

# Kögel Company Brochure



















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The Kögel Management



#### **Thomas Heckel**

has a Bachelor Degree in Business Economics. 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 head-quarters in Gersthofen. Since 2009 he has been the Managing Director for the departments Purchase, Controlling, Finance, Transport and Foreign Trade at Kögel Trailer GmbH & Co. KG.



### Thomas Eschey

is a qualified mechanical engineer and mechanical technician.

He has been a Humbaur design engineer and subsequently Technical Director since 1995. He currently manages Kögel's Production, Technology, Industrial Engineering and Quality Management.



### Petra Adrianowytsch

has a Bachelor Degree in Business Economics (University of Applied Sciences). Since the start of 2015 she has been the Managing Director at Kögel and is responsible for the departments of Company Development, Human Resources, Marketing/Communication and IT. She is familiar with the trailer market and our company as a result of her consulting work for Kögel in 2012 and



### Massimo Dodoni

owns a degree as Master 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 Italy, Russia and Eastern Europe, 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, where he is responsible for sales in Germany,

Austria, Switzerland and Western Europe, Financing, Full Service and Telematics, and Used Vehicles.

### **Editorial**

### Dear readers,

Kögel – a brand with over 80 years of tradition – is at heart of things with its unmistakable experience and competence throughout Europe. I have, with the takeover of Kögel in 2009, taken on an active entrepreneurial role, that provides the brand and the company with the stability and continuity that they have earned. 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 ensuring a good reputation, even internationally, that characterise modern road transport and the construction sector. As a medium-sized characterised entrepreneur, I am fully aware of this responsibility and our customers can rely on that.

le Allenseur



Ulrich Humbaur, owner of Kögel



# Why so much talk about the art of engineering?

### Because there is genius in it and because prowess is behind it.

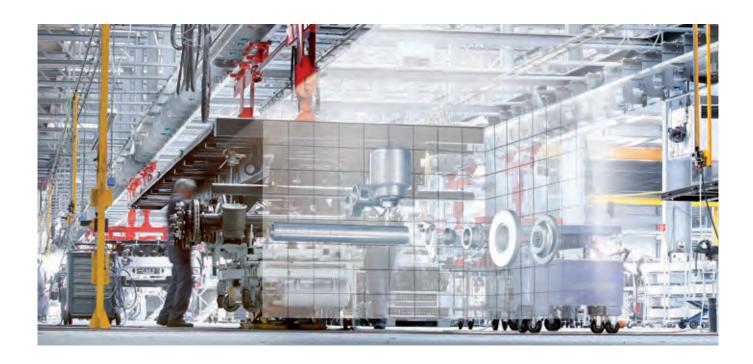
Comprehensive competence and experience, creativity and openness, consistent marketing and customer orientation: these are the foundation that the innovative force is based on which Kögel uses to develop and implement transport solutions. State-of-the-art design and simulation software are used – however innovation starts in the mind and a pencil sketch is still generally the first step in the complicated process from the basic idea to the perfect end product.

A special feature at Kögel is the close collaboration with the customer throughout all phases of development to be able to always keep the practical requirements in mind and to gather the important impulses from the marketplace: Approaches to solutions are discussed with customers, prototypes are tested together and customer feedback is incorporated into further development and optimisation. All components are tested in our own experimental department under extreme conditions which go far beyond the normal requirements. The vehicles are subjected to intensive driving and rough road tests, in rain, snow and ice and

under a scorching sun. This is because only products that pass these strenuous tests will be capable of withstanding all stresses and strains of day-to-day use for many more years to come. Kögel places great store on high-quality materials, extraordinary workmanship and quality-oriented sequences throughout the production process.



The most important innovation factor at Kögel consists of the competent, creative and committed members of staff.



### Kögel Philosophy, Visions, Goals

### Innovation leader, Kögel: yesterday, today and tomorrow

Since 1934 Kögel, as an innovative leader, has been setting the milestones in the development and manufacture of contemporary trailer solutions that find a lot of interest both nationally and internationally in truck transport circles.

The highlights in the history of Kögel are the ground-breaking innovations with which Kögel time and again sets innovative market standards, such as the first refrigerated semitrailer in fully plastic construction, the first swap body platform with support legs, the first self-supporting aluminium tipper body or the patented central axis tilting trailer, the first lightweight semi-trailer and the first cathodic dippaint coating plant for optimum corrosion protection of vehicle frames.

Innovations from the Kögel company have been characterising the modern road commercial transport for decades traditionally and have finally become the sector 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 their leadership in innovation. In combination with in-house know-how, the requirements of our customers in the marketplace successful solutions with added value in many aspects. Kögel focusses deliberately on benefits and advantages to create long-lasting added value for the forwarding and construction sectors.

### **Innovations yesterday:**



First refrigerated trailer in fully plastic construction



First self-supporting aluminium tipper body



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

### **Innovations today:**



### Kögel Euro Trailer:

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



#### Kögel Trailer with CNG Module:

- 70 % less CO<sub>2</sub> emission in regional and long-distance transport
- Range over 1,000 kilometres
- Increased payload as a result of CNG Module



### PurFerro:

The Kögel sandwich panel technology for box and refrigerated box vehicles

#### Made-to-measure products

Kögel has always offered a product portfolio for made-to-measure solutions for the forwarding and construction industries and is thus one of the leading global trailer manufacturers. Kögel reacts with traditional rapidity and skill to customer requirements and thus provides today the solutions for the transporting tasks of tomorrow. Kögel still relies today on the strengths that once made the company big: Passion for transport. Quality characterised by engineering. Innovations that have earned this name because they provide the customers with benefits. And the reliability of an owner-led family company with long-term perspectives. In addition, Kögel sets great store by the continuous

development of their products and services to be able, in this way, to guarantee first class quality and optimum trailer availability.

The targets for the next few years are thus clearly established: healthy growth with high-quality trailers at the optimum price-performance ratio.





#### Kögel Mega – perfect height:

- Internal usable height of 3 m at a total overall height of 4 m
- 12 t usable semi-trailer load
- Weight optimisation by the most modern manufacturing methods

### Kögel Tipper Trailer:

- Wear-resistant round steel tipper body with 24 m³ or 27 m³ capacity, as well as fully insulated tipper body available
- Modular concept: bolted
- Frame, chassis and tipper body with nano-ceramic plus KTL coating as standard



### Kögel Lightplus:

- Payload-optimised and weight-optimised frame and body
- More internal height thanks to the reduction of frame neck by 60 millimetres compared to the previous model
- Optional features for further weight-reduction

### For the environment:



Energy efficiency



Reduction in CO<sub>2</sub> emissions

Kögel customers today and in the future will profit from our competence as the innovative leader in the market. Stringent customer requirements, practice-oriented accessories and equipment solutions, and thus convincing advantages in economy, quality and safety by patented future-proof innovations characterise the Kögel vehicles of tomorrow.

### Kögel Location overview

With contact partners throughout Europe, Kögel is available for their customers for analysis of their specific requirements and for advice concerning the complete Kögel product portfolio for the forwarding and construction industries.



### Kögel Trailer GmbH & Co. KG (Company Headquarters)

Location: Burtenbach/Germany

Production of trailers, Cathodic dip-paint coating

### Kögel Trailer GmbH & Co. KG (After Sales)

Location: Neu-Ulm/Germany



### Kögel s.r.o.

Location: Chocen/Czech Republic Frame manufacture and trailer assembly



### Kögel Trailer RU

Location: Moscow/Russia Trailer assembly



#### Kögel ITALIA S.R.L.

Location: Verona Sales and After Market



### Kögel BeNeLux B.V.

Standort: Zwolle Kögel Used

### Kögel PurFerro GmbH & Co. KG

Location: Duingen/Germany Premium sandwich panels

### KÖGEL =

### Kögel in Spain

Location: Cartes/Cijuela/Gallur/Spain Trailer assembly

### KÖGEL 느

### Kögel in Bulgaria

Location: Burgas/Bulgaria

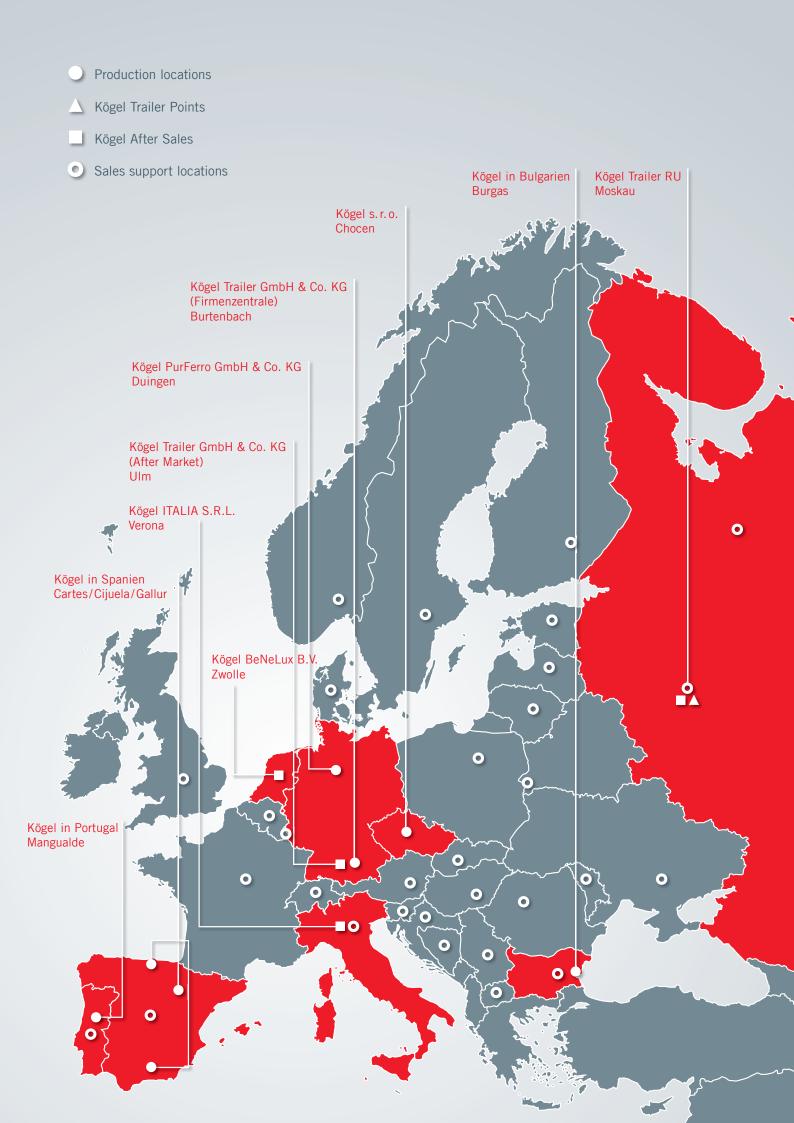
Trailer assembly

### KOGEL 💹

#### Kögel in Portugal

Location: Mangualde/Portugal

Trailer assembly





## Kögel Trailer GmbH & Co. KG

### in Burtenbach

Products: Trailers

Staff: approx. 1,300 employees

Company premises: 465,000 m<sup>2</sup>

Production area: 47,000 m<sup>2</sup>

Production: 17,500 Trailer p. a.

Export proportion: about 80%

Turnover: approx. € 530 million

(Plan 2018)



#### Company Headquarters and Main Production Facility of Kögel Trailer GmbH & Co. KG (Bavaria)

Since 1993 Kögel has been at the easily-accessible location Burtenbach. This is the heart of the company. Alongside the company headquarters with its offices, there is the main production facility with several assembly shops and the largest trailer cathodic dip-paint coating plant in Europe. The works premises also includes parking lots 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 headquarters in Bavaria is a top-level development and production site. Kögel is continuing to invest in the Burtenbach facility, of course including the manufacturing facilities in order to supply their customers with products of the highest quality. The production facility in Burtenbach ensures that Kögel is ideally prepared, for the coming years as well. Because the Kögel premises, that were extended to almost 55 hectares in 2011, can be extended even more over the limits of the current premises if necessary.











### **Coating process**

### Cathodic dip-paint plant

### 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-cutting edges. After mechanical cleaning, the frames are ready for enhancement — they pass through a total of ten different baths:

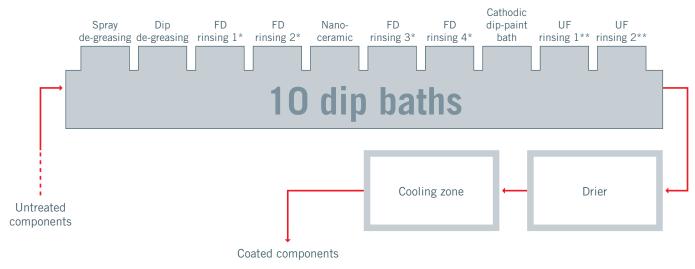
In the first step the components are chemically cleaned as well in two de-greasing baths and two rinsing baths. From there we go directly to the nano-ceramic bath where a nano conversion layer is formed, consisting of copper and zirconium. This layer is responsible for **corrosion protection** and for the adhesion of the cathodic dip-paint coating. After rinsing twice, the components arrive at the cathodic dippaint coating. Here we apply a current to the components, and the pigments and binders are deposited on the component. 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 component is taken to the cathodic dip-paint coating drier. During burning-in, the special paint hardens and forms a stable structure. After this, the components easily withstand a 504-hour saltspray test in accordance with DIN ISO 50021 SS.



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



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



<sup>\*</sup> Rinsing with FD water (fully desalinated water)

<sup>\*\*</sup> 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 Chocen

Products: Baseframes for Kögel Trailers

Company premises: 250,000 m<sup>2</sup>

Production area: 27,785 m<sup>2</sup>

Production: around 450 frames per week

additional capacity for trailer assembly; 80 per week

### The Kögel factory in Chocen (Czech Republic)

The Kögel factory in Chocen is one of the most modern production facilities for chassis frames and trailers. It is around 250 kilometres from Prague and, using the most modern welding technologies, we weld together the frames for all vehicles in the Kögel product range, in accordance with German quality standards. 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 manufactured refrigerated vehicles, amongst other things. Kögel then bought the factory in 1996. The works is outstanding for its long tradition, extensive know-how and high-quality work. Chocen has a good name in the business and is known for top quality chassis production.











### Frame manufacture

### Frame manufacture in Chozen

The chassis for platform trailers, box trailers and tipper vehicles as well as Euro Trailers and demountable systems are produced here using the most modern 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 Families

### **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 extended. Among other things, Kögel offers the tried and tested platform trailers Kögel Cargo, Kögel Light, Kögel Light<sup>plus</sup>, 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<sup>plus</sup> 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.



### **Products for the construction industry**

For the construction industry, Kögel produces the Kögel Multi flat semi-trailer, the Kögel flatbed trailer with pivot plate 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 trough with 24 m³ or 27 m³ 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 Product range

### Kögel Platform Trailers

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

	Vehicle type	Versions
MODEL 1	Kögel Cargo	<ul> <li>Sliding tarpaulins</li> <li>Side wall with full tarpaulins, TIR</li> <li>Sliding tarpaulins, 2-axle</li> <li>Rail-loading, sliding tarpaulins</li> <li>Coil, sliding tarpaulins</li> <li>Coil, rail-loading, sliding tarpaulins</li> <li>Also available with FlexiUse body</li> </ul>
	Kögel Light	<ul> <li>Sliding tarpaulins, TIR</li> <li>Coil, Sliding tarpaulins, TIR</li> <li>Also available with FlexiUse body</li> </ul>
ROOEL	Kögel Light <sup>plus</sup>	- Sliding tarpaulins
KOGEL	Kögel Mega	<ul> <li>Sliding tarpaulins, TIR</li> <li>Side wall with full tarpaulins, TIR</li> <li>Coil, sliding tarpaulins, TIR</li> <li>Rail-loading, sliding tarpaulins</li> <li>Super-light, sliding tarpaulins, TIR</li> <li>Sliding tarpaulins, 2-axle</li> <li>Also available with FlexiUse body</li> </ul>
KOGEL	Kögel Mega – perfect height	- Sliding tarpaulins
	Kögel FlexiUse	- Sliding tarpaulins
	Kögel Multi	<ul> <li>Frame height 120 mm</li> <li>Frame height 90 mm</li> <li>Frame height 90 mm, 2-axle</li> <li>Frame height 90 mm, Mega</li> <li>Frame height 120 mm, Coil</li> <li>Frame height 180 mm, Light</li> </ul>

### **Kögel Box Trailers**

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

	Vehicle type	Versions
KOGEL	Kögel Cool – PurFerro quality	<ul><li>Freezer body</li><li>Refrigerated body</li></ul>
NOCEL	Kögel Box – PurFerro quality	<ul> <li>Dry freight, Plywood, rail-loading</li> <li>Dry freight, Plywood, 2-axle</li> <li>Mega, Plywood</li> <li>Mega, Plywood, 2-axle</li> </ul>
Noder Noder	Kögel Box – PurFerro quality	<ul> <li>Dry freight, slight insulation, rail-loading</li> <li>Dry freight, slight insulation, 2-axle</li> <li>Mega, slight insulation</li> <li>Mega, slight insulation, 2-axle</li> </ul>

### Kögel Demountable Systems

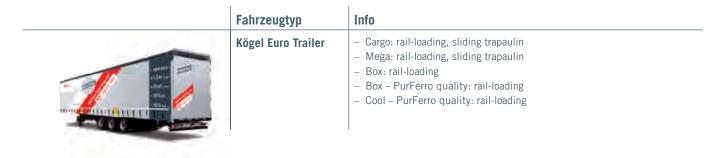
Economic and efficient transport demands flexible concepts that are adapted to suit the requirements. Kögel has versatile swap talents for this application in there range. The Kögel demountable systems Swap, Combi and Port are genuine multi-talented and are characterised by their versatility.

1	Vehicle type	Versions
	<b>Kögel Swap</b> (Swap platform)	<ul> <li>Side wall with full tarpaulins, TIR</li> <li>Sliding tarpaulins</li> <li>Swap frame</li> </ul>
	Kögel Combi Swap body trailer	- 22.5" tyres - 19.5" tyres
	Kögel Combi Centre axle trailer	- 22.5" tyres - 19.5" tyres
	Kögel Port (container semi-trailer)	<ul> <li>40'</li> <li>40', Light</li> <li>Simplex, 40', rear extension</li> <li>Simplex, 40', rear extension 20' ISO central</li> <li>Simplex, 45', rear extension with overhang</li> <li>Duplex, 45', front and rear extension</li> <li>Tankplex, 1 x 20 ISO central</li> </ul>

### Kögel Product range

### Kögel Eurotrailer

The Euro Trailer is extended by 1.3 m. It thus allows for the transport of additional volume or additional palettes, reducing the fuel consumption and  $CO_2$  emmissions of truck fleets.



### **Kögel Chassis**

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

	Vehicle type	Versions
-	Kögel Chassis Cargo	<ul> <li>Frame throat height 90 mm</li> <li>Frame throat height 120 mm</li> <li>Frame throat height 90 mm, 2-axle</li> <li>Frame throat height 120 mm, Coil</li> </ul>
	Kögel Chassis Mega	- Frame throat height 90 mm
7000	Kögel Chassis Cool	- Frame throat height 50 mm
000	Kögel Chassis Light	- Frame throat height 180 mm
.000=	Kögel Chasshis Light <sup>plus</sup>	- Frame throat height 120 mm

### **Kögel Tipper Trailers**

The Kögel tipper trailer impresses with its low maintenance costs, good handling and high stability levels. The durable steel body can be changed more easily as a result of intelligent jointing techniques – the tipper is ready for new deployment quicker. Also available with fully insulated trough on request.

	Vehicle type	Versions
	Kögel Tipper Trailer	– 3-axle, 24 m³ / 27 m³
		– 2-axle, 24 m³ / 27 m³
		- 3-axle, 24m <sup>3</sup> with fully isolated tipper body
45661		– 2-axle, 24m <sup>3</sup> with fully isolated tipper body

### **Kögel Flatbed Trailers**

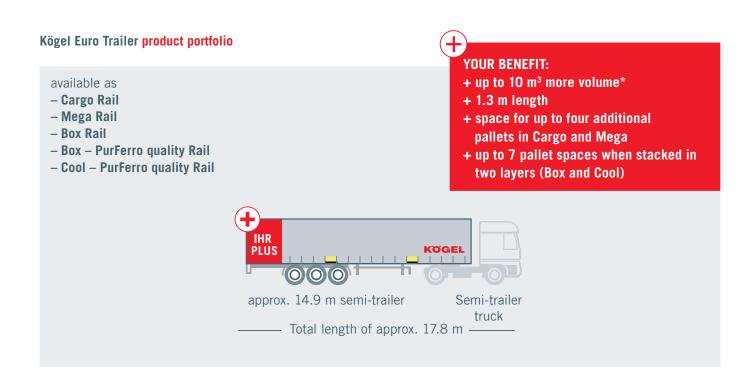
Kögel offers several turntable flatbed trailers for the transport of diggers, construction machines and heavy working equipment for the construction industry. Whether with stepped platform, such as for the transport of wheel loaders or with straight platforms for the transport of long cargo, the right flatbed trailer is certainly there for you.

	Vehicle type	Versions
The second	Kögel Flatbed Turntable Trailer	<ul> <li>3-axle, straight platform</li> <li>3-axle, stepped platform</li> <li>4-axle, stepped platform</li> </ul>
	Kögel Flatbed Semi-Trailer	- 3 axle, high angled bed

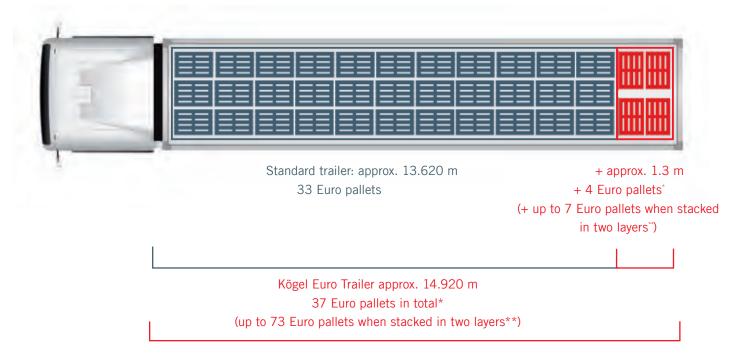


Kögel is the inventor of the Kögel Euro Trailer, which has been extended by approx. 1.3 m, and has been meeting the demand for extended trailers among transport companies for more than ten years.

	Vehicle type	Info
HILLIA TO THE TOTAL TO THE TOTAL TOT	Kögel Euro Trailer	<ul> <li>10% more volume, 1.30 metres longer, providing space for up to four additional pallets</li> <li>The consumption values of Euro Trailers are identical to those of a conventional 40-tonne vehicle</li> <li>10% less fuel consumption, 10% less CO<sub>2</sub> emissions</li> <li>Can be operated with conventional tractor units</li> <li>Tried and tested Kögel load securing systems can be used; body stability certificated as standard (EN12642XL)</li> <li>Surface treatment with cathodic dip-paint coating plus nano ceramic</li> <li>A wide variety of equipment options, e.g. As Cargo Rail, Mega Rail, Box Rail, Box – PurFerro quality Rail or Cool – PurFerro quality Rail</li> <li>Rail-loading facility</li> </ul>



### Kögel Euro Trailer: Your benefit - loading area



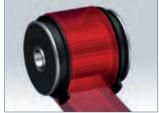
<sup>\*</sup> Compared to standard trailers

<sup>\*\*</sup> Valid for Cool – PurFerro quality Rail, Box Rail and Box – PurFerro quality Rail

### Kögel Trailer-Axle KTA



The Kögel trailer axle is an integrated chassis system that forms the strong backbone of Kögel vehicles. 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, also resulting in high cost-efficiency.



The Art of Engineering

"Double suspension" consisting of rubber bearings in combination with an elastic spring link made from forged spring steel



The Art of Engineering

A sophisticated brake ventilation system: specially designed ventilation slots in the wheel end prevent overheating and subsequent expensive damage



The Art of Engineering

The unique new axle connection enables compatibility with all standard axle brands.



**Durability** 

Maintenance-free, closed compact bearing prevents the ingress of dirt



A low-maintenance product

Wear parts can be quickly and easily replaced



Safety

Sensitive transported goods are protected by means of optimum suspension and outstanding driving characteristics



### Safety

Outstanding brake performance and service life as a result of using brakes that have been tried and tested over many years, with optimised brake pads and brake discs



Safety

Zero-stress play of forces, and protection against breakage due to axle tube being forged from a single piece, without any joins

## Kögel Telematics

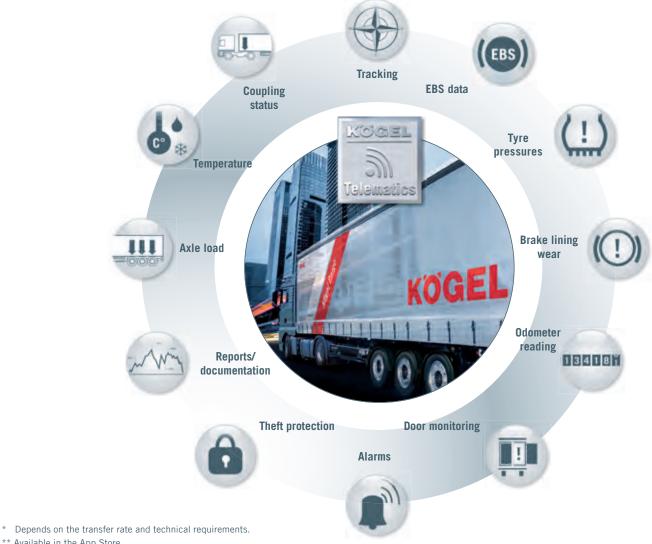
### a clear overview of your trailers, at all times

You'll be impressed by Kögel Telematics! The innovative Telematics system enables you to always have a full overview of your trailers "on the road".

It provides data in real-time\*, including information about the location of the trailer, the cooling situation, the opening status of the doors, EBS data, and much more. The KTTM Kögel Trailer Telematics module is linked to the diagnostic interface of the trailer brake system. Alongside vehicle data, additional data relating to the trailer is also integrated into the assessment.

Access the data at any time using a structured and userfriendly web portal, or via the "Kögel Telematics" app\*\*.





<sup>\*\*</sup> Available in the App Store.

### Kögel Customer Service –

### providing consistently good advice throughout Europe!

Customer satisfaction is always 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.

We have around 500 service partners across Germany at your disposal as well as more than 400 authorised workshops in Europe. Our partners include reputable truck manufacturers, such as Mercedes-Benz, MAN, Scania and Iveco.

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

Fon +49 1805-563435-55 Fax +49 731 9454-23494 E-Mail aftersales@koegel.com



# Kögel 24h breakdown assistance hotline –

### we'll get you back on track!

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 24h 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! We would be please to come to your assistance quickly and repair the damage.

Whether caused by an accident or external forces - you can contact the Kögel 24h Hotline at any time.

To be able to provide assistance as widely as possible, the Kögel Breakdown Service is available in eight languages: English, German, French, Spanish, Polish, Russian, Turkish and Romanian. In almost all European countries you can drive without having to worry because you are able to rely on us at all times.



### Kögel Parts –

### quality and speed to your advantage!

Quality and speed are the pillars that form the basis of efficient transportation. Our Kögel parts division offers you all the 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 ideally prepared to meet your needs with our extensive product portfolio.

Our central parts warehouse in Ulm has 6,000 m² of storage space and is ideally set up to cater for your needs as well as guaranteeing maximum availability of all spare parts throughout Europe. Our sales department keeps approximately 8,500 different items in stock. Orders for items that are kept in stock are dispatched the same day. Delivery is tailored to suit your preferences, either via an overnight express service, parcel post or forwarding company.

Whether wear parts for the bogie and body, or accessories, Kögel parts are impressive with a perfect fit, maximum security and increase the resale value of your trailer.

### First-class service when you order a part

So make use of the most direct way to get your parts: The Kögel parts team would be glad to help you select the right item.



### Kögel Branch solutions

### Precisely the trailer you need

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

### Paper/Container



The sturdy vehicle frame by Kögel is designed for high point and area loads. In combination with the non-slip load-carrying flooring, which the roll rail systems are recessed into, and special patented load-securing systems, Kögel offers everything required to safely transport heavy rolls of paper or containers/room cells.

### Rail



Kögel also offers vehicles that are approved for rail loading. With special reinforcement in the frame and the body, protection plates at the gripper points and railway underride guard.

### Boards and palletised goods



It takes state-of the -art engineering know-how to effectively secure the wide range of different types of cargo, weights and loads with a high centre of gravity. Kögel offers a wide range of different special solutions for this application.

### Tyre transport



Kögel vehicles comply with the certification DIN EN 12642 Code XL for load-securing. The vehicle body with additional equipment makes tyre transport possible, stacked, dressed and graded with a technical payload of 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 are easily accessible and 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 which must not be folded thus does not present a problem.

### **Electronics**



In this way you can transport electronic goods of all types under the best of conditions. These products are particularly impact and pressure sensitive and need a special transport solution; here again, the significant requirements are fulfilled by Kögel in an exemplary manner.

### Frozen and fresh food services



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

### **Beverages**



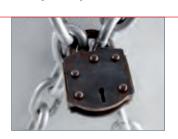
High payload and intelligent load-securing, also for securing partial loads, timesaving loading and unloading and high levels of efficiency in use are the most important requirements that Kögel meets with flying colours.

### Medical products



Pharmaceuticals are particularly delicate. Here the special temperature ranges must be held 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 also available for different versions of Kögel refrigerated trailers

### Safety transports



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

### **Plants**



Whether cut flowers, pot-plants or decorative blooms – Kögel has years of experience in body construction for fresh goods transporting of green items. Reliable refrigeration technology and continuous temperature checking ensure co-ordinated and problem-free transport, thus ensuring that fruit and vegetable loads arrive as fresh as can be.

### **Temperature-sensitive goods**



These cargoes are delicate and valuable as well and thus represent special requirements for transport security and safety. The made-to-measure services and decades of tried and tested innovative forces mean that Kögel is the guarantee on an international marketplace.

### Construction



Transport of construction vehicles.

### Construction



Transport of construction materials.

### Kögel Quality characteristics



#### Safety

Well-thought-out components provide high levels 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 vehicles also have outstanding trailing characteristics.



### **Corrosion protection**

Nano Ceramic plus cathodic dip-paint coating, the latest and highest quality industrial surface treatment, provides the same outstanding properties as zinc phosphating used to but it is more environmentally compatible and exhibits a better energy balance.

The durable clean surface coating can be repainted at any time.



### **Underride** guard

The reinforced underride guard increases safety levels for all road users. It can be fitted and replaced as an individual unit.

The lamp carrier consists of impact-resistant plastic and ensures 100 percent corrosion protection. It can be fitted and replaced as an individual unit.



### **Electronic system and lighting**

EBS is part of standard equipment. The lighting can be supplied entirely in LED design, providing long-term durability and reduced power consumption.



### Kögel CLIMATEX -

The Kögel cool air system



### Kögel COILFIX -

The Kögel Load Securing system for coils and split strips



### Kögel PurFerro -

The Kögel sandwich panel technology for box and refrigerated box vehicles

#### **Service**



Using www.koegel.com you can call up our comprehensive service facilities at any time from anywhere. Repair and guarantee services can be simply dealt with online. Our Kögel Hotline Assistance is available around the clock in many European languages.



### Load-securing and body stability



Kögel fulfils all stability requirement for reinforced bodies according to EN 12642 XL. For vehicles with this certificate, the load-securing process operates very simply: With form-locked loading, and with the load secured to the rear, the body absorbs all forces arising from the driving dynamics according to VDI 2700.

#### **Environmental protection and sustainability**



Kögel vehicles make an active contribution to the reduction in fuel consumption and environmental pollution: The aerodynamics are optimised, noise emission is constructively reduced, in production, strict requirements are observed to protect the environment and ensure that the materials used can be recycled.

### **Comprehensive tests**



All vehicle components are checked in dynamic driving tests according to the highest standards.

These are Kögel's own System Solutions.



Kögel Trailer Axle -

the Kögel Trailer Axle



#### Kögel Telematics –

Kögel Trailer Telematics module + Kögel Telematics web portal



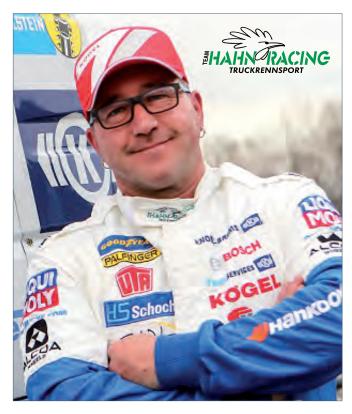
#### Kögel Strong & Go -

The innovative structure of the NOVUM generation in combination with a Kögel integral roof tarpaulin reinforced with belt bracings

### Kögel Sponsoring and cooperations

### European champions Castrol Team Hahn Racing relies on Kögel

As of the 2012 season, Kögel has been supporting 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 their 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.





# **Kögel** True stories about the pioneering work of the company

### Did you know that Kögel is a manufacturer that has been setting market trends, particularly in the refrigeration segment, since the 1950s.

The design engineers led by F.X. Kögel, have long been considered trailblazers in technical innovations in the sector. At the start of the 1950s Kögel started producing small box out of light metal parts. These bodies provided the basis for Kögel's later refrigerated vehicles. Following the motto "always stay a nose ahead" Kögel selected a construction method using an exclusively plastic sandwich structure, with whose development and maturing F.X. Kögel was personally deeply involved. By 1961 the first refrigerated semi-trailer made using a freestanding plastic structure was ready for launch on the market. This trailer was made using what was referred to as allplastic polycell superstructure with an integrated ventilation channel. Using the method, Kögel engineers achieved a K value of 0.25 with a wall thickness of only 100 millimetres. Thanks to the constant further development of this "wet-onwet" plastic construction, by 1969 Kögel was able to launch the first pallet-width refrigerated unit onto the market. In 1976 the first refrigerated semi-trailer made using self-supporting plastic structure was launched. Right from its beginnings, the company has driven its efforts into high-quality, innovative solutions in refrigerated box design and into developing its products to contribute consistently to better refrigeration units. Since 2007, the new 1.3 metre longer Euro Trailer has been available as a refrigerated box semitrailer. Even more recently, Kögel has once come back into focus in the refrigerated transport segment through its



purchase of Kögel PurFerro GmbH & Co. KG at the end of 2011. This renowned Duingen-based competency centre for sandwich panelling produces the structural components of the premium refrigerated semi-trailer, the Cool – PurFerro quality, launched by Kögel in 2012.

#### Did you know that Kögel has been a specialist in the field of tippers since the 1930s?

Kögel looks back on a long tradition of working with the construction industry. Tipper bodies have been, from the very start, a real Kögel speciality over many decades. Alongside agricultural trailers, the first tipper bodies on trucks, including two-axle trailers, were produced in the start-up period from 1935. 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 attracted attention with semi-trailers having two independent tipping bridges and a tipping semi-trailer with a steel tipper body. These were followed in 1966 by the first selfsupporting aluminium round tipper body. From the 1970s onwards, tandem tipper trailers and three-axle three-way tipper trailers dominated the 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 m<sup>3</sup> and 27 m<sup>3</sup> 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 History 1934–2017

#### 1934

Franz Xaver Kögel takes over his former employer's business



#### 1935

Trailers to meet growing agricultural demand



semi-trailer built using plastics



Development of special vehicles for concrete components

Kögel invents the interchangeable open body with outriggers



### 1966

First self-supporting aluminium tipper body

### 1969

First pallet-wide refrigerated semi-trailer



Patented central axis tipper trailer



Lightest series production semi-trailer in the world

### 1985

First integral box body for courier, express packet applications





TIEFKUHLTRANSPORTE LOHAR KONIG

### 1990

"Wiesel", the first handling vehicle for swap bodies

First cathodic dip-paint coating system with zinc phosphatising

















### 2005

Mega trailer extended by 1.3 m

#### 2006

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

#### 2007

Refrigerated semi-trailer extended by 1.3 m

### 2010

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

Expansion of the product pallette by the Mega centre axle trailer and the Kögel Port Multiplex













#### 2011

First Mega trailer with 4 m height New development of the Tipper Trailer with innovative modular construction

### 2012

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

Development of the hybrid quickopening mechanism with pneumatic cking



TRAILER

WINNER CATEGORY BODY

L**⊘**GISTRA





First registration of a trailer with a CNG module which acts as an additional storage unit for natural gas, thus increasing the range of gas-powered tractor/ trailer combinations three-fold

### 2013

Recipient of the Trailer Innovations Award

#### 2014

Kögel celebrates 80 years of commercial vehicles experience

### 2016

Recipient Best practice Award

Introduction of Light<sup>plus</sup>: new external frame and body design



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













