them.

KÖGEL FLATBED TURNTABLE TRAILER



Versions

- 3-axle, straight plateau
- 3-axle, offset plateau
- 4-axle, offset plateau

KÖGEL FLATBED SEMI-TRAILER



Versions

- 3-axle, high sloped plateau

EXTRA-LONG, EXTRA-EFFICIENT

KÖGEL EURO TRAILER



The Kögel Euro Trailer – the original

Kögel is the inventor of the Kögel Euro Trailer, which has been extended by approx. 1.3 m, and has been meeting the demand for extended trailers among transport companies for more than ten years.

- 10% more volume and 1.30 metres extra length, providing space for up to four additional pallets
- The consumption values of Euro trailers are identical to those of a conventional 40-tonne vehicle
- 10% less fuel consumption, 10% less CO₂ emissions
- can be operated with conventional tractor units
- Tried-and-tested Kögel load securing systems can be used; body stability certified as standard (EN 12642XL)
- Surface treatment with nano-ceramic plus KTL
- A wide variety of equipment options, e.g. as Cargo Rail, Mega Rail, Box Rail, Box – PurFerro quality Rail or Cool – PurFerro quality Rail
- rail-loading facility

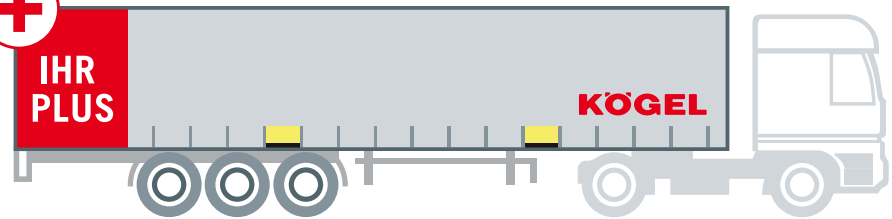
**YOUR BENEFIT:**

- + up to 10 m³ more volume*
- + 1.3 m length
- + space for up to four additional pallets in Cargo and Mega
- + space for up to seven additional pallets when loaded on two levels (Box and Cool)

KÖGEL EURO TRAILER PRODUCT PORTFOLIO

Available as

- Cargo Rail
- Mega Rail
- Box Rail
- Box – PurFerro quality Rail
- Cool – PurFerro quality Rail

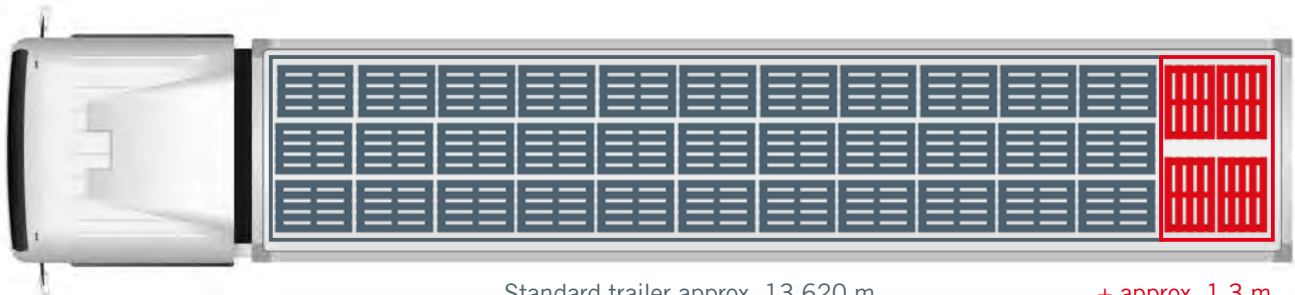
**IHR PLUS**

approx. 14.9 m semi-trailer

Semi-trailer truck

Total length of approx. 17.8 m

KÖGEL EURO TRAILER: **YOUR PLUS – LOADING AREA** ✓

Standard trailer approx. 13.620 m
33 Euro pallets+ approx. 1.3 m
+ 4 Euro pallets*
(+ up to 7 Euro pallets
with double level loading**)Kögel Euro Trailer approx. 14.920 m
37 Euro pallets total*

(up to 73 Euro pallets with double level loading**)

* Compared to a standard trailer

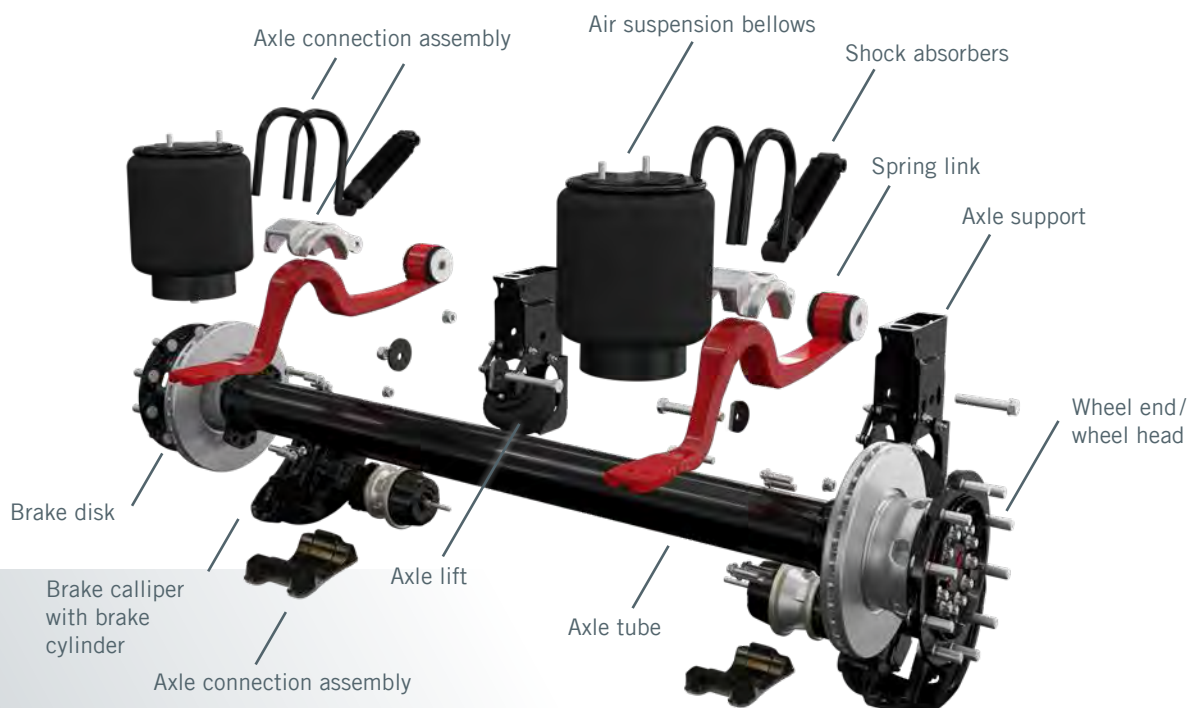
** Valid for Cool – PurFerro quality Rail, Box Rail and Box – PurFerro quality Rail

MAXIMUM SMOOTHNESS!

KÖGEL TRAILER AXLE KTA



The Kögel Trailer Axle is the integrated chassis system that forms the strong backbone of Kögel trailers. Specially designed for Kögel trailers, it further enhances the trailers' driving properties. This not only increases the payload of Kögel trailers, but also extends their service life due to higher levels of engineering expertise on the axle. The axle achieves optimum maintenance-friendliness, the main requirement of Kögel customers, and therefore also high cost-efficiency.



A PERFECT OVERVIEW OF YOUR TRAILER AT ALL TIMES

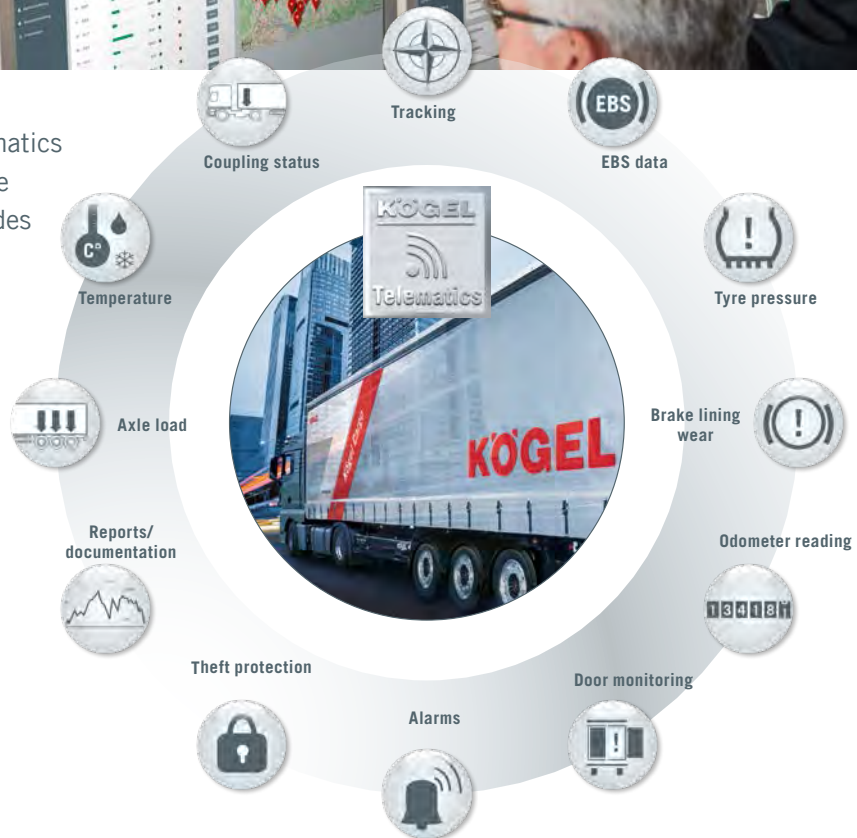
KÖGEL TELEMATICS



Kögel Telematics will get your vote! The innovative telematics system allows you to keep a firm eye on your trailer while it is on the road. It delivers data in real time* and provides information about the trailer's location, the open/closed status of the doors, the EBS data and much more.

The Kögel Trailer Telematic Module (KTTM) is connected to the diagnostic interface of the trailer brake system. In addition to trailer data, further data on every aspect of the trailer is integrated in the evaluation.

You can access data at any time via a structured, user-friendly web portal or via the "Kögel Telematics" app.



YOU CAN RELY ON US!

KÖGEL AFTER MARKET



We not only offer our customers technical innovations and engineering expertise, but also comprehensive, professional customer service. We offer high-quality trailers and outstanding service: Do you have a question, need spare parts quickly or have a complaint?

Kögel will provide you with quick and professional assistance – you can rely on us!

KÖGEL CUSTOMER SERVICE

Customer satisfaction is our top priority! We always want to provide you with the best advice and service. We provide quick, straightforward support with complaints and manage warranty claims competently. Please do not hesitate to contact either ourselves or our authorised service partners.

Our customer service division will provide you with advice and support:

Telephone + 49 1805 563435 - 55, Fax + 49 731 9454 - 23494

Email: aftersales@koegel.com



KÖGEL 24-HOUR BREAKDOWN SERVICE



We provide rapid assistance in the event of a breakdown. You can call our Kögel breakdown assistance hotline from anywhere within Europe 24 hours a day, 365 days a year. We will make sure you arrive promptly at your destination with minimum fuss.

The 24-hour Kögel hotline offers you the following services: If the worst comes to the worst, we will tow your trailer away and place it in storage for you. We offer breakdown assistance for tractor units and trailers. Your refrigeration unit has broken down or your load drop sides have been damaged? No problem! Here too we will be pleased come to your assistance at short notice and repair the damage. Whether the problem is caused by an accident or by external forces – you can contact the Kögel 24-hour hotline at any time!

KÖGEL PARTS



Quality and speed are the pillars that form the basis of efficient transportation. Our Kögel spare parts division offers you all the spare parts and accessories that you need first hand. Whether it's for your Kögel product or your product from another commercial vehicle manufacturer – we are optimally prepared to meet your needs with our extensive product portfolio.

Order quickly and easily from the Kögel Parts online shop

You can purchase any spare parts you need quickly, at any time, from our Kögel Parts online shop. Benefit from our quick and easy order process: www.koegel-parts.com.

Kögel Parts shop at the logistics centre in Ulm

From Monday to Friday between 8 a.m. and 5 p.m., you also have the opportunity to purchase any items you need or collect ordered items directly from our “Kögel Parts” shop in Ulm.

PRECISELY THE TRAILER YOU NEED

KÖGEL INDUSTRY SOLUTIONS

With our versatile product and accessories programme, our innovative products for load-securing, the special technologies from our own development department and extensive industrial expertise, we can realise made-to-measure transport solutions for any application, right up to highly individual special designs.

..... Automotive



Low tare weight, optimum volume, simple rapid loading, specific securing for pallet cages, pallets and small-sized carriers and an excellent cost to benefit ratio are Kögel's answer to the requirements of delivery traffic in the automotive industry.

..... Paper/Container



The sturdy vehicle frame by Kögel is designed for high concentrated and distributed loads. In combination with the non-slip load-carrying flooring, into which the roller rail systems are recessed, and special patented load-securing systems, Kögel offers everything required to safely transport heavy rolls of paper.

..... Rail



Kögel also offers vehicles that are approved for rail loading, with special axles, reinforcements of the frame and gripper edges.

..... Boards and palletized goods



The continuously increasing range of cargoes, the weight and high centre of gravity of the loads demands state-of-the-art engineering for effective load-securing. Kögel offers a wide range of different special solutions for such applications.

..... Tyre transport



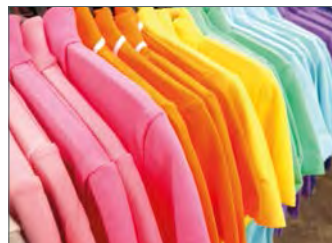
Kögel vehicles comply with the certification DIN EN 12642 Code XL for load-securing. The vehicle body with additional equipment can be used to transport tyres stacked, arranged and packed with a technical payload up to 18,000 kg.

..... Ferry/RoRo



For RoRo traffic, Kögel offers specially adapted vehicle equipment, which has been optimised based on extensive experience. Important features include easily accessible, sturdy lashing points and generously dimensioned free spaces.

..... Garment transport



A special perforated rail system permits this type of transport. The corresponding rods are also provided. Transport of hanging garments and transport of garments that must not be folded can therefore be easily transported.

..... Electronics



This allows you to transport electronic goods of all types under the best of conditions. These products in particular are particularly sensitive to impacts or pressure and require special transport solutions; where once again, Kögel meets all the essential requirements and more.

Kögel offers specialised trailer configurations with practical solutions for many different industries.

..... Frozen and fresh delivery



Foods are delicate products that require professional transport solutions. Kögel is a specialist in the field of temperature-controlled transport and can fall back on decades of experience in this sector. Its compliance with the strictest of international quality standards makes Kögel a qualified partner for the food industry and for the food trade.

..... Pharmaceutical products



Pharmaceutical products are especially sensitive. Here specific temperature ranges must be maintained within tight limits. All pharmaceutical products, including delicate biotech medicines, can be transported in a continuous refrigerated chain using Kögel vehicles. In this way, we can protect the effectiveness of the medicines using tried-and-tested body technologies. Pharmaceutical certification is also available for different versions of Kögel refrigerated trailers.

..... Plants



Whether it's cut flowers, pot plants or ornamental plants – Kögel has years of experience in body construction for the fresh transport of green goods. Reliable refrigeration technology and continuous temperature checking ensure coordinated and problem-free transport, ensuring that fruit and vegetable loads arrive as fresh as can be.

..... Temperature-sensitive goods



These cargoes are both delicate and valuable, resulting in special requirements for transport security and safety. The made-to-measure services and decades of tried-and-tested innovative forces mean that Kögel is your go-to partner on the international marketplace.

..... Beverages



High payload and intelligent load-securing, including for the securing of partial loads, time-saving loading and unloading, and high levels of efficiency in use, are the most important requirements that Kögel meets with flying colours.

..... Safety transports



Kögel offers a wide range of different special solutions for such applications. The wide range of variants for safety-relevant transport with special requirements allows us to offer customer-oriented equipment.

..... Construction



Transport of construction vehicles.

..... Construction



Transport of construction materials e.g. bulk material.

YOUR PLUS – QUALITY ✓



Safety

Complex components guarantee a high degree of active and passive safety: specially developed panelling elements on the frame for improved aerodynamics, underride guard compliant with the new EC Directive, standard load-securing as per EN 12642 XL, RSS for greater driving stability and safety-optimised height adjustment valve (lifting roof with BG support). Kögel trailers also have outstanding trailing characteristics.



Electronic system and lighting

EBS is fitted as standard. Full LED lighting is available to provide a long life and minimise power consumption.



Underride guard

The reinforced side underride guard increases safety levels for all road users. It can be installed and replaced separately.

Light mounting

The light mounting is made of impact-resistant plastic and guarantees 100% corrosion protection. It can be installed and replaced separately.



Corrosion protection

Nano-ceramic plus KTL coating, the most modern and highest quality industrial surface treatment on the market provides the same outstanding properties as the coating previously applied using zinc phosphate, but it is more environmentally friendly and provides a better energy balance. The durable, clean surface coating can be repainted at any time.



Service

Visit www.koegel.com to take advantage of our comprehensive services at any time and from anywhere. Repair and warranty services can be managed conveniently online. Our Kögel Hotline Assistance is available around the clock in many European languages.



Extensive tests

All trailer components are tested to the highest standards in static and dynamic tests.



Environmental protection and sustainability

Kögel trailers make an active contribution to reducing fuel consumption and environmental pollution: The aerodynamics are optimised, noise emissions are reduced, and strict guidelines are observed during production to protect the environment and ensure that the materials used can be recycled.



Load-securing and body stability

Kögel fulfils all stability requirements for reinforced bodies according to EN 12642 XL. Securing the load on trailers with this certificate is very simple: with a form-locked load secured at the rear, the body absorbs all forces generated thanks to the driving dynamics according to VDI 2700.

Kögel Assistance 24h Hotline
00800 8285 88-88

KÖGEL SYSTEM SOLUTIONS



Kögel CLIMATEX

The Kögel cool air system



Kögel COILFIX

The Kögel load-securing system for coils and split strips



Kögel PurFerro

the Kögel sandwich technology for box and refrigerated trailers



Kögel KTA trailer axle

A low-maintenance axle that is perfectly adapted to Kögel trailers. It enhances the trailers' driving properties, thanks to the "double suspension", made of a soft rubber bearing, and spring steel wishbone.



Kögel Telematics

Kögel Trailer Telematics module + Kögel Telematics web portal



Kögel Strong & Go

The innovative NOVUM generation body combined with a Kögel integral roof tarpaulin and reinforced with stiffening belts

KÖGEL SPONSORING AND CO-OPERATION



European champion, Castrol Team Hahn Racing, puts its trust in Kögel

As of the 2012 season, Kögel has supported Castrol Team Hahn Racing in the FIA European Truck Racing Championship – the top European class of truck racing. Kögel recently extended its agreement with the European Championship team from Altensteig, and will thus be continuing this close, long-term collaboration. The team uses a Kögel turntable trailer and two swap bodies completely tailored to their requirements. The robust swap bodies help the team optimally deal with the logistics and representation tasks of the racing season. One of the swap bodies is used as a transport and storage solution for the catering crew. The swap body has air-conditioning for the summer months. The second swap body is used by the service team for storing spare parts. It also houses a separate office/quiet room for European Champion Jochen Hahn. The walls are made of sandwich panels supplied by the Kögel competence centre in Duingen, Kögel PurFerro GmbH & Co. KG.



ABOUT THE COMPANY'S PIONEERING WORK

TRUE KÖGEL STORIES

Did you know that Kögel is the manufacturer that set market trends in box bodies and in particular in refrigerated boxes as early as the 1950s?

The designers under F. X. Kögel have always been pioneers of technical development. At the beginning of the 1950s, Kögel produced small box bodies made of light metals, which served as the starting point for later refrigerated vehicles. True to the motto "always one step ahead", Kögel developed the method of full-polymer sandwich construction in parallel. F. X. Kögel has been personally involved in the development and application of this system. In 1961, the first refrigerated semi-trailer with a self-supporting full-polymer structure was presented. These trailers featured the "polycell" full polymer structures and an air channel. This produced a K-value of only 0.25 with a wall thickness of only 100 millimetres. Continuous further development of the "wet-in-wet" polymer construction allowed Kögel to bring the first pallet-wide refrigerated semi-trailer to the market in 1969. In 1976, Kögel presented the first refrigerated semi-trailer with a self-supporting structure. From the beginning, the company has based its box design on high-quality and innovative solutions and has consistently advanced the

construction of refrigerated trailers through its products. Since 2007, Kögel has also offered the Euro trailer, which has been extended by 1.3 metres, as a refrigerated box semi-trailer. Kögel has recently attracted attention with the purchase of Kögel PurFerro GmbH & Co. KG at the end of 2011.

This sandwich panel competence centre is located in Duingen and now provides the superstructure components for the premium refrigerated box semi-trailer, the Cool – PurFerro Quality, which was introduced by Kögel in 2012.



Did you know that Kögel was already a specialist in the tipper sector in the 1930s?

Kögel also has a long tradition in the construction sector. Tipper superstructures have been a genuine Kögel speciality since its early days and for many decades subsequently. During the period after 1935, Kögel produced the first tipper bodies on lorries plus two-axle trailers, in addition to its agricultural trailers. During and after the war, the primary demand was for tippers and farm trailers on pneumatic tyres pulled by horse or tractors. In the 1950s, Kögel already attracted attention with its semi-trailers with two independent tipping bridges and a tipper semi-trailer with a steel body. This was followed by the first self-supporting round-body aluminium trailer in 1966. From the 1970s onwards, tandem tipper trailers and three-axle three-way tipper trailers dominated production. In 2002 Kögel presented the first component tipper body in a lightweight yet high-strength bimetallic design. This idea of a modular concept was used as the basis for the Kögel 2-axle and 3-axle tipper trailers, having load

volumes of 24 m³ and 27 m³ as available today. Thanks to the intelligent joining technology, customers can design their own tippers with various wall and floor thicknesses to match the deployment requirement. The floor and back wall of the Kögel tipper trailer are made from hardened and tempered Hardox 450 steel and the side walls from high-strength S700 sheet steel.



KÖGEL TIMELINE 1934 – 2019



1934 Apprentice Franz Xaver Kögel takes over his former employer's wagon-making business



1961 First refrigerated semi-trailer entirely made of plastics



1966 First self-supporting aluminium round trough

Trailers to meet growing agricultural demand

1935



Kögel invents the interchangeable open body with outriggers



1965 Development of special vehicles for concrete components

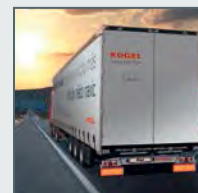


First pallet-wide refrigerated semi-trailer

1969



2006 Launch of "MAXX", "Phoenixx" and "foxx" brands



First mega-trailer with a total height of 4 m



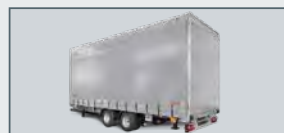
2011 New development of a tipper trailer with a novel modular design

Refrigerated semi-trailer extended by 1.3 m

2007



2010



Expansion of the product palette with the Mega centre axle trailer and the Kögel Port Multiplex



Two strategic support pillars in the Kögel product portfolio: Construction and forwarding industry

Acquisition of Kögel PurFerro GmbH & Co. KG and presentation of the Kögel Cool – PurFerro quality

Development of the hybrid quick-opening mechanism with pneumatic tarpaulin locking

2012





1974 Patented central-axle tipper trailer



"Weasel", the first handling vehicle for swap bodies



2005 Mega trailer extended by 1.3 m

1982 Lightest series production semi-trailer in the world



1985 First integral box body for the courier-express-package sector

2001 First cathodic dip-paint coating system with zinc phosphating



2013 Recipient of the Trailer Innovations Award



2014 Recipient of the Best Practice Award



2016 Introduction of Light^{plus}: new external frame and body design



2018 Introduction: NOVUM generation. Recipient of the Trailer Innovations Award: NOVUM, Bavaria's Best 50 award winner



First registration of a trailer with a CNG module, that acts as an additional storage unit for natural gas



Kögel celebrates 80 years of commercial vehicle experience



"Best Logistics Brand" award Third place in Trailers & Bodies category



Kögel celebrates 85 years of commercial vehicle experience

KÖGEL

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