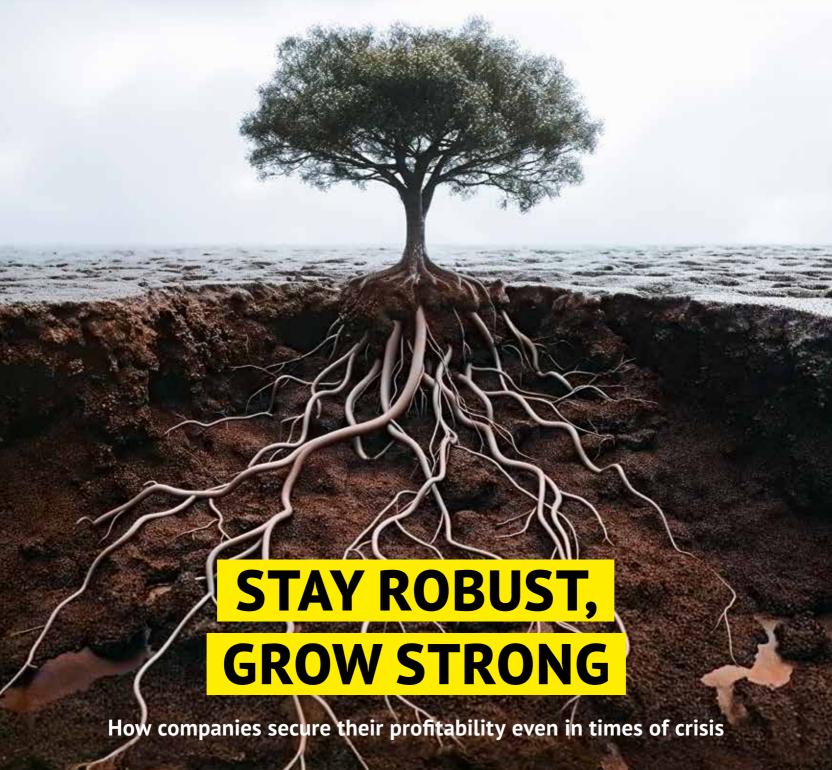
DENKFA3RK®

NEW IDEAS FOR TOMORROW'S TRANSPORT



+ TRIAD OF SUCCESS

Data, costs, people – every detail counts
Page 08

ENTREPRENEURSHIPWITH IMPACT

On the test track with Fernride CEO Hendrik Kramer Page 26

BROAD RANGE

The Brass group has a lot to offer beyond transport Page 14



Dear readers,

hese are challenging times and we are all facing major tasks. This makes it all the more important for companies in transport and logistics to ensure their economic efficiency so that they remain stable and profitable. At Fahrzeugwerk Krone, we do everything we can to ensure this for you, our customers. As a fourth-generation family business, we have been successfully focusing on quality, trust and constant innovation in products and solutions for decades – and are reliably at your side!

In this issue of our DENKFABRIK magazine, we show you what really reduces the total cost of ownership and how our comprehensive Fair Care service package gives you cost certainty and increases the value of your fleet. We present our automated chassis, which we will also be showcasing at the IAA Transportation in Hanover. We also talk to entrepreneurs who can secure their profitability thanks to Krone's well thought-out solutions. And we take a look at future technologies that will ensure tomorrow's success.

We want to support you, inspire you and provide you with new impetus - so that you can overcome all challenges and continue on your path. And we would be delighted to accompany you on your journey!

I wish you an exciting read!

Yours,

Bernard Krone



Bernard Krone, Chairman of the Supervisory Board of the Bernard Krone Holding SE & Co. KG

FOLLOW US ALSO ON

facebook.com/kronetrailer x.com/kronetrailer

instagram.com/kronetrailer

tiktok.com/@kronetrailer

youtube.com/user/KroneTrailer all known podcast portals

in linkedin.com/company/krone-commercial-vehicle-group

#07

Focus

Stable business

02 Food for thought

03 Editorial

06 Blue Notes



+ COVER STORY

08 Securing economic efficiency

Strategies to remain stable in the long term and to build on success.

13 Service

Krone Fair Care keeps every trailer on the move

18 Reality Check

The total cost of ownership is influenced by many factors.

14 Leaving the competition behind

The Brass Group, one of the largest transport and logistics companies in South Westphalia and North Hesse, is endeavouring to delve deep into its customers' processes.

17 Impulse

What else moves us

20 Automatic coupling

At the IAA Transportation 2024 in Hanover, Krone will be presenting the next development stage of an automated chassis.



22 Know the costs

The Hamburg-based rental company Trailer Lloyd has been successful in the market for more than three decades.

How to reduce the TCO

26 Heart of the matter

Dr Stefan Binnewies, COO of Krone Holding, met Hendrik Kramer, CEO of Fernride, in Munich to speak about his vision of autonomous electric trucking.



31 Partnership

Krone acquires a stake in the Schwarzmüller Group.

32 Cold Passion

The vehicles in the Frischli dairy fleet are on the road almost around the clock thanks to the company's own workshop.

35 Big Picture

At the Gigant plant in Dinklage, axles are assembled using the friction welding process for exceptional strength, quality and durability.



36 Tempo is in our DNA

With Sovereign Speed, Martin Araman offers a fast and economical delivery infrastructure for the whole of Europe.

39 Column

LEGAL NOTICE

Publisher:

Fahrzeugwerk Bernard Krone GmbH & Co. KG Bernard-Krone-Straße 1 49757 Werlte www.krone-trailer.com

Responsible for the publisher:

Dr. Frank Albers, Geschäftsführer Vertrieb und Marketing Tel. +49 5951 209-200

Publishing house:

DVV Media Group GmbH Julia Schwericke (Projektleitung) Heidenkampsweg 73-79 20097 Hamburg

Editorial contributions to this edition:

Juliane Gringer, Claudia Behrend, Julia Schwericke

Layout:

Benjamin Tafel, www.byben.de

www.muellerditzen.de, Bremerhaven

The publication, its articles and its illustrations are protected by copyright. Any reproduction or distribution must be authorised by the publishing house or publisher. This also applies to electronic use or transfer to databases, online media (Internet). intranets or other electronic storage media.

The publisher and publishing house cannot accept any liability for photos, manuscripts and other data carriers submitted without solicitation.

Fahrzeugwerk Bernard Krone GmbH & Co. KG will use your address to provide you with information about similar products and services pursuant to Section 7 (3) of the German Act against Unfair Competition (UWG).

You may object to such use at any time, for example by sending an email to info.nfz@krone.de

The privacy policy pursuant to Section 13 GDPR can be accessed at https://www.krone-trailer.com/datenschutz

Notes

News from the world of Krone



Stem cell donors wanted!

A stem cell transplant can be life-saving for patients suffering from blood cancer. A simple cheek swab registers you as a potential donor. Nicolas Gallenkamp, Managing Partner of the Nosta Group, launched the "Blood Transported" logistics initiative at the end of 2023 to support this and recruit as many donors as possible. This summer, he organised two major campaigns in cooperation with DKMS: at the fan zone for the European Football Championship in Munich's Olympic Park and at the Truck Grand Prix at the Nürburgring motor sports complex. There, interested parties were able to register as potential stem cell donors free of charge and in just a few minutes. Krone's historic World Cup Liner was on site for the European Championship campaign under the motto "Every goal counts". Former national team players such as Mario Götze, Thomas Müller and Toni Kroos had celebrated the victory at the 2014 World Cup on it – now visitors were able to take selfies in the Liner in their European Championship look. 🕊

Krone expands spare parts **business** in Italy

Krone Trailer Service Italia SRL aims to dynamically develop the spare parts business in Italy: Fahrzeugwerk Bernard Krone GmbH & Co KG and the Italian Krone importer Realtrailer SRL, Suzzara, have jointly founded the company with this aim in mind. Ralf Faust, Managing Director Service of the Krone Commercial Vehicle Group, explains: "Our aim is to further improve the range of spare parts for our customers and to significantly increase the rapid availability of spare parts in Italy and the neighbouring countries." Krone Trailer Service Italia SRL will provide even better support, not only to local customers, but also to all international Krone customers. The company will commence operations in Mantua at the end of 2024, where it will operate a spare parts centre covering more than 2.000 square metres. It will also strengthen the Krone Trusted brand: Delivery times for spare parts will

be shortened and deliveries within 24 hours or overnight will become standard. 🔽





40 years of partnership

In June, **LKW Walter** took delivery of the 40,000th trailer from Krone: a delegation from the Austrian transport organisation travelled to Emsland for the ceremonial handover of the anniversary vehicle and visited the Krone plants and agricultural machinery production facility. Ingo Geerdes, Managing Director of Fahrzeugwerk Bernard Krone GmbH & Co KG, said: "40 years of partnership with LKW Walter and 40,000 units produced - these impressive figures speak for themselves." He thanked the company for the many years of trust and the close dialogue, which has repeatedly led to product improvements and innovations. LKW Walter, founded in 1924, is a leader in European full truckload transport. The company has been a pioneer in the development of combined road/ rail transport and short sea shipping since 1984. Karl Schauer, Senior Management Director at LKW Walter Internationale Transportorganisation AG: "Our Krone craneable trailers are in daily use throughout Europe - most of the way by rail or ship. By shifting from road transport to combined transport, we are making a significant contribution to reducing pollutant emissions and can achieve a total CO2 reduction of over 329,000 tonnes per year."

∠

"Especially in challenging times, Krone as a trailer manufacturer stands firmly behind the transport industry."

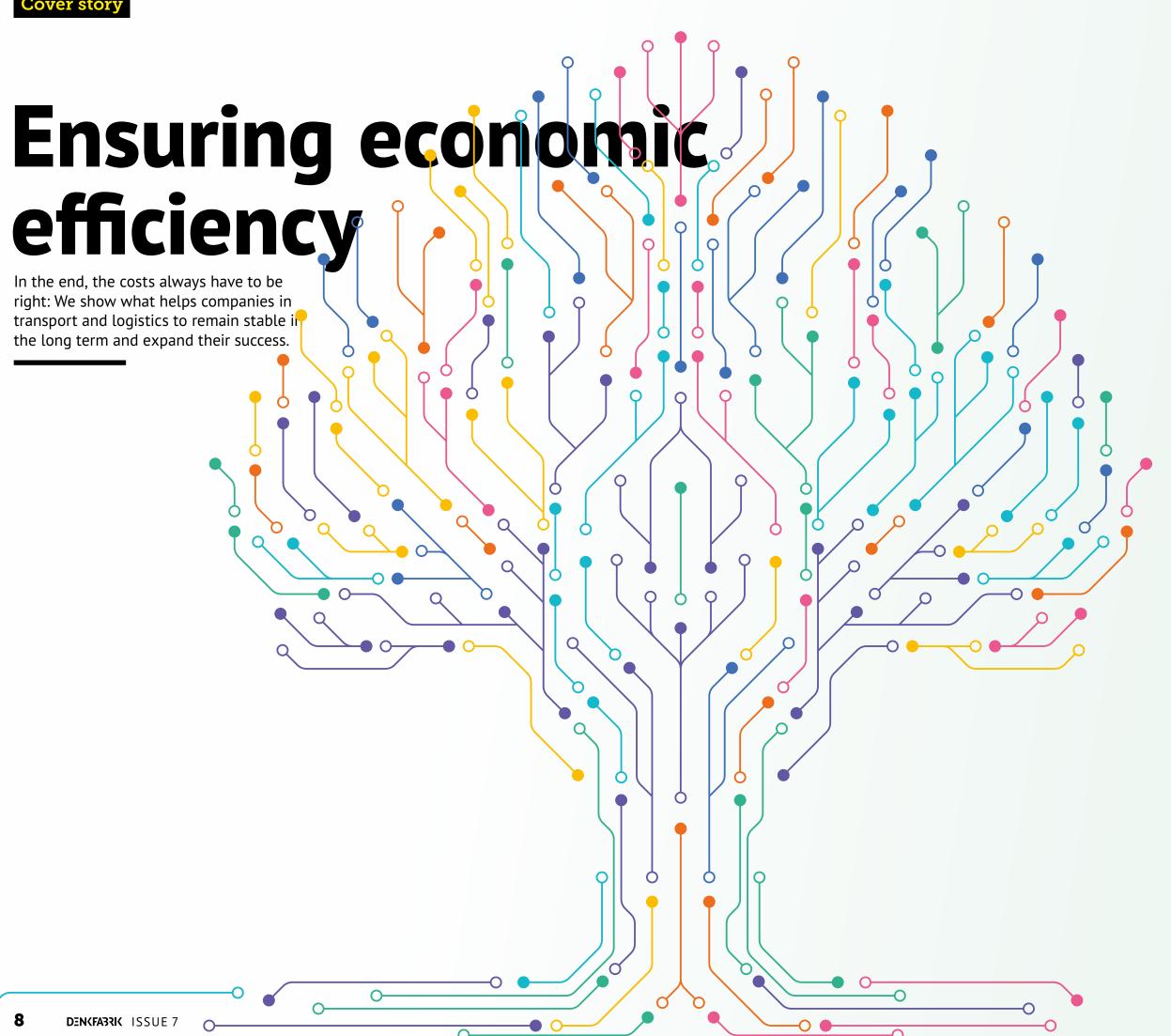
DR. FRANK ALBERS

"KEEPING YOUR FRIDGE FULL"

The hashtag #ichfahrfürdich (#idrive4u) and "Damit Dein Kühlschrank voll ist!" (to get your fridge full) are emblazoned on the sky-blue side tarpaulin of Michael Lange's new Profi Liner. Lange is the owner and managing director of Transport Pack und Logistik TPL GmbH from Frankfurt (Oder) and a board member of the Berlin and Brandenburg Transport Industry Association (LBBV). With the eye-catching lettering, he wants to show "that our trade stands for much more than just the transport of goods". #ichfahrfürdich is a further development of the BGL's previous #mauteverest campaign, which, among other things, campaigned for an end to the CO₂ toll. Dr Frank Albers, Managing Director Sales and Marketing at Fahrzeugwerk Bernard Krone, explains: "Especially in challenging times, Krone as a trailer manufacturer stands firmly behind the transport industry. That is why we are supporting the concerns of the BGL with this striking digital print, which can reach thousands of consumers every day as a rolling advertising medium." <



DENKFABRIK ISSUE 7 **DENKFABRIK**



ogistics companies work 22 days a month just to cover their costs – for wages and storage, fuel and vehicles. They only become profitable from the 23rd day onwards. "That's why every detail, every move, every minute counts in this industry," emphasises Dr Frank Albers, Managing Director Sales and Marketing at Fahrzeugwerk Bernard Krone. "Fleet operators must be able to rely on their vehicles running smoothly in order to ensure and continuously increase their profitability." Krone supports this with uncompromising quality - both in the trailer itself and in all associated solutions and services.

Krone Fair Care supports long service life

They provide security, predictability and flexibility. For example, with the comprehensive range of services: "With Krone Fair Care, we offer fixed service packages that ensure the trailer is always ready for use," says Albers. The haulier can be sure that his vehicle will be kept running continuously. "The full-service contract can cover repairs for up to ten years. In addition to preventive maintenance, the driver receives help from one of our 1,200 service partners throughout Europe, in the event of a breakdown." Spare parts are always available quickly and directly: "This gets the vehicle back on the road as fast as possible." It also promotes value retention: Continuous maintenance keeps the vehicle in perfect condition. At the same time, Fair Care's flat-rate billing with a fixed monthly instalment provides cost certainty: the haulier knows exactly how much he will have to pay in the long term.

Telematics can monitor safety-relevant aspects such as tyre pressure. It can also



TOBIAS LENHART

Tobias Lenhart,

Managing Director of WM Group, studied transport and logistics as well as maritime transport and port management. After six years at Schenker Deutschland AG, most recently as Senior Manager Product Development E-Commerce,



he held positions including Project Manager Supply Chain Management International at Bofrost and Head of Department at Ceva Logistics before joining the WM Group at the beginning of 2024.

"It is important for us to focus on the opportunities and the long term. There will be other economic signs again."

> TOBIAS LENHART, MANAGING DIRECTOR WM GROUP

be used to optimise the calculation of the estimated time of arrival - which also increases the efficiency of the vehicles: "This means that loading and unloading can be better planned and the duration of this process is kept as short as possible." This in turn leads to more efficient utilisation of personnel: "The driver is a valuable asset. The less time he has to wait somewhere, the more he can do what he's really needed for: driving from A to B. And thus generating revenue."

Turnkey AI solutions

Christoph von Viebahn, Professor at Hanover University of Applied Sciences and Arts, says: "In my experience, if freight forwarders want to improve their profitability, this goes hand in hand with digitalisation and sustainability measures." He is a supply chain expert and business IT specialist. He recommends that small and medium-sized companies work with artificial intelligence, which calculates an optimised

tyre selection for the fleet, for example: "SMEs can already use turnkey solutions that don't involve any major hurdles during implementation," says von Viebahn. "Platforms for temporary storage and logistics services can also be easily integrated into customers' systems. In many cases, the return on investment is less than one year, which makes it easier to decide in favour of such systems."

With his team at "das hub", Christoph von Viebahn uses dynamic computer simulation to test and optimise new logistics concepts virtually before they go live. The goal is a resilient supply chain. "We work with the tools of simulation, data analytics and artificial intelligence. In the simulation, we calculate new concepts. compare different scenarios and have modelled and optimised material flows for tyre manufacturer Continental, for example," he explains. Economic efficiency in logistics increasingly means being able to provide data: "In addition to the established key performance indicators for costs and times, values for energy and CO, footprint are becoming increasingly relevant. I can only make the right business decisions if I measure these precisely," says the expert. "What's more, reporting today doesn't just mean thinking about the balance sheet for the last calendar year; it also needs to be faster and more forward-looking."

The real-time factor

Especially in view of increasing requirements: The German Supply Chain Duty of Care Act and the European Corporate Sustainability Reporting Directive set the pace for legal

"In my view, 'quieter' times should be used to implement digitalisation projects. That's when your own employees have more time for it. And as a result, the company is then better positioned for further growth."

> CHRISTOPH VON VIEBAHN, PROFESSOR AT HANOVER UNIVERSITY OF APPLIED **SCIENCES AND ARTS**



Christoph von Viebahn

has been Professor of Information Systems at Hanover University of **Applied Sciences and Arts** since 2012 and heads the Supply Chain Management specialisation. He also helped set up "das hub" there: The team conducts research using



data analysis and simulation methods.

requirements. In addition, there are operational guidelines for more transparency in the supply chain. According to von Viebahn, the real-time factor has been playing an increasingly important role for around five years: "It is no longer enough to analyse the past or provide planning data. It is becoming increasingly important to be close to the actual movement of goods, delays and deviations. And 'the big players' are passing these requirements on to their service providers."

In times when the order situation is sometimes unclear, there is a great temptation to postpone digitalisation projects: "In my view, 'quieter' times should be used to implement digitalisation projects. That's when your own employees have more time for it. And as a result, the company is then better posi-

tioned for further growth. As far as the order situation is concerned, many companies are currently experiencing quieter times. Tobias Lenhart, Managing Director of logistics service provider WM Group, says: "Logistics is regarded as an early indicator of economic development. We are clearly facing challenges in the industry at the moment." Among other things, Lenhart offers its customers customised transport and storage solutions. "For us in the company, it is essential that we can build on our strong team right now. This is even more relevant in difficult phases than in the easier ones - and for me, alongside working in partnership with our customers, it is also the most important basis for profitability." He deliberately mentions these soft factors first because he considers them to be so essential. Nevertheless, the "hard factors" are equally essential: for him, these include above all scalable processes and transparency. "We really have to be very flexible in logistics and be able to adapt to order peaks as well as less intensive phases."

Motivating employees

The WM Group manages over 160,000 square and a variety of different value-added services. Offering its customers customised logistics solutions is the company's top priority. Lenhart knows how important the employees are for this: "We want to be a company where people really enjoy working. Because then it's easier to get through times of crisis together." According to Lenhart, employees can only be motivated to a limited extent by monetary targets: "It is much more important that they can participate in something that they want to stand for." In concrete terms, this means that the team repeatedly sets itself ambitious goals that everyone works towards together. "If it doesn't succeed, then that is also a team effort and not the fault of an individual." He appeals for \rightarrow

metres of logistics space. It offers a combination of goods storage, intelligent transport solutions

10

11

Dr Frank Albers, **Managing Director** Sales and Marketing at Fahrzeugwerk Bernard

DENKFABRIK ISSUE 7



employees to be heavily involved in new developments: "If they don't have a chance to understand what the company wants to achieve with digitalisation and automation, any initiative will sooner or later come to nothing. And the workforce also needs to understand how the technology - whether machine, programme or system - can help to achieve the goals and fulfil the vision."

Strategy of small steps

The WM Group has opted for a strategy of small steps: "Innovation, whether

> central - it is one of the most important for haulage companies. Dr Frank Albers explains how Krone continues to optimise it in the interests of its customers: "An efficient total cost of ownership starts with the fact that when I invest in a Krone trailer, I can be sure that it will accompany me for many years because it is built to be particularly stable and robust from the ground up." Krone vehicles are also versatile: "This keeps the fleet flexible. If a contract with a customer expires, the trailer can also transport other goods - the vehicle doesn't have to be sold at a loss, but

"In this industry, every detail, every move, every minute counts."

DR FRANK ALBERS, **MANAGING DIRECTOR SALES** AND MARKETING AT FAHRZEUGWERK BERNARD KRONE

in the area of technology or process, requires room for trial and error. We try to work specifically on a business case and consider where rapid progress is possible, for example where frequently recurring tasks can be automated or digitalised and thus quickly achieve initial success and profit." This then results in a move towards larger business cases and investments. "If the first steps are successful, the investment is also easier." According to Lenhart, the principle can be summarised as follows: "Think big, start small!" He also sees great potential in digitalisation and automation: "These developments can completely change the balance of power in the industry." His company is using them to continue its growth trajectory - because it is definitely maintaining this despite the enormous economic challenges at the moment. "It is important for us to focus on opportunities and the long term. There will be other economic signs again."

Even then, the vehicle cost factor remains can remain in use." ∠

All-round service throughout Europe

Krone offers full protection for the trailer with its "Fair Care" service packages. Ralf Faust, Head of Service at the Krone Commercial Vehicle Group and Managing Director of Fahrzeugwerk Bernard Krone GmbH & Co. KG, explains how this service offers security and saves costs.

What is Krone Fair Care?

360-degree protection that works all around and ensures the continuous mobility of the trailer: with Fair Care, we support our customers long after the purchase with a full-service contract that can cover everything from the refrigeration unit to the tyres and tailgate – for up to ten years. In the event of a trailer breakdown, or component failure, drivers throughout Europe can get direct, fast and competent help. To do this, we work with 1,200 service partners who are digitally connected to us. The system also indicates when maintenance is due and plans the workshop visit. This keeps the trailer running and offers full cost control and planning security. We now have several thousand vehicles in the full-service area; this also includes the support of large and rental fleets. We also service mixed fleets of trailers and chassis with our spare parts brand Krone Trusted. A fleet manager who would otherwise quickly have a dozen or more contacts can get everything from us.

How does this work in practice: as a driver, for example, I realise that my brakes have a problem what do I do?

I can then use our app to check where the nearest garage is and head for it. The team there can see the contract information and all the vehicle data via the chassis number and knows immediately which parts are fitted. So, they can get started straight away. The workshop is networked with our spare parts supply in our online shop and can order the required parts as quickly as possible. And we offer an automatic payment guarantee in the event of a breakdown - even a Spanish or Italian workshop knows that it can start the repair immediately. In the event of a breakdown, we work with a Belgian organisation that can be contacted around the clock in 26 languages. If the tractor unit also has a problem, we can also handle this via a co-operation with Alltrucks, the Europe-wide workshop network for commercial vehicles of all brands: Trucks and trailers are then repaired in an Alltrucks workshop. In future, we will also provide workshops with complete wheels, including tyre pressure management, via our own tyre shop.

How do you ensure the quality of your service partners?

We train them ourselves, travelling to them with our own training trailer. This is a very important point: If a workshop lacks skilled workers, it helps them a lot for their staff to be trained on site.

Why is Krone so committed to good service?

In transport, every minute that a trailer is out of action costs a lot of money. That's why our most important goal is to ensure that the vehicle is ready for use again as quickly as possible in the event of damage. And that breakdowns are avoided: This includes planning and carrying out maintenance appointments and taking wear and tear into account. What's more, as we all know from our private lives, the decision in favour of hardware is also based on the service. We want our customers to feel comfortable in our service world – and to choose Krone next time.

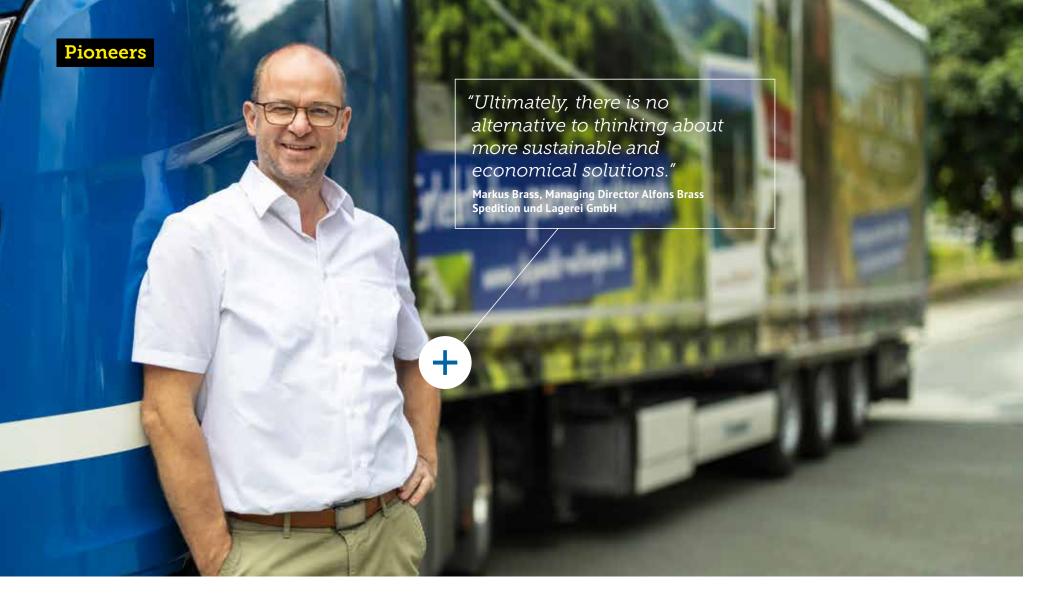
What advantages does a pre-booked service package offer customers?

You can plan reliably, know the costs, remain mobile and save a lot of money because, for example, the replacement of wearing parts is indicated in good time: This avoids breakdowns - and can also protect against accidents. As all information about the vehicle is available digitally, quick decisions can be made in the workshops to make the trailer mobile again. Even with large fleets, TÜV inspections or safety checks can easily be carried out. We inform customers when statutory inspections are due and manage the appointments via the scheduling department. A fixed service contract also helps to maintain the value of a trailer and makes it easier to finance. 🔽





Ralf Faust, Managing Director for Parts, Full Service, Customer Service, Service and Telematics at Krone, and a team of around 100 employees throughout Europe are committed to supporting customers far beyond the purchase of a trailer.



"You have to stand out from the competition"

The Brass Group is one of the largest transport and logistics companies in South Westphalia and North Hesse. How does it manage the challenges of the present and future?

rowing out of a small haulage company, the Brass Group has developed into a strong player in the transport and logistics sector over the decades. With 160 of its own trucks, the company is operating throughout Europe. One focus is on transport with megaliners for the automotive industry and transportation with

silo trucks, while another mainstay is municipal waste disposal. The mix has proven its worth – if demand in one of the areas weakens, the company can switch and compensate with other orders. A total of around 50,000 full loads are transported each year. For many decades, the company had concentrated on the transportation sector, but towards the end of the 1980s

it entered the logistics business, building and buying logistics properties. Today, the group of companies is represented at its headquarters in Medebach, Korbach, Bad Arolsen and Stadtallendorf and has around 200,000 square meters of logistics space at its disposal.

"We try to get very deeply involved in our customers' processes."

MARKUS BRASS,
MANAGING DIRECTOR
OF BRASS GROUP

Broad-based and close to the customer

Almost all of the Brass Group's customers use the full range of services and make use of both transportation and logistics services. Markus Brass, Managing Director since 1996, explains: "Today, you can't just transport goods from A to B if you want to survive on the market. You have to set yourself apart from the competition and offer more." This is why Brass not only stores goods for customers, but also provides value-added services such as complete wheel assembly or additional finishing activities. "We try to get very deeply involved in our customers' processes - this offers them concrete added value and makes us less interchangeable. We have grown up with our customers, have learned from them and sometimes work in their systems. If they find that it works, and we have the right people, are innovative and want to grow with them - then perhaps complete wheel



assembly is the first step, followed by other activities that we can take on for the customer."

Traditional in style, innovative in purpose – this is how you could describe the Brass Group's recipe for success. Customer relationships are close and long-term, and quality, flexibility and reliability are values that are practiced in the company. Thinking outside the box and breaking new ground is also part of the company's identity. Digitalization was tackled early on. Peter Winterberg, who has been with the company since 1988 and Managing Director of the three Contrans companies responsible for logistics within the Group since 2005, was and remains a driver of innovation in this area. All processes in the forwarding and logistics area



are completely digitalized, working paperless along the entire process chain and guaranteeing customers transparent, efficient processes.

Operating with the future in mind

Thinking ahead and finding economical, sustainable solutions is an important aspect of long-term success. This is why the Brass Group is actively addressing the issue of the mobility transition. In addition to the use of HVO diesel, it now also offers e-mobility to customers. "If you do it right, you can save money, even if e-vehicles are still very expensive at the moment," says Markus Brass. "We have installed an e-charging station, and our first electric truck, the E-Actros 300, is being used successfully by a customer in local transport, plus, an E-Actros 600 is on order. Even though many customers have other things on their agenda at the moment, we are actively tackling the issue of CO₂ savings, have invested and are seeking contact with our customers in order to drive the whole thing forward. Ultimately, there is no alternative to thinking about

DENKFABRIK ISSUE 7



Krone impresses with its stability and long service life, especially when transporting goods for the automotive sector with high point loads and raw materials with maximum payloads. The trailers are used in the Brass Group for around ten years.

PROFILE

The Brass Group has

its roots in a transport

company founded in

1945. Now in its third

by Markus Brass, the

four locations in the

generation and managed

group of companies with

Sauerland region provides

comprehensive transport

and logistics services with

around 600 employees.

www.brassnet.de

more sustainable and economical solutions." This includes using rail wherever possible for freight transportation. The Brass Group has had its own siding with a transhipment terminal at the Korbach site for a long time and is currently investing around one million euros in the expansion, including new tracks and sleepers.

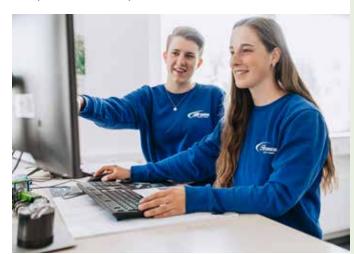
The 2008 financial crisis, the coronavirus pandemic - many challenges have been overcome in recent years, but now new ones such as the mobility revolution need to be faced. What worries Markus Brass most when he thinks about the future? "My biggest concern is personnel. We are in a great position and I would like everything to stay that way. But when I look at who will be retiring in the next seven to eight years, that is the biggest challenge we face, because staff are the key to success."

Attractive employer

Guido Thoma, who moved from an automotive company to the Brass Group in 2009 and has also been Managing Director since 2021, are responsible for logistics. Markus Brass can be found at the headquarters in Medebach, in his overalls in the workshop on Saturdays: "If a driver has something on his mind, he can speak to me directly." Brass wants to be close to the people and the issues. He recently drove a tour and then unloaded the new Krone trailer. "Opening the tarpaulin, moving the boards in and out, moving the stanchion - handling the trailer is really great. It's also important to me that it's made easy for the drivers, that they have fun handling the truck and the trailer." Freight forwarding manager Frederic Küthe adds: "We have mega trailers with an interior height of three metres for the automotive industry, but also mega trailers that can be extended to an interior width of three metres. The Krone system is simply more convenient than the competitor's system." Another important aspect with regard to the drivers, explains Küthe: "Nowadays, drivers tell us what they want for a tractor unit and with what equipment, and the same applies to the trailer. The drivers come and say that they want the Krone semi-trailer because they've been getting on really well with it for years."

∠

At the Korbach site, Peter Winterberg and





The Brass Group does a lot to attract and retain good staff: It trains forwarding agents, office clerks, warehouse logistics specialists, commercial vehicle mechatronics technicians and professional drivers, and a dual study programme in the commercial field is also possible. Almost all of the employees in the scheduling department are "home-grown", and the first trainee has been with the company for more than 40 years. The company is an IHK-certified training company, has been recognised as an attractive employer and the working atmosphere is good. "I always have time to listen to my people. We provide support wherever possible and have an employee who takes care of things like dealing with the authorities, school, kindergarten, the residents' registration office or residence certificates for Ukrainian drivers who want to work here. We organise everything," says Markus Brass.

What still moves us

More inspiration, tips and thoughts



"GiiKER Smart Four" is an innovative 3D board game that sets itself apart from conventional four-win games. An accompanying app allows players to compete against an integrated Al. optimize their strategies and view detailed analyses of their games. Interactive features and challenges make the gaming experience even more dynamic.

Available at Amazon





The "Shortcut" podcast offers a comprehensive overview of current topics and trends from the world of technology, science and society. Each episode contains clear and well-researched information that makes it easier for listeners to stay up to date and quickly grasp complex issues.

Available on all popular streaming services



Understanding money

In the book "The Psychology of Money", Morgan Housel analyzes how people make financial decisions and which psychological factors play a role in this. He provides valuable insights into the behaviors, thinking errors and emotional influences that shape our relationship with money. His book also provides practical advice on how to make financial decisions more consciously and successfully.

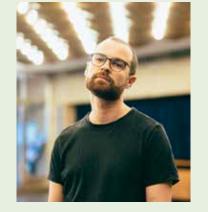


Published by Finanzbuch-Verlag

Put simply

Youtuber Niklas Kolorz explains complex topics in a simple way on his channel of the same name. With a successful mix of humor and well-founded explanations, he deals with complicated content from physics, biology and other natural sciences. He manages to convey complex concepts in a way that is both understandable and captivating.

www.niklaskolorz.de





The exhibition, "Choose your Player. Game worlds from dice to pixels" at the Zeppelin Museum Friedrichshafen invites visitors to sharpen their view of gaming as an essential cultural technique of our time and to become active gamers themselves. From traditional board and dice games to modern video games, the development of gaming culture will be presented extensively until the end of May 2025.

www.zeppelin-museum.de

17 16 **DENKFABRIK** ISSUE 7 **DENKFABRIK**

Targeted reduction of TCO

The total cost of ownership is influenced by many factors. Haulage companies should be aware of these in order to optimise their calculations and save costs.

1. The usage profile

Whether a truck and trailer are used a lot in the city, on country roads or on the motorway, the operating profile determines the cost. Krone's customers often have mixed loading requirements for which the vehicles are used flexibly - especially for general deliveries. In typical transport distribution, the focus is on country roads and urban areas, whereby companies often use regular routes, for example when delivering to supermarkets. Only for long-distance transport does the proportion of motorways exceed 80 per cent.



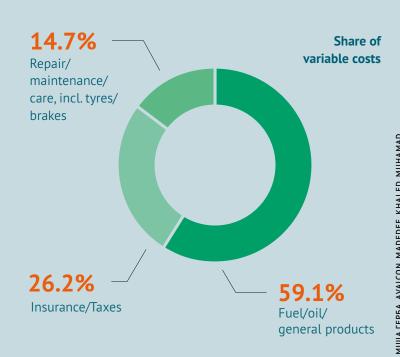
3. Tyres

Long-distance driving can save money if you use low rolling-resistance tyres and those of the lowest resistance can save up to 2.5 per cent on fuel. When changing from a tyre with a C label to A, for example, the vehicle only consumes 26.2 litres per 100 kilometres instead of 27.58 - a saving of 5 per cent.



2. Variable costs

On average, around 30 per cent of the total costs incurred by a vehicle – across all usage profiles from short to medium and long distance – comprise fuels, oil and general products, plus insurance, taxes, repairs and maintenance including tyres and brakes. The diagram shows the approximate proportion of these variable costs, according to Krone's calculations: Fuel, oil and general operating products are in the lead and amount to just under two thirds of the total running cost.

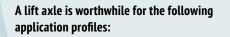




4. Unladen weight

A lighter trailer consumes less fuel: Krone's calculations in practice show that 0.15 to 0.2 per cent can be saved for every 100 kilograms less unladen weight.

5. Lift axle



- Vehicles that drive more than **60,000 kilometres** a year with a mileage of less than 20 tonnes – the purchase pays for itself after around two years
- Volume transports
- Mass transport with empty runs for example, automotive suppliers who drive empty or only with equipment carriers on the return journey





6. Aerodynamics



Aerodynamic add-on parts reduce air resistance and therefore save fuel. Possible options include side panelling, rear flips and measures on the underbody, for example on the pallet box, as well as covering the gap between the tractor unit and trailer.

Reducing the c_d value measurably lowers fuel consumption. A 5 per cent lower c_d value saves 1 to 2 per cent, a 10 per cent lower c_d value even 2 to 4 per cent fuel. A validated example from Krone's customer base: a 10 percent reduction in the c_d value reduced fuel consumption from 27.58 to 26.75 litres per 100 kilometres – a fuel saving of 3 per cent.

The parts should:

- **be light:** they should weigh less than 200 kilograms each.
- be robust: side panelling, for example, is susceptible to damage when loaded from the side.
- **be cost-effective:** The purchase should have amortised after two years.

The combination makes the difference

If several measures are combined, this has an even greater impact on the TCO. An example: A trailer is used in delivery transport for the automotive industry. It is equipped with low-rolling resistance tyres and aerodynamic measures. The latter may make it weigh 150 kilograms more, but its c_d value improves and, in combination with the A label tyres, it saves a lot of fuel.

Example: Supplier transport in the automotive sector

Base C label

 $+150 \text{ kg/}-5\% \text{ c}_{d}$

 $+150 \text{ kg/} - 8\% \text{ c}_{d}$

 $+150 \text{ kg}/-10\% \text{ c}_{d}$

* values = litres/100 km

19 18 **DENKFABRIK** ISSUE 7 **DENKFA3RK**



Automatic coupling in under a minute

Krone presents the next development stage of an automated chassis at the IAA Transportation 2024 in Hanover.

chassis that can be uncoupled and coupled automatically within a very short time without the driver having to get out of the vehicle saves time and money, increases safety and enables faster coupling – even in places where in the future, personnel may not be present. Krone is developing such a system and is presenting the next stage of development at this year's IAA Transportation. In 2022, the company was already able to show a chassis with automatic locking. This is currently being tested in vehicles in

everyday use. The next stage now looks like this: "We are launching a system in which a standard truck without an automatic function, with standard and ABS-connection, can couple automatically," explains Krone Product Manager Ulrich Josefowitsch.

Simply couple up and drive off

An electric terminal tractor from Terberg reverses under the trailer, then the landing gear is automatically cranked up and the electrical

and air connections are engaged. The coupling process takes no time at all: the landing gear retracts in just over half a minute, and as soon as the fifth-wheel pin engages, the connectors are connected within a second or two. No supports need to be raised and the driver can control the process from the tractor unit: "Couple up and drive off" is the motto.

Colin Minx, product manager in the team, explains: "At the next IAA in two years' time, we want to show a system with ABS that can be connected automatically – a fully automated chassis." Until then, it can be used primarily in harbours and hubs, where frequent coupling and uncoupling is required in confined spaces. It also offers many advantages where cranes are in use: "Every crane manufacturer will tell you that the safest crane environment is one in which there are no people," says Ulrich Josefowitsch.

Important for autonomous driving

Automatic coupling not only works with a container chassis – it can also be fitted to a flatbed, dry freight and (in the future) refrigerated



The driver can adjust the container chassis to all containers from 20' to 45' at the touch of a button in the cab. semi-trailer. For this reason, the system is already of interest to haulers who run shuttle services and shorter distance logistics. However, Krone is not only aiming for approval of the automated chassis for this purpose, but also has another highly relevant topic in mind: autonomous driving. The major truck manufacturers assume that this is anything but a dream of the future and that the first stages of the technology will be ready for series production by around 2030. "2030 – that's not far away, but practically tomorrow," warns Josefowitsch. "And then I'll need automated coupling, if only because there will no longer be a driver. You could certainly

"Every crane manufacturer will tell you that the safest crane environment is one in which there are no people,"

> ULRICH JOSEFOWITSCH, PRODUCT MANAGER AT KRONE

find solutions where staff take on this task at the depot, but there will be places where coupling will simply have to be automated."

Especially in autonomous transport, the technology has to function reliably: If there is no human on site, any unplanned incident is all the more difficult to manage. Krone therefore recognised the issue as important at an early stage and addressed it for its customers so that they too can remain fit for the future: "We are now gaining experience in practical tests and can optimise the system - when it really has to function autonomously, we will have it under control," says Colin Minx. "It's important to us at Krone that we help drive and shape such technologies. We don't copy, we lead the way."

Integrated automatic adjustment

The automated chassis is being developed in cooperation with RMM Metternich Mechatronik GmbH, which developed the hardware with "AUCOS-Coup" and "AUCOS-Lock". Rüdiger Metternich, Managing Director of RMM Metternich Mechatronik and AUCOS-Systems, says: "I have been working on AUCOS systems for two decades. In Krone, we have now found a partner who can complement its practical expertise and bring it to the road." The breakthrough came as a result of the collaboration: "With our experience in the European market, we can say exactly what the industry needs," emphasises Ulrich Josefowitsch, who wrote the specifications together with Colin Minx. For example, "Lock" was adapted to the widely used gooseneck chassis and equipped with a different connection accordingly. It is also possible to select the right size in advance. "The driver must be able to specify that he wants to manoeuvre 20 feet, flush with the rear, for example, and then the chassis must adjust automatically."

The coupling is part of a series of product developments that Krone is developing for automation: The aim is an automated container chassis as an "all-in-one solution" that can survive in a world in which the vehicle is teleoperated or drives autonomously where there is no longer a driver on board.

20 DENKFARK ISSUE 7



Being aware of your own costs

The rental company Trailer **Trailer Lloyd** from Hamburg has been successfully operating on the market for more than three decades: with customer orientation, flexibility and short communication channels.

ho would rent a trailer instead of buying one? "Some can't, others don't want to buy," says Thorsten Schroeder, Managing Director of Trailer Lloyd Fahrzeugvermietung GmbH & Co. KG from Hamburg. His company provides a fleet of over 700 units. For example, for forwarders who can only conclude short-term contracts with their customers and therefore prefer the rental model. Others want to cover seasonal peaks or test something new. "Or someone wants to implement something individually and is therefore looking for direct, short-term solutions." The list of Trailer Lloyd's customers ranges from self-driving transport companies to logistics providers for brands such as Coca-Cola, Gardena or Opel.

A "dinosaur" in the transport industry

The company was founded in 1991 by people from the shipping industry in Hamburg and Bremen, including Nikolaus W. Schües, owner of the F. Laeisz shipping company. When the other shareholders wanted to give up the business, Schües took over 97 percent of the company. Thorsten Schroeder was already managing director at the time. He remembers: "Mr. Schües showed his trust in me and only asked me to ensure that the company remained profitable in the long term. We managed to do that. I was able to help build up the company, which was great."

Schroeder had previously been in the rental business, at Tip Trailer Services, and now has 35 years of experience. "Someone recently said to me quite respectfully that I was probably the last dinosaur in this industry," he says. "All I know is that our customers give us the

feedback: 'If something doesn't work for you, then it doesn't work at all'. Or we don't want to take on a task because it simply doesn't suit us - due to our size, for example. But yes, I think we do what we can do quite well. Our speed and quality are always appreciated."

Very short distances

This is made possible above all by the short communication channels within the company: "With large rental companies, it's often a case of 'I'll have to call the head office'. It's different with us, everyone is practically in one office. I myself am a marketer, controller, purchaser and salesperson at the same time," says Schroeder. A total of twelve employees work at Trailer Lloyd's two locations in Hamburg and Neu-Ulm, four of whom are trainees. The executive floor at the headquarters in Hamburg usually remains empty because the boss works downstairs with the team: "You can listen in, shout >



information directly to each other and simply exchange information faster and better." Of course, this only works up to the current size of the company. "We could also manage 200 more vehicles with this structure – but not 5,000." A competitor was acquired in 2009: This is how Trailer Lloyd has grown. "It can get bigger, but it doesn't have to," says Schröder. The fact that the shareholder does not aim to maximize profits through constant growth is a very important factor in the company's success: "Our focus is on profitability and limiting risk."

The Trailer Lloyd team keeps an eye on its own profitability primarily because it knows its costs precisely. "We have positioned ourselves in such a way that we have been able to directly allocate the costs to each vehicle for more than 20 years," says Schroeder. "For example, we can also see which brand is cheaper to run and which equipment features offer us cost benefits." Some customers want specific features:

Trailer Lloyd ensures its own profitability primarily by knowing its costs - right down to the individual vehicle.



"Some may want pallet boxes. But we have other customers who travel to Scandinavia and say that the boxes will be damaged on the ferry. That's why we only make special configurations if a customer signs longer-term contracts for them." When selecting new vehicles, Schroeder and his team also benefit from the fact that the company is small and communication channels are short: "When we buy new vehicles, we discuss among ourselves what exactly we need."

Krone offers proximity and flexibility

60 percent of the Trailer Lloyd fleet is from Krone. Schroeder has had a long-standing personal relationship with the company: "I was friends with Jörg Sanders, the International Sales Manager of the Krone vehicle plant, who sadly passed away far too early in 2014. He drew my attention to the fact that Trailer Lloyd had been newly founded." The company started the business with 200 Krone trailers. "We have been working together ever since and have built up good personal relationships over the years. I particularly appreciate the fact that Krone



is a large company, but still a family business. And it demonstrates flexibility. I always have a contact person, and if we ever have a problem, we find a solution very quickly. When I call somewhere, I don't want to have to first call my customer number. Our transport and logistics business is still a people business," says

In more than three decades in the industry, Thorsten Schroeder has experienced many better and more difficult economic times. Even the current crisis can't shake him: "It's not all that much fun at the moment, that's for sure. But you can't force certain things," he says. "If customers don't need a vehicle, I can't rent it to them. The pie that everyone is eating from is getting smaller. Instead of lowering prices and triggering a downward spiral, we rely on patience." His team is using the time to deal with topics such as digitalization. "However, a booking app doesn't make sense in our business, for example, because we have to know the specifications of the vehicles precisely, which is almost impossible to map via an app," explains Schroeder. For further training, he recommends that his employees learn more about the vehicles in the in-house workshop or via Krone TV, Krone's YouTube channel. Constant questioning is an important driver for the further development of the company: "If someone in the team comes up with a good idea, we talk about it - and implement it tomorrow if necessary! If we realize the day after tomorrow that it wasn't a good idea after all, then we just stop doing it the day after. That's also something that sets us apart from large companies: We can quickly change direction if necessary."



How the hardware saves costs

Customers can use a Krone sales tool to calculate exactly which vehicle configuration is the most favourable for them.



Which trailer has the lowest costs for my application profile? Krone can answer this question with a tool that analyses and compares vehicle configurations in terms of their consumption and total cost of ownership (TCO). For each application it shows which vehicle is the most favourable to drive and provides insights such as these: If a trailer is in use for at least 60,000 kilometres per year and is often on the road with a light load, it is worth investing in a lift axle. For

vehicles that are mainly used for long-distance transport, aerodynamic accessories and low-rolling resistance tyres are not only beneficial for environmental protection, but also save costs.

Calculate consumption

The software was developed in cooperation with the TU Braunschweig. Various route profiles were simulated, for example for city traffic, driving on country roads and the motorway, taking into account conditions such as traffic density, gradients and road conditions. Parameters such as rolling resistance according to the tyre label, weight and aerodynamic measures, as well as the economic calculation with corresponding characteristic values were also included. This makes it possible to calculate consumption



and costs for different vehicle types and configurations.

Krone can use it to advise customers before they buy a vehicle: "We can enter the parameters with which a haulier wants to use a vehicle to calculate the return on investment and profitability", explains Oliver Ehl, Head of K&E Numerical Analysis at Werlte. "We can then optimise this and make specific recommendations for the composition of a vehicle fleet. Of

course, it is advantageous if the type of use of a trailer is known before the purchase: the more precisely we know how it is to be operated, the more precisely we can calculate."

Software reflects reality

According to Ehl, there is great interest in testing these customised profiles: "Reducing the TCO is naturally a priority for our customers." The software always reflects reality: it has been validated in several projects and has always shown very accurate results in comparison to real consumption data and costs. It is also continuously developed and adapted: Current data on petrol prices or salaries are incorporated and, in the long term, navigation data is to be integrated for more precise calculation of specific route profiles.

PROFILE

As a service provider for the transport sector and industrial companies, Trailer Lloyd rents out standard tractor units, container chassis, and various types of curtainsider trailers, as well as box and refrigerated trailers. The fleet currently comprises around 700 vehicles.

DENKFABRIK ISSUE 7

24

25



"As an entrepreneur, you can change the world"

Hendrik Kramer and his team at Fernride want to tackle the driver shortage with autonomous electric trucking. Krone Group supports the start-up as an investor and is working with Fernride on various innovative technology projects. Dr Stefan Binnewies, the Krone Holding Executive Board member responsible for the Krone Holding's commercial vehicle division, visited Hendrik Kramer on the company's test track in Munich.

Dr. Stefan Binnewies: Dear Hendrik, you have been working on autonomous electric trucking solutions at Fernride for five years and we at the Krone Commercial Vehicle Group are proud to be a partner at your side. The fact that you are doing good work is recognised: Volkswagen and DB Schenker have also invested in you and you have been voted one of the "30 under 30" in the "Manufacturing and Industry" category, by business magazine Forbes. What motivates you personally on this journey?

Hendrik Kramer: I want to build a globally relevant tech company here from Europe that solves real problems. We need to deal with issues in logistics such as driver shortages and electrification to ensure resilient supply chains

and maintain everyday life in our democracies. And we can do that now. I find entrepreneurship so exciting because you can make an impact. You can change the world – and that's my goal. Of course, you have to proceed step by step. We have all the expertise in Europe to start this transformation: from manual to autonomous, diesel to electric, using strong partners and not just leaving it to the Chinese or Americans. It's a great privilege to work with so many exiting people, while learning directly from them.

Binnewies: Please tell us again how it came about and what exactly you do!

Kramer: Fernride is a spin-off from the Technical University of Munich. After ten years of research into automated driving, the technology was so mature that we wanted to launch it on the market, but initially we didn't know which market and which business model to use. During numerous discussions with experts and participants from different markets, we realised the many challenges and huge potential in logistics.

Binnewies: Other start-ups also want to exploit this potential. How do you go about it?

"We have all the expertise in Europe to start this transformation: from manual to autonomous, diesel to electric, using strong partners and not just leaving it to the Chinese or Americans."

HENDRIK KRAMER

Kramer: Others are focussing directly on the most difficult case: public roads. We have decided to take a more pragmatic approach and start where autonomous driving already works today: in distribution centres, on factory premises or in ports, i.e. on private

26 DENKFARK ISSUE 7

The Fernride team

does not want to offer

pure technology, but

a solution with high

property where there is no need to change legislation and where people drive at a maximum speed of 30 kilometres per hour. We want to scale up this first use case in the harbour and become the global market leader. Then we will decide on the next steps. What we want to offer is not a technology, but a solution that ultimately benefits the customer. And this must be holistic, taking the entire system into account. For us, having the trucks drive autonomously means that people assist the technology: We don't take them completely out of the equation, but place them in an office from which they are responsible for several highly automated lorries - today there are four vehicles. This increases productivity and safety and makes the job more attractive. We are now continuing to work on making the system scalable. The next milestone is to remove the safety driver from the vehicle in the next six months. Certain safety aspects, standards and regulations must be observed. That's quite a long list, but it will enable us to fulfil the requirements of the Machinery Directive. The next step is CE labelling. After that, we can continue to optimise and scale up. We are currently investing heavily in our supply chain in order to be able to put not 20 lorries into operation, but rather hundreds, thousands.

Binnewies: Why did you decide to approach Krone?

Kramer: If we want to remove the driver, we have to look at the entire logistics process. The driver doesn't just steer, his tasks also include coupling and uncoupling, he has to open and close the doors, release the brakes and take







Dr Stefan Binnewies (top right) and Hendrik Kramer discussed the challenges and prospects of autonomous driving.

care of securing the load. These secondary activities also need to be covered, so it makes sense to work with a trailer manufacturer. I come from Emsland myself, so it was clear that I would knock on Krone's door. Fortunately, you were very open to talking about innovation and we have found great partners in your organization, with whom we have now been working together for a long time in a spirit of trust. How do you actually cultivate this openness within the company?

Binnewies: Of course, we can see that the world is changing. And everyone is talking about the need to increase the productivity of transport logistics on the road, but hardly anything has happened in recent decades. Now the changes brought about by digitalisation, automation and electrification are pressing and we need higher productivity, if only because there are

"As soon as we recognised the many challenges and the enormous potential in this sector, we fell in love with logistics."

> HENDRIK KRAMER

fewer and fewer drivers. At the same time, road transport cannot be replaced and will continue to grow. For us, this is an opportunity to make our product more valuable and functional for the customer. We had just redefined our strategy for this when you approached us. It quickly became clear that we wanted to work with you, not least because we share the same entrepreneurial values. This also includes potential friction: I really appreciate the fact that we simply speak directly when things get stuck somewhere and we can resolve issues quickly.

Kramer: Yes, I feel the same way. It allows us to make rapid progress.

Binnewies: For me, further development always means that people work together without knowing the exact solution beforehand. No matter how great the concept is: If people can't work together, it becomes difficult.

Kramer: I see it the same way. It's about shared values, while at the same time you can be very diverse. That's how we live it at Fernride: our 150 employees have 40 nationalities and come from all age groups. We need young, dynamic energy as well as industrialisation expertise. Experienced engineers ensure that we do not repeat mistakes that are avoidable.

Binnewies: Speaking of avoiding mistakes, as a start-up, it goes without saying that you are breaking new ground. How do you decide which direction to take?

Kramer: I think the most important thing is always to draw the right conclusions quickly from your findings. If you try to be very good at everything as a start-up, you can only fail. I always want to have a strong focus. Because wherever we remove complexity, we can become faster. That way, we can add more cases in the future and again build up more complexity. The decisions that are necessary for this can't be made in a PowerPoint presentation or in a meeting room, but by trying things out and making mistakes. I think we at Fernride are very good at drawing the right conclusions – also together with the customer: You also have to be quick with them as a team.

Binnewies: While the trailer was previously seen primarily as a simple shell for goods, we breathe life into it. For example, we ensure that it can couple automatically and that this work step can be carried out without a driver. So we give the trailer arms – and it gets legs through our cooperation with Trailer Dynamics, where it is equipped with an electric axle and even supports

the tractor unit. When do you think your technology will make it onto the road?

Kramer: I think we will decide in the next two years when we want to start using it on the road. The alternative, for example, is to begin with other applications on private property; we have already implemented successful projects with Volkswagen and DB Schenker, for example. And for this medium-term decision, we are of course already holding talks with potential partners. After all, our current trucks are optimised for the container yard in the port. If you go onto public roads, that means higher speeds and other vehicle types and therefore other vehicle manufacturers.



Binnewies: Personally, I believe that automated driving will gradually move out of these limited areas of application such as harbours. And that will happen faster than we all think. I come from the intralogistics sector, and 15 years ago we didn't think that driverless transport systems would become so established. In our new spare parts warehouse, these carriers now operate as a standard feature.

Kramer: Yes, for our major logistics customers, automated processes in the warehouse are now absolutely standard, just as they are in the harbour. For them, it's actually the next logical step to use mobile robots in horizontal transport as well. With regard to drivers, I would also like to say that making autonomous driving possible is not our priority. Our focus is on the imminent shortage of two million drivers in Europe by 2026. This is a huge issue for our society. And if we do not find a solution soon, the empty supermarket shelves we know from the pandemic will become the new normal. We need to make the

drivers we have more productive, train new →

The driver monitors the vehicles from an office and can intervene from there in the event of problems.

28 DENKFARK ISSUE 7

talent and make the job more attractive. At Fernride, we are doing all of this at the same time by creating the new job of teleoperator. As a teleoperator, you manage a fleet of autonomous vehicles from an office, so you don't have to travel as much, you don't have to sleep in the lorry and you can earn more money in the long term. The job is also safer: accidents happen in container terminals, where everything has to happen quickly and masses of metal are moved.

Binnewies: That's a big step forward compared to the status quo. I think that accidents at work don't happen at the interfaces to automation, but where work is still done manually. People always look for the best way – the most efficient, the most convenient for them. Our customers don't always use our products the way they should according to the safety regulations.

Kramer: This is only human.

Binnewies: Yes, definitely. What I would also like to say: As a partner, we were also very pleased about your nomination for Forbes' "30 under 30", because this helps to promote a positive perception of logistics in society and thus give it a higher profile. As the Krone Commercial Vehicle Group, we also want to contribute to this and create an understanding that smooth logistics is a competitive advantage. In terms of logistics costs as a percentage of gross domestic product, Europe has an advantage of several percentage points over other developing countries. We are therefore not only able to build the best machines, but are also the best at bringing them to the markets in the logistics process and are in control of our supply chain. We need to understand and utilise this competitive advantage more as a business model. And work together to ensure that logistics also has a better social standing in Europe. Nobody yet knows exactly what the future of autonomous



ABOU'

Hendrik Kramer, born in 1995, founded his first company at the age of 16 with the idea of selling dressage horses online. He studied at the Technical University of Munich and Stanford University. During his studies, he met his Fernride co-founders



Jean-Michael Georg and Dr Maximilian Fisser.



"With regard to drivers,
I would also like to say that
making autonomous driving
possible is not our priority.
Our focus is on the imminent
shortage of two million
drivers in Europe by 2026."

Sensor technology enables the vehicles to drive autonomously and ensures the necessary safety-among other things.

HENDRIK KRAMER

truck driving will look like. But here too, one of our tasks is to give our customers an idea, to show them what is already technically possible and what is yet to come. Now is exactly the right time to develop this from a safe harbour – in the truest sense of the word.

Kramer: We see it exactly the same way. For me, the award is above all a nice recognition of our work as a team at Fernride. The attention we have received at a global level has certainly helped us as a new brand in terms of customers, investors and talent. Especially because Kramer: we are competing with high-tech companies in the labour market. The nomination helps to create trust and I am grateful for that. It was nice that the local newspaper in my home town reported on it, which made my mum very proud − it also gave her a better understanding of what we've been working on here in Munich all this time.

∠

Shaping the commercial vehicle industry together

With its investment in the Schwarzmüller Group, Krone is establishing a strong partnership in the European commercial vehicle industry.

hared values, a broader portfolio and even more service: Krone is acquiring a stake in the Austrian Schwarzmüller Group in order to expand production networks, create comprehensive service offerings and a holistic product range. The two family-owned companies want to jointly expand their position in the European commercial vehicle market and continue to actively shape the commercial vehicle industry. "Our aim is for customers to find the right transport solution from us at all times. The investment in the Schwarzmüller Group and the associated partnership ensures that we can fulfil this aspiration to an even greater extent", explains Bernard Krone, Chairman of the Supervisory Board of Krone Group.

A secure future with stable jobs

Beate Paletar, owner of Schwarzmüller Group, says: "We see the industrial partnership in the new ownership structure as an opportunity to further professionalise our modern, traditional company together, to optimally counter regulatory obstacles and thus ensure a secure future with stable jobs." As a major European manufacturer of specialised vehicles in the commercial vehicle industry, Schwarzmüller generates an annual turnover of 390 million euros with 1,950 dedicated employees. The broad portfolio covers the areas of long-distance transport, construction and infrastructure. Lightweight trailers, robust tipping semi-trailers and high-quality tankers as well as container transporters in the waste disposal sector of the subsidiary Hüffermann, are particularly in demand.



Driving the expansion of service networks forward

The company has four modern production sites - in Germany, Hungary, the Czech Republic and Austria - which, under the umbrella of Krone Commercial Vehicle Group, can increase distribution capacities and drive forward the expansion of the service networks. The existing management of Schwarzmüller Group will remain active, supported by the expertise from Krone. The strong brands will also be retained so that customers can continue to be addressed individually. At the same time, both companies want to utilise synergies for innovation and growth.

Krone's investment in Schwarzmüller Group is still subject to approval by the antitrust authorities, which is expected in the near future.

✓



Two family businesses hand in hand: Beate Paletar, owner of the Schwarzmüller Group, and Bernard Krone, Chairman of the Supervisory Board of the Krone Group.

30 DENKFABRIK ISSUE 7



Round-the-clock reliability

Frischli produces dairy products for canteen kitchens, the processing industry and the retail trade at four locations. To ensure that the logistics runs smoothly, the company operates its own fleet of vehicles and its own workshop.

HT milk, cream, milk powder, sauces, quark or pudding: Frischli uses milk as a raw material to create a wide range of products for kitchens in canteens, retirement homes, hospitals and restaurants as well as for the end customer, who can find them in the chiller cabinets or dry goods aisles of food retailers. The company is one of the most modern and efficient dairies in Germany. "Our packaging lines handle products from 7.5 gram packs to 1,000 kilogramme bulk packs," says Jan Ballmann, Head of Sales Logistics at Frischli. "They go fresh and safely from our warehouse directly to the customer."

Refrigerated transport ensures quality

The company has four sites: In addition to Rehburg-Loccum near Hanover, where Frischli was founded in 1901, there are plants in Weißenfels (Saale), Eggenfelden and Schöppingen. In Rehburg-Loccum, mainly long-life products that can be transported unrefrigerated are produced - with the exception of long-life cream, which requires refrigeration due to its high fat content. In Weißenfels, chilled products such as the quark dessert "Leckermäulchen" (Sweet tooth) leave the production line. "We can supply around two thirds of Germany ourselves with our own fleet of vehicles," explains Jan Ballmann. "We integrate our locations into this and, for example, drive full loads from Schöppingen to eastern Germany, unload at the customer's premises, then pick up new goods from our plant in Weißenfels and bring them back to the west."

Some regions are serviced daily, others only on certain days of the week. In some cases, packaging materials, ingredients for the production facilities and empties such as pallets and reusable containers are taken on the return route, which significantly reduces the number of empty journeys. "At the same time, we can be more flexible than many haulage companies: If a customer has to adjust their order at short notice, for example because a product is out of stock, we can adjust the route planning until the vehicle leaves our yard and then the goods still arrive on time." In addition to transport and storage, logistics at Frischli also includes order acceptance: "The employees who accept customer orders also plan the vehicles. This means we are close to our customers and can provide them with personalised support." The routes are attractive for our drivers: they take in the plants and cover longer distances, but at most, only one overnight stay is required. For short-haul milk collection logistics, you know months in



advance when you will be driving and which routes will be used, which enables each delivery to be efficiently planned.

Cost leadership in the market

"Our focus is on cost leadership in the market," says Ian Ballmann, "That's why it's particularly important for our profitability that we can collect the raw material milk at optimum cost, remain efficient in production and work in a price-optimised manner in terms of packaging and logistics. We operate our own vehicle fleet because we see it as a competitive advantage. According to Heiko Ziesenis, Vehicle Group Manager, a total of around 7.1 million kilometres are covered every year with 47 tractor units and corresponding trailers for milk collection logistics and general distribution. From the Rehburg-Loccum site, almost 115 drivers are on the road in 47 of their own trucks: "We try to optimise the utilisation of our fleet in both areas so that we can keep individual vehicles on the road almost around the clock. In milk collection logistics, for example, the vehicles are utilised 23.5 hours a day. In the area of general distribution, good planning and long-standing customer relationships also make high capacity utilisation possible. And thanks to our own workshop, we have sufficient capacity and can react quickly at any time."

This makes predictive maintenance all the more important. To date, the team has not only relied on digital support, but above all on experience: "We make a note in our workshop information system when parts need to be replaced or certain work is required," says Ziesenis. "The vehicles are then checked and, if necessary, the brakes are replaced at the same time. If we have driven a wheel bearing on a semi-trailer for 1.2 million kilometres and see that the brake disc shortly needs

The Frischli plant at the headquarters in Rehburg-Loccum has grown continuously. It is currently being expanded to include a facility for the production of oat drink.

32 DENKFABRIK ISSUE 7

Cold Passion

replacing, we change the entire wheel hub straight away – and the vehicle is ready for the next million." Breakdowns are the absolute exception thanks to this way of working: "And 80 per cent of them are caused by burst tyres." In addition to order picking, route planning is also digitally controlled: "Every lorry has a tablet on board, which the driver can use to call up the route and other information about the route," explains Jan Ballmann. "Telematics provides data such as driving and rest times and also shows us how economically the individual vehicles are travelling."

Remaining a successful family business

For even greater sustainability, Frischli has committed to reducing $\mathrm{CO_2}$ emissions by 22.5 per cent by 2030 compared to the base year 2021 and among other things, to integrating alternative drive systems. Fuel consumption has already been measurably reduced over the past ten years. "We are seeking advice from experts on how we can achieve a $\mathrm{CO_2}$ -neutral dairy," says Jan Ballmann. "In particular, we are looking at how we can reuse energy generated during production." In addition, the company is also working closely with the 750 farmers who supply the milk in order to drive forward climate protection targets in the upstream sector.

In addition to its sustainability goals, the team wants to achieve one thing above all: Frischli should remain a successful family business characterised by resilience and profitability. With 125 years of history behind it, the dairy is constantly evolving in all areas. This also includes modernising its production facilities. "We will be starting up a new production line in 2025," says Ballmann. "At the same time, however, we are also maintaining machines that have been doing a good job for a long time. We are optimising these by incorporating our own innovations to solve challenges in the production process. For example, we have integrated a lifting device with all kinds of software customisation into



a bag filling machine, which enables the bags to 'fall' gently into the packaging area. This has significantly improved product quality." The company is in contact with consumers via a so-called user team, which visits the chefs who use the products so they can discuss individual requirements.

Frischli's vehicle group manager Heiko Ziesenis (left) keeps the company's own fleet of vehicles running.

New plant for milk alternatives

Frischli is also responding to changing eating habits such as the boom in plant-based foods: For example, an oat liquefaction plant is being built in Rehburg, which in the future will be able to produce several million litres of oat drink per year. According to Heiko Ziesenis, constant development is also noticeable in the vehicle fleet: "We have already been able to implement optimisations together with Krone. I'm sure some hauliers look upon us with envy." Frischli has been working closely with Krone for a long time. "The quality of the vehicles is right, especially in regard to their stability and service life, and that is extremely important for our business," says Ziesenis. "We also appreciate the direct contact: Personally, it's very important to me that I can pick up the phone if I have a concern and that I'm listened to. This is the case at Krone. My contacts have been the same for many years and the level of trust is consistently high."



FRISCHLI

Frischli produces
long-life and fresh dairy
foodstuffs at four sites
in Germany. The products
are sold throughout
Germany and Europe
as well as worldwide.
State-of-the-art process

and filling technology enable the company to produce basic products in large quantities and to the highest quality.







"Speed is in our DNA"

With Sovereign Speed, Martin Araman offers a delivery infrastructure for the whole of Europe that enables exceptional speed – while remaining commercially efficient.

any people can transport things from A to B," says Martin Araman, Managing Director of Sovereign Speed GmbH. "But we do it with a passion that is second to none. If a 9 o'clock delivery in London is ever late, we are personally offended!" Good thing that doesn't happen often. The company has had speed in its name since it was founded: "Speed is in our DNA," says Araman. He and his team always look for and find the optimum solution for every task.

He gives an example: "You might think that a special delivery directly to England would arrive faster than with our scheduled service. But we manage to get over 98 percent of shipments from Hamburg that are delivered by 5 p.m. to Derby in the center of England before noon the next day and to East Kilbride in Scotland before 5 p.m." This is possible thanks to "trained and well-rested employees who are equipped with the latest technology". Thanks to reservations, Sovereign has priority when traveling through the Eurotunnel. "And our colleagues in England are familiar with the local conditions, speak the local language and know the traffic rules – including driving on the other side of the road."

Still on fire today

Sovereign is almost invisible to the recipient of a shipment: the company acts as a neutral infrastructure provider for logistics companies, freight forwarders, airlines, integrators and parcel services in Europe. It serves a total of 72 destinations six nights a week in a fixed-schedule network. "We keep your promises" is the company's slogan: "We are an integral part of our customers' supply chain and enable them to reliably keep their promises to their customers."

Araman founded the company 26 years ago together with Karim El-Sayegh. The two have known each other since their school days. After leaving school, Araman first joined the German army and then completed a dual degree in business administration at the Hamburg Business Academy and the trading company Arnold Otto Meyer. He then attended a program for management trainees in industry. Karim El-Sayegh had already gained a foothold in logistics. The two of them had the idea of founding Sovereign over a meal together. "I was immediately hooked and I still am today," says Martin Araman. The starting shot was fired on May 1, 1998. "Our foundation is the typical 'garage story': we started with five employees and two Sprinters in a backyard in Hamburg's City Süd, with a single room as an office." Today, Sovereign employs over 850 people at 23 locations in Europe.

Drivers are called Sovereign pilots

Araman and his team maintain the high quality of the services by developing and implementing the offers themselves and not working with subcontractors − as is →



customary in the market. "We operate the transshipment halls at the airports ourselves and only our own drivers drive for us." They are called Sovereign pilots to pay respect to their important work. In addition to the scheduled network, Sovereign offers air cargo activities at the Hamburg, Cologne and Frankfurt locations and customized transport solutions for contracted logistics services. A small airline, four cargo aircraft and its own flight operations cover scheduled flights and ad-hoc charters within and outside Europe. Sovereign uses more than 500 transport units, "from gigaliners to e-sprinters": "We don't simply purchase our vehicles randomly, but try to buy them in such a way that they can be used flexibly." In addition to the price, reliability, technical equipment and optimum compatibility for multiple loading requirements are the most important factors.

Economic success is "extremely important" to him, says Araman. "Because it enables us to run the company as we do now and to do things that other companies would not prioritize." This includes, for example, the trainee house: the establishment of a shared apartment for the company's trainees in Hamburg. Or "Haus61" in Frankfurt, a start-up lab that brings together and connects international start-ups with established logistics companies. "We want to be innovative, question processes in logistics and do pioneering work for new logistics solutions," is how he describes his personal motivation. In the area of green logistics, he and his team launched the "Our way to zero" strategy a good three years ago, and Sovereign was awarded the "Hanse Globe" sustainability prize by the Hamburg Logistics Initiative, among others, the company being one of the leading purchasers of the renewable fuel HVO 100. "All these strategies and projects can only be pursued if the economic conditions are right."

"Condemned to growth"

As an infrastructure provider, Sovereign is "condemned to growth", as Araman describes it. "As prices, requirements and salaries increase every year, we have to keep developing new solutions and breaking new ground." In air freight handling, for example, he and his team have optimized the supply chain from the shipper to the plane or from the plane to the customer's door: "We were able to eliminate unnecessary processes because we offer the entire chain from a single source." The biggest lever for profitability is capacity utilization: "As we keep the costs for our services down, the utilization factor determines economic success. That's why we try to maximize capacity utilization by offering the best possible service." If, as is currently the case, market conditions mean that express shipments have to be reduced in favor of prices and import and export air cargo shipments are in significantly lower demand, Sovereign switches to other products such as handling e-commerce shipments at Frankfurt Airport.

"We want to be innovative, question processes in logistics and do pioneering work for new logistics solutions,



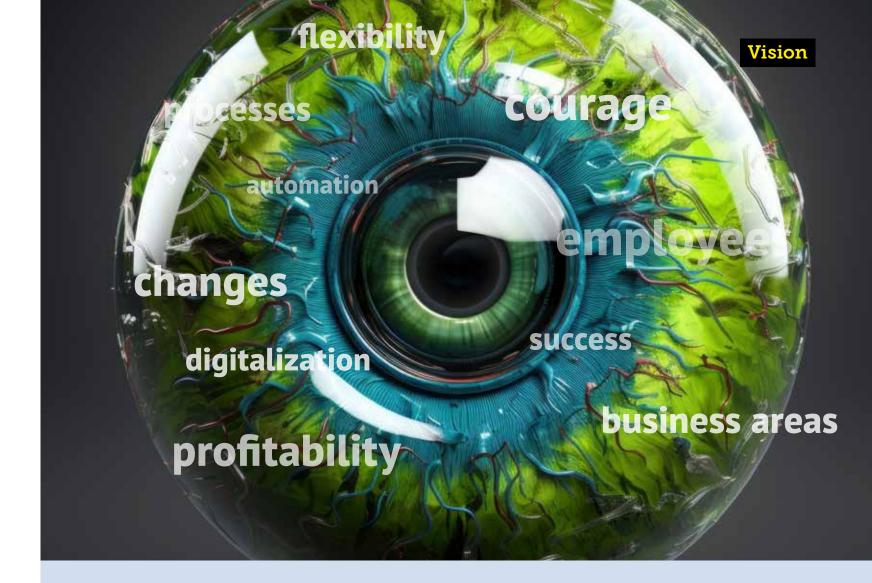
Working at the company has shaped Martin Araman's career. "In 26 years at Sovereign, there have always been different phases: Development, growth and consolidation. My job was always to make customers happy and build up our locations. That was my focus." He sees transportation as an extraordinary industry: "Of the many acquisitions we have made over the years, not even half were intentional." They were the result of a market need or "quite simply put: because some partner companies were not managed well commercially and were on the brink of collapse". He recalls the takeover of a partner in England in 2002. "It was facing insolvency. But England was essential for us, so we took over the company – and paid a lot of learning money, as we had no idea about English law or employment law. Was it still the right decision? Yes!" It was situations like these that shaped him, says Araman. "I have always risen to the challenge of achieving a great performance with a lot of passion, despite all the adversity."

The pulse of success

to be commercially successful. They not only enable us to optimize processes and reduce costs, but also to open up new business areas and improve existing structures.

"With automation and digitalization, we have powerful tools at hand".

Profitability is more than just a key figure – it is at the heart of entrepreneurship. Let's work together to keep this heart strong and healthy, even in turbulent times. 🛂



A column by Bernard Krone

rofitability is the pulse of every suc-

cessful company, the foundation on

and maximizing profits. It combines efficiency,

innovation and sustainable action. It requires

us to be flexible, adaptable and courageous –

and is based above all on a strong workforce.

ing times? By continuously investing in our

employees and technologies. By remaining

open to change and having the courage to try

new things. And by constantly reminding our-

selves that profitability is not a static goal, but

an ongoing process. With automation and dig-

italization, we have powerful tools at hand to

meet the challenges of the future and continue

How do we ensure profitability in challeng-

which all business activities are built.

It means more than just reducing costs



PROFILE

Martin Araman, a graduate in business administration, co-founded Sovereign Speed GmbH almost 26 years ago. As Group Managing Director, he manages the specialist service provider for time-sensitive transportation with a focus on innovation, quality, reliability and assertiveness.

38 **39 DENKFABRIK** ISSUE 7 **DENKFA3RK**

