

Kögel Box Trailers



Why so much talk about the art of engineering?

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

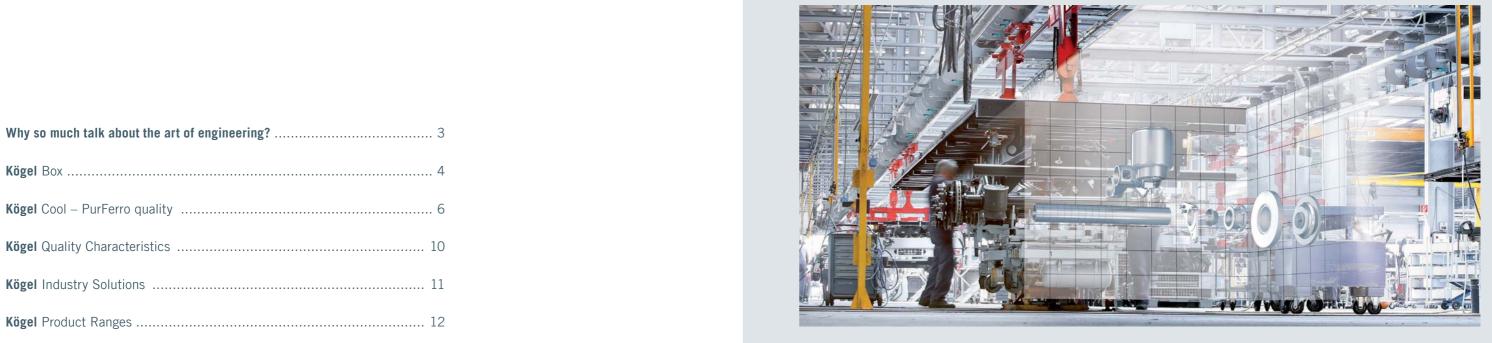
Comprehensive competence and experience, creativity and openness, consistent marketing and customer orientation: these are the foundation that the innovative force is based on which Kögel uses to develop and implement transport solutions. State-of-the-art design and simulation software are used – however 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 Box



Kögel Box: The versatile dry freight box body

The Kögel Box: The trailer for logistics companies who value versatile use, a high payload and transport security. Depending on how it is equipped, you can use this dry freight trailer to transport goods which are sometimes temperature sensitive, such as electronics, furniture, preserves, clothing and much more.

With its stable box body, the Box Trailer reliably protects its load from environmental influences and theft. If you are transporting sensitive goods, then decide on insulating side walls made of 30 millimetre thick sandwich panels with PUR foam (100 % CFC-free). Where temperature is of no importance, we offer 20 millimetre plywood side walls. Plywood is a multi-layered composite panel, covered with a seamless GRP coating. The smooth surface is extremely resistant to knocks and easy to clean. Lockable aluminium portal doors or a roll-up door will secure your goods against pilferers at parking lots or service stations.



GRP roof

- Translucent GRP element with transverse bows (total strength approx. 40 millimetres)
- Four LED inside lights



- Insulating roof with PUR foal core and steel outer coating (total thickness approx. 40 millimetres)
- Four LED inside lights
- Kögel in-house development and production of panels



Lightly insulated for temperature sensitive goods

- Insulated side walls approx.
 30 millimetres thick
- Stage rails for double-layered loading (optional)
- Fully recessed anchor rails throughout (optional)
- Heated ventilation (optional)
- Kögel in-house development and production of panels

Insulation layer of polyurethane

Panels of steel (both sides)



Plywood for resistant goods

- Strong multi-layered composite panel approx.
 20 millimetres thick
- Supporting anchor rails (optional)
- Keyhole panel (optional)
- Smooth surface for easy cleaning



Anchoring rail

The completely recessed anchor rail offers optimum load securing through the complete load length.



Level loading

- Variable stacked loading for 33 Europallets including 22 load beams with a load capacity of 1,000 kg each
- Pallet supports adjustable on a 20 millimetres grid (for securing partial loads using double stacking with the existing pallet supports)



Bump protection

One pair of steel rubber bumpers mounted on the frame exterior, optional

- Steel
- Reinforced steel
- Rubber loading roller
- Spring-mounted protective bumpers
- Rubber bumpers
- Central protection, optional
- Galvanised steel bracket
- Reinforced galvanised steel bracket
- Rubber bumper profil



Roll-up door

A space-saving roll-up door is

doors for fast turnover of loads.

available instead of rear wall

 The Box Trailer chassis from the Kögel modular system

Chassis/Frame

- With unified modules, assemblies and components
- Safety and high quality due to time-tested components
- Durable corrosion protection with nano-ceramic plus KTL coating



Weight advantage

The advantages: more payload and/or reduced fuel - usage, and a lower CO² emissions.

Kögel Industry Solutions Box

Rail	Ferry/RoRo	Clothing transport	Electronics	Temperature-sensitive and non-sensitive goods	Security transport

Kögel **Equipment Characteristics** Box

Plywood	Slightly insulated	2-axle version	Mega version

Illustrations may show optional extra equipment /The products are subject to continuous technical modifications

Kögel Cool – PurFerro quality



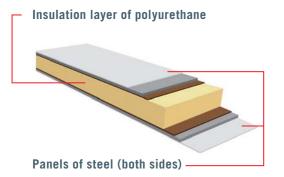
Kögel Cool - PurFerro quality: The lightweight cooling professional

More demanding life-styles and the desire for fresh food on a daily basis have led to a significant growth in the market for both fresh products and frozen foods during the last few years. In order to fully meet the requirements this development has brought about, the transportation logistics industry is faced with a number of challenges: Flexible, robust, strong and also light refrigerated vehicles that are adapted to the specialised market requirements are wanted. With a low tare weight, the Kögel Cool – PurFerro quality offers the high payloads with optimal volumes as well as high mechanical load-bearing capacity of the components. Driving safety, stability and durability were examined in great detail in multistage test programmes. The Kögel Cool – PurFerro quality conforms to DIN EN 12642 Code XL (VDI 2700) in terms of structural rigidity and has been tested for a payload of 27,000 kg.

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Chassis/Frame

- Sturdy end beam with protective bumper
- Corrosion protection with nano-ceramic plus KTL coating
- Optional protective full-surface coating on frame or chassis respectively (available as an option in various RAL colours)



Side walls

- Side wall of sandwich material with insulated core (100% CFC-free)
- Covering layer made of 0.6 millimetre sheet steel end-coated and inside made of 0.6 millimetre sheet steel with hard PVC film coating
- Smooth and food-compatible surface guarantees refrigerated semi-trailer is easy to clean
- Total wall thickness: As an option approx. 60 millimetres for deep freeze transport or 45 millimetres for all purpose transports
- Components from the in-house Kögel PurFerro centre of excellence





Floor and side protection bar

- Sealed, liquid-tight trough made of aluminium floor and 300 millimetre high side protection bar
- High friction value for safety and optimum load-securing
- Fork-lift axle load of 7.2 tonnes
- Optimum hygiene and cleaning characteristics
- Thermal separation groove in transition to portal
- aluminium floor with low-noise emission (optional)





Portal

- Stainless steel portal with rotating rods and hinges which are easy to replace
- Optimised four-fold lip seal on door which is easy to replace for higher sealing and less energy consumption
- Rubber bumper all around (available as an option)





Roof

- 85 millimetre thick sandwich element with insulating core (100% CFC-free)
- External final coating in plate steel
- Internal covering layer sheet steel with hard PVC film coating
- Five interior LED lights with switch outside the body at the front on the left-hand side



Screwed underride guard

Simple cost-effective repair in the event of an accident



Weight

Because if its tare weight, the Kögel Cool – PurFerro quality refrigerated semi-trailer allows you a high payload

Illustrations may show optional extra equipment /The products are subject to continuous technical modifications

Kögel Cool – PurFerro quality



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In addition to non-slip flooring, the vehicle has excellent insulating (ATP) and hygiene properties (HACCP). The materials used guarantee a long service life and maintain value, while at the same time providing an attractive, modern appearance. With its wide range of options the Kögel Cool – PurFerro quality reflects decades of experience and intensive engineering expertise and offers everything that the demanding market for refrigerated logistics could require.

Protective bumper versions













Country-specific equipment



Air duct (CLIMATEX):

The extended and expanded air duct provides optimum guiding of the air and distributes the cooling air evenly over the entire body.



Level loading

- Fully recessed stage rails to make it easy to clean the refrigerated semi-trailer
- Simple to adjust the height of loading bars for varying pallet heights



Anchoring rail

The completely recessed anchor rail offers optimum load securing through the complete load length.



Impact protection wall

- Optimum protection of front wall and evaporator
- Easy-to-disassemble design (with maximum protection) thanks to V-aluminium lattices





15 t fifth wheel load

Self-steering axle

Axle lift for 1st + 3rd axle

Kögel Industry Solutions Cool – PurFerro quality

Frozen and fresh food services	Medical products	Plants	Ferry/RoRo	Safety transports

Illustrations may show optional extra equipment /The products are subject to continuous technical modifications

Kögel Quality Characteristics

Kögel Assistance 24h Hotline 00800 8285 88-88



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.



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.



Underride guard

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



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



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



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



Comprehensive testing

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



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



Load Securing and body stability

Kögel fulfils all stability requirements for reinforced bodies according to EN 12642 XL. For vehicles with this certificate, Load Securing is quite simple: with form-locked loading secured at the rear, the body absorbs all forces arising from the driving dynamics according to VDI 2700.



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



impact and pressure sensitive and need a special transport solution; here again, the significant requirements are fulfilled by Kögel in an exemplary manner.

goods

Temperature-sensitive

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.

Safety transports

Kögel offers a wide range of

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Kögel Industry 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, patented technologies from our own development department and extensive industrial expertise, we can implement made-to-measure transport solutions for any application right up to highly individual special designs.

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.

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.

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.

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.

Electronics

In this way you can transport electronic goods of all types under the best of conditions. These products are particularly



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.



Kögel CLIMATEX -

the Kögel cool air distribution system



Kögel COILFIX -

the Kögel Load Securing system for coils and split



Kögel PurFerro -

the Kögel sandwichnanel technology for box and refrigerated vehicles



Kögel Trailer Axle -

the Kögel Trailer axle

Kögel Telematics – Kögel Trailer Telematics

Telematics web portal

module + Kögel

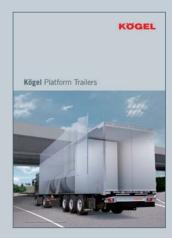
KOGEL

Velematics

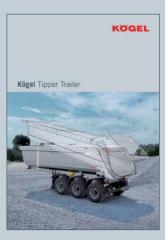
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Kögel Product ranges



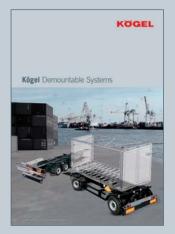




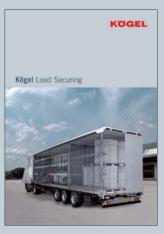
Tipper Trailer



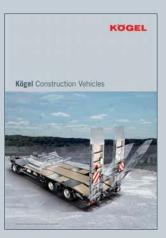
Euro Trailer



Demountable Systems



Load Securing



Flatbed Trailers

