

Issue 69 December 2025

BRAKING NEWS

The customer magazine of **Knorr-Bremse Systeme für Nutzfahrzeuge GmbH**

120 years of Knorr-Bremse

The evolution of compressor technology

Workshop at Christmas

Always there for customers

Central Motors Dubai

One step ahead of the competition



KNORR-BREMSE



06



12



16

EDITORIAL

- 03 Alexander Wagner, Head of Global Aftermarket / TruckServices at Knorr-Bremse Systeme für Commercial Vehicles GmbH

NEWS

- 04 WESP CV: Recognizing growth potential in the workshop
- 06 ESB REMAN: Repairing control units quickly and sustainably
- 23 Jochen Hahn: Highly motivated for the new season

COVER STORY

- 12 Workshop at Christmas: Always ready for action

TECHNOLOGY/SERVICE

- 16 120 years of Knorr-Bremse: Compressors ensure safety

CUSTOMER FEATURES

- 8 Lex & Hesse: Customized solutions for 35 years
- 20 Central Motors: Premium quality for the Emirates

IMPRINT

PUBLISHED BY

Knorr-Bremse Systeme für Nutzfahrzeuge GmbH: December 2025
Information for customers and partners of Knorr-Bremse

CONCEPT AND REALIZATION

ETM corporate publishing und Knorr-Bremse Corporate Communications

CONTRIBUTORS TO THIS ISSUE

Simon Basler, Ilona Burgrath, Sabine Duffner-Beck, Katrin Gienger, Thomas Hünseler, Thomas Rosenberger, Susanne Spatz, Bettina Tokarski, Magdalena Usar, Georg Weinland

PHOTOS

Christian Schwigon, CME Parts, Cojali, Getty, GLX, Jochen Hahn, Knorr-Bremse, Knorr-Bremse Archive, Lex & Hesse GmbH, Richard Kienberger, W. Schütt GmbH, WESP CV

GRAPHICS

Viploria, Gerlachweg 27, 80999 Munich, Ilona Burgarth

PUBLISHER

EuroTransportMedia Verlags- und Veranstaltungs-GmbH, ETM corporate publishing division, Managing Directors: Bert Brandenburg and Oliver Trost, Handwerkstraße 15, 70565 Stuttgart, © by ETM corporate publishing 2025

CONTACT

bremspunkt@knorr-bremse.com



ALEXANDER WAGNER
Head of Global Aftermarket /
TruckServices at Knorr-Bremse Systeme
für Commercial Vehicles GmbH

Dear Reader,

Knorr-Bremse is pursuing a clear vision: Through data-based services, digital platforms and innovative products, we want to sustainably increase the efficiency of all market players in the commercial vehicle aftermarket. In doing so, we are transforming the aftermarket from a component supplier to a digital solution provider - and at the same time strengthening the position of the independent aftermarket and complementing the brand-bound aftermarket. Our ecosystem creates transparency, opens up new sales potential and supports workshops, fleets and dealers alike.

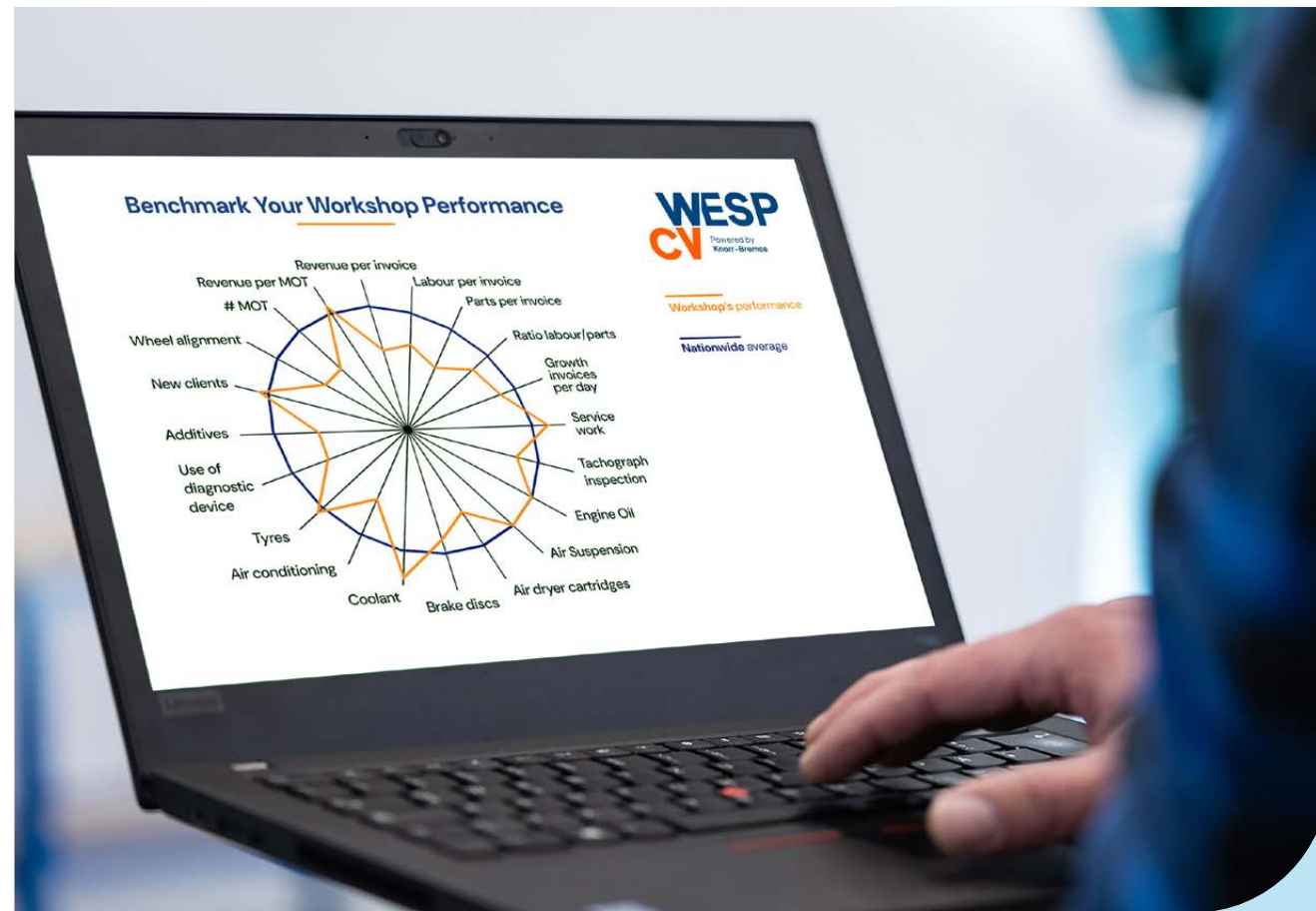
One example of this is ESB REMAN. Instead of a cost-intensive new purchase, the repair service offers an efficient and sustainable solution for electronic control units (ECUs) in commercial vehicles. This lowers maintenance costs, reduces downtime and extends the service life of important components. With a strong network of repair center in Europe, we can carry out repairs quickly, regionally and to the highest quality standards - thanks to trained personnel and standardized processes.

Another key element of our digital ecosystem is WESP CV. Together with our partner WESP, we have developed a workshop benchmarking system that helps workshops to increase their efficiency and profitability based on data. Anonymized key performance indicators enable mutual learning within the industry and well-founded decisions for business optimization.

In the third part of our series celebrating Knorr-Bremse's 120th anniversary, we look at the development of our compressors - the "lungs" of the commercial vehicle, which remain indispensable even in the age of electromobility. We also shed light on how medium-sized workshops are there for their customers even at Christmas. And we introduce two exceptional customers: Central Motors & Equipment from the United Arab Emirates and Lex & Hesse from Dresden - both united by quality, customer proximity and a spirit of innovation.

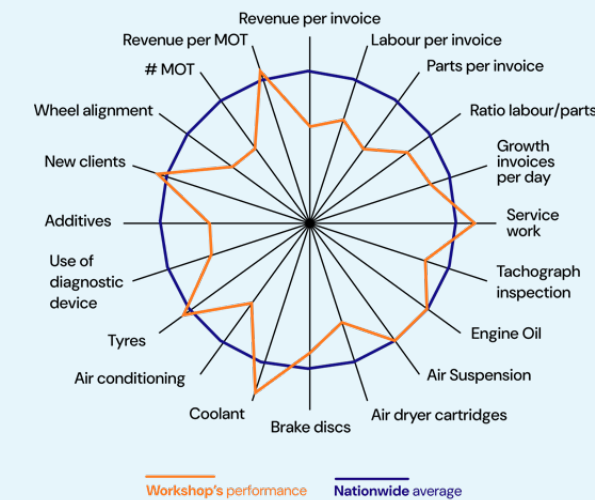
I wish you an enjoyable read, a peaceful and merry Christmas and a good start to the 2026 trade fair year.

Alexander Wagner



WESP CV Powered by Knorr-Bremse

Benchmark Your Workshop Performance



Data that *moves*

With WESP CV, the Dutch data pioneer WESP and Knorr-Bremse are now jointly bringing their expertise to the commercial vehicle aftermarket - for more transparency, efficiency and entrepreneurial opportunities in workshops.

If data could talk, it would tell workshop managers where potential still lies dormant. This is exactly what WESP CV makes possible - the new joint venture between Knorr-Bremse TruckServices and the Dutch data analysis specialist WESP. „We discovered the WESP system at a trade fair two years ago and were immediately convinced,” recalls Korbinian Kutzner, Managing Director of the young company. „It was a great product, already established in the car sector and extremely successful. It quickly became clear that it also had enormous potential for commercial vehicle workshops.” The idea: WESP contributes over 13 years of experience in the processing, data cleansing and standardization of workshop data, while Knorr-Bremse TruckServices adds its in-depth industry knowledge and market access. Together, they are creating a plat-

form that is set to revolutionize the aftermarket based on data. „Our pilot phase has shown that there is huge interest. The market urgently needs this transparency,” says Kutzner. At the heart of the offering is an intelligent benchmarking system. Workshops receive a clear overview of their own performance and can compare it with an anonymized peer group of similar businesses. „Many entrepreneurs make decisions based on gut instinct,” says Kutzner. „For the first time, we are giving them the opportunity to back up their feelings with facts - in direct comparison with the market.” This allows efficiency potential, sales opportunities and operational weaknesses to be quickly identified without the need for external analyses. The technical implementation is extremely simple: WESP CV is



“WESP CV brings transparency and efficiency to the aftermarket - to the benefit of all.”

(Korbinian Kutzner, Managing Director WESP CV)

system-independent and can already exchange data with over 60 different workshop management systems. „Onboarding only takes a few minutes. After that, data transfer and analyses run automatically - the workshop doesn't have to worry about anything,” explains Kutzner. Data protection is a top priority. WESP's decades of experience in the secure handling of sensitive information ensures that all data is anonymized, aggregated, non-traceable and used exclusively for comparison purposes in compliance with the GDPR.

The special thing about WESP CV is not just the technology, but also the support: Workshops are not left alone with the many analysis options. Data experts help to understand causes and effects and derive specific measures from them. „We also save companies' most valuable asset - time,” emphasizes Kutzner. „Our specialists analyze the data in advance, identify potential and discuss this directly with the workshop manager.”

Following a successful pilot phase, the rollout is already underway. The first workshops in several European countries are using the system - with noticeable added value. „We are receiving consistently positive feedback. The workshops appreciate the fact that they can see their own development and at the same time know what it means in the market,” says Kutzner. The further development of the tool remains an ongoing process: „We listen carefully to what our partners need and integrate new functions and key figures on an ongoing basis.”

WESP CV will play a central role within the Knorr-Bremse ecosystem. The platform strengthens the connection to the workshops, provides valuable feedback and helps to improve services and products in an even more targeted manner. „We are creating real win-win effects - for Knorr-Bremse, for our partners and for the entire aftermarket,” says Kutzner.

The challenges in the commercial vehicle service business are considerable: a shortage of skilled labor, rising operating costs, new requirements due to electromobility and sustainability. This is precisely where WESP CV comes in by digitalizing and networking processes and providing data-based support for decisions. „Ultimately, the aim is to give workshops the tools they need to remain economically strong in the future,” summarizes Kutzner.

And what drives him personally? „I studied mechanical engineering, worked in workshops myself and know what everyday life is like there. That's why it's important to me that our solution not only shines technically, but also offers real benefits - easy to use, practical and with tangible added value.” With WESP CV, says Kutzner, every workshop should have the feeling: We are one step ahead.



Faster Service for control units with ESB REMAN

Knorr-Bremse TruckServices offers workshops throughout Europe with fast, cost-effective and sustainable repairs for electronic control units - a service that takes both practical and environmental aspects into account.



The workbench is used to check the ECU. This is where a decision is made on repair or replacement.

The control unit is always repaired as quickly as possible.

In the Europe-wide repair network for electronic control units from Cojali and Knorr-Bremse TruckServices, workshops can order the repair of ECUs via an online platform. After being read for existing damage, the defective unit is sent to one of four European repair centers operated by Knorr-Bremse and Cojali via a logistics service provider. There it is checked and, if possible, repaired and returned within 36 hours - a speedy service provided not only in Germany and Austria, but also in Portugal, Spain, France, Italy, Central and Eastern Europe and the Baltic states. "Our aim is always to repair the control unit as quickly as possible and return it to the customer," explains Jan Kroupa, Specialist ESB REMAN Knorr-Bremse TruckServices EMEA. "However, we do not have a contractual agreement that guarantees a specific repair time. In some cases, a more in-depth technical analysis is required or we need to clarify details with the workshop." The repair period starts from the time the control unit arrives at the repair center. Transport times depend on the location of the workshop and the current conditions. Therefore, the ESB REMAN portal does not publish fixed turnaround times to ensure realistic expectations. The benefits of ESB REMAN are clear: On a single platform, workshops can repair a wide range of ECU types, including engine control units, chassis, brakes or instrument clusters. The platform organizes collection and delivery, currently free of charge, so that workshops do not need their own courier service and only need to prepare the package and specify opening and closing times. The cost saving compared to buying new is significant, and customers can track the status of their delivery and any repair request online at any time. "Many garages have already given us positive feedback," adds Kroupa. "There is a lot of interest, and many customers appreciate the transparency and ease of processing."

ESB REMAN is particularly worthwhile for truck owners whose vehicles are no longer covered by the manufacturer's warranty. A repaired ECU offers a cost-effective alternative to buying a new one, extends the service life of the vehicle and ensures its performance. "Based on our conversations with customers, we are seeing a lot of interest and enthusiasm. Some are already looking forward to joining the ESB REMAN network and utilizing the service," says Kroupa. The service is being continuously developed. Knorr-Bremse is constantly expanding its ECU repair portfolio to cover a wider range of types and customer needs. The company currently operates four dedicated repair centers together with Cojali, and further expansion plans are in place to increase accessibility and service capacity. In Liberec, two technicians are currently directly responsible for repairs, supported by a cross-functional team from logistics, quality assurance, packaging and SAP systems. "We are planning to expand the core team in the coming months in order to meet the growing demand, make processes even more efficient and further optimize the service," explains Kroupa. The ESB REMAN portal currently supports over 1,100 OEM ECU references, with plans to significantly increase this number over the course of 2026. With ESB REMAN, Knorr-Bremse TruckServices thus offers a modern repair portfolio that is economical, sustainable and practical. Workshops benefit from fast, transparent processing, customers save costs and the environment is protected - a service that optimally meets the requirements of the industry today and in the future and fulfils the high demands of modern workshops.



*ESB REMAN makes
ECU repairs fast,
transparent and
cost-efficient.*

(Jan Kroupa, Specialist ESB Reman Knorr-Bremse TruckServices EMEA)



Lex & Hesse keeps mobility running

Lex & Hesse only packs original parts from well-known quality manufacturers.



“The right solution for our customers at all times - that is the goal of Lex & Hesse.”

(Hans-Jörg Hänggi, Managing Director of Lex & Hesse)

With spare parts, expertise and a clear strategy for the future, Lex & Hesse keeps buses and trams reliably on the move - in partnership, efficiently and digitally.

When buses and trains come to a standstill, every minute costs time and money. Lex & Hesse makes sure it doesn't come to that. The Dresden-based company supplies transport companies and workshops with spare parts, assemblies and system solutions for local public transport - from trams to modern buses. "Our aim is to keep vehicles running - efficiently, economically and safely," explains Managing Director Hans-Jörg Hänggi. Founded more than 35 years ago, Lex & Hesse has established itself as a reliable partner in the supply of spare parts. Today, the company specializes in the public transport and rail sectors and works closely with Knorr-Bremse and other leading

manufacturers. Quality is the top priority: The company only procures original parts and categorically rejects cheaper replacement products from third-party suppliers. For Hänggi, this is not only a promise of quality, but also a safety factor: "If a cheap product fulfils the specification but fails during passenger transport, we don't want to be responsible." The collaboration with Knorr-Bremse includes not only the supply of spare parts, but also technical advice, training and support for customer projects. Hänggi reports that Knorr-Bremse's field service is always available and finds solutions together with Lex & Hesse and the customer: "Sometimes you have to bite the bullet

and earn almost nothing on a part, but you win the customer for the future." This partnership principle pays off: Satisfied customers come back and the supply chain remains reliable. The future of mobility demands more than traditional spare parts supply. Electromobility, digitalization and new generations of vehicles are changing the requirements for spare parts and service. Lex & Hesse is responding to this change with clear strategies: Digital systems monitor stocks, control ordering processes and provide customers with real-time information on availability. This is not just about efficiency, but also about transparency: Customers can see directly which parts are

available and how quickly they will be delivered. "We have evolved from a traditional parts dealer to a digital system partner," says Hänggi. "The aim is to offer our customers the right solution at all times - predictable, reliable and efficient." Personal advice remains a central component of the service. Technical expertise, which is available both at Lex & Hesse and at the core suppliers, ensures that complex requirements can be solved. "Technology is no substitute for experience. Our customers know that with us they can reach people who understand their business," explains Hänggi. Lex & Hesse attaches great importance to a modern working

environment and the promotion of skilled labor. The company regularly trains apprentices, many of whom are later promoted to management positions. Flexible working hours and home office solutions are also part of the concept in order to offer employees a modern working environment. Hans-Jörg Hänggi emphasizes: “Every employee can contribute to the success of our company. This creates identification and motivation.” Sustainability is also playing an increasingly important role. By repairing and reusing high-quality components, Lex & Hesse extends the life cycles of vehicles and helps to conserve resources. At the same time, the company is constantly reviewing which parts need to be strategically kept in stock in order to remain able to deliver even in crisis situations such as supply chain bottlenecks. Decades of experience in the spare parts

business are evident here: Planning, proactivity and partnerships ensure customer mobility. Looking to the future, the challenges are clear: electromobility in public transport, changing wear profiles, digitalization of processes and a growing customer base. Lex & Hesse relies on a combination of strategic warehousing, digital transparency, partnership-based collaboration and a motivated team. “We want to be a reliable partner for our customers not only today, but also tomorrow,” says Hänggi. With this combination of experience, expertise and forward-looking strategy, Lex & Hesse keeps buses and trains moving - efficiently, safely and reliably. The company shows that spare parts trading is far more than just logistics: It is a decisive factor for the mobility of millions of people in urban areas.










Lex & Hesse is celebrating its 35th anniversary this year. The front of the Ikarus bus on the façade is a reminder of the company's time as a GDR supplier..



Birthday surprise: Lex & Hesse Purchasing Manager Robert Topf (center) and his Knorr-Bremse supervisors Christian Schwigon (left) and Thomas Gaus (right) are delighted with the award specially designed for Lex & Hesse to mark the company's 35th anniversary.

UP2DATE



-  Y603372
ESB REMAN: the intelligent, sustainable repair solution for various commercial vehicle ECUs
-  Y514892
Pneumatic disc brake type SyT7 (NexTT®) Update
-  Y586250
Compressors with aluminum housing for Scania CBE1 applications
-  Y608545
EAC2.5 - Bayonet Cartridge Design Change
-  Y607050
Knorr-Bremse is expanding its range of transmission components.
-  Y592249
Extension of the new SYNACT® brake family
-  Y603172
Newly available for service workshops - pressure sensor cable repair kit for the iAPU

The documents are available for download at:

<https://mytruckservices.knorr-bremse.com>

“Somewhere in the world there is always a holiday”

Business continues at the Grünheide central warehouse even on public holidays. Knorr-Bremse provides its customers with constant availability across a portfolio of around 6,000 article numbers.



“Worldwide parts availability across our entire portfolio - that is our claim”

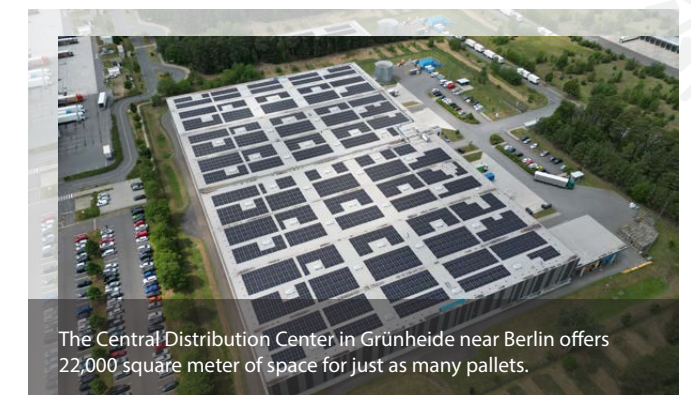
Sebastian Doll, Director EMEA Logistics Operations & Warehousing bei Knorr-Bremse

“Business as usual, even on public holidays - that’s normal for us,” says Sebastian Doll, Director EMEA Logistics Operations & Warehousing at Knorr-Bremse and therefore also head of the CDC (Central Distribution Centre) in Grünheide. From the central warehouse, Knorr-Bremse supplies customers worldwide as well as its own plants with parts. “There’s always a public holiday or some other holiday somewhere. That’s why we are always prepared to keep operations running,” he explains. While most people in Germany are celebrating Christmas and relaxing, the employees in Grünheide are working with a reduced workforce, but are able to ensure supplies to international customers at all times. “There are 1,800 different customers. We keep 6,000 article numbers or 9.5 million parts in Grünheide for them at all times. They are stored in 22,000 pallet spaces or on an area of 22,000 square meter,” explains the CDC manager.

A total of twelve sales offices, nine of which are located in Europe, manage incoming orders at the site just east of Berlin. They maintain direct contact with customers and forward their orders to the central warehouse. According to Sebastian Doll, seasonal or weather-related order peaks are no longer a surprise and are firmly factored in. Many fluctuations in demand are based on the known repair cycles of the service companies, for example. “We are always available wherever possible and our stocks in Grünheide are calculated with a sense of proportion,” he explains. “We predict the transport requirements for our service providers, the haulage companies, so that they can adjust to the capacities we need in good time,” says the Director EMEA Logistics Operations & Warehousing. On working days, shipments are sent to direct customers several times a day, while express services are available for urgent, unexpected requirements during national holidays. “The CDC endeavors to provide our customers worldwide with parts availability across our entire portfolio. We always try to respond to short-term requirements - even at Christmas or other national public holidays. For us, it remains business as usual,” he says, summarizing the central warehouse’s mission statement.



The Knorr-Bremse employees in Grünheide ensure that every one of the 9.5 million parts in stock can be delivered on time if the worst comes to the worst.



The Central Distribution Center in Grünheide near Berlin offers 22,000 square meter of space for just as many pallets.



W. Schütt uses two Mercedes Sprinter service vans and an articulated truck for breakdown and emergency services.

Christmas in blue overalls

At Servicebetrieb W. Schütt, everyone sticks together. This is why they are able to offer an emergency service even on public holidays and fulfil the company promise of “punctuality and flexibility.” The service partnership with Knorr-Bremse TruckServices also contributes to this.

While many people spend the Christmas period at home, professional drivers keep the supply chain running - keeping shelves stocked, gas stations supplied and much more. Employees at commercial vehicle workshops also have to provide an emergency service to help stranded professional drivers and get trucks that have been involved in accidents back on the road as quickly as possible. Especially when it is cold at Christmas, there is a lot to do.

The independent workshop W. Schütt, based near the port of Hamburg, also helps to keep the economy running over the festive period. The company works for various emergency services. “We are a small, fifth-generation family business with 37 employees, including five master craftsmen and three trainees. In order to be able to offer an emergency service at Christmas, we start planning early and spread the workload evenly across all shoulders. We take the families of our employees into consideration,” explains Oliver Schütt, an employee since 1994 and, since 2016, together with his brother Matthias Schütt Managing Director of the service company, which was founded in 1882 as a farrier’s and carriage smithy. From December 24 to 28, at least one mechatronics technician is on duty for the emergency service in one of the two service vehi-

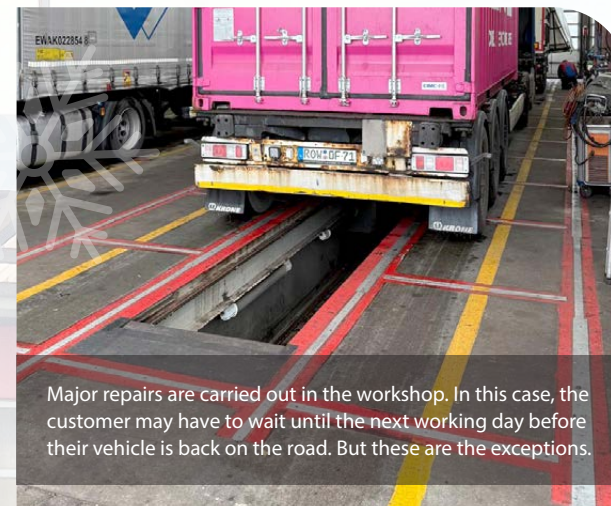
cles; there is a daily rotation.

Especially during the holidays, customers want their trucks to be able to get back on the road quickly. There is no time for contemplation in road freight transport, the deadline pressure is also high at Christmas time, and there is always a lot of traffic around Hamburg and the port. “We can solve 60 to 70 percent of cases on the road within one to two hours, depending on the journey time. The rest we have to tow to the workshop to get the vehicles back on the road, at least provisionally - in accordance with legal regulations, of course. Only if there is a particularly serious defect or damage does the customer have to be patient until the next regular working day. But these are the exceptions,” explains the company boss.

In principle, W. Schütt undertakes all work on commercial vehicles. If the specific job does not match the expertise of the mechatronics technician currently on duty, the job is referred back to the emergency service so that they can assign another partner. Various defects occur, depending on the weather. When it is particularly cold, starter batteries in particular go flat or water can freeze and then cause problems in the air or brake system. Clutch heads also tend to fail. Worn brake discs and hot wheel bearings



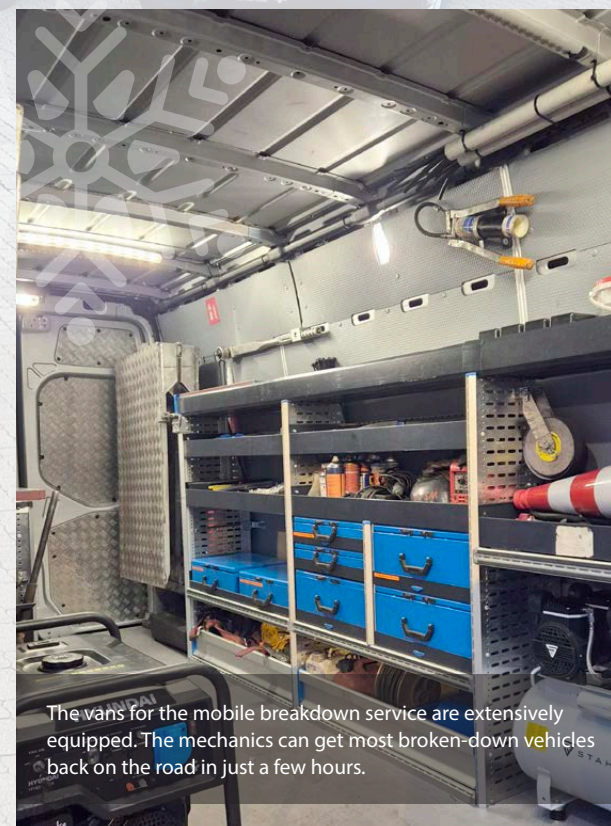
Oliver Schütt (right) is one of the two Managing Directors of W. Schütt. With Hendrik Schütt (left), the sixth generation is already working in the company.



Major repairs are carried out in the workshop. In this case, the customer may have to wait until the next working day before their vehicle is back on the road. But these are the exceptions.



W. Schütt also carries out more demanding tasks, such as straightening frames.



The vans for the mobile breakdown service are extensively equipped. The mechanics can get most broken-down vehicles back on the road in just a few hours.

are classics all year round. The service company also specializes in heavy goods vehicles and their hydraulic systems. However, work on heavy goods vehicles is rarely carried out on public holidays, but mainly on working days.

The service company is prepared for all tasks. Up to 7,000 parts are always in stock at W. Schütt. “We know which spare parts are needed particularly quickly at Christmas and have all the usual components in stock,” says Oliver Schütt.

It is not only during the festive season that W. Schütt’s customers include many external fleets. “Every day, five to ten vehicles come to us unscheduled from the motorway or we have to send a service van to a truck,” he reports. Apart from this, the workshop mainly serves companies with one vehicle up to large fleets within a 50 - kilometer radius of the company. In addition to commercial and heavy goods vehicles, the family business also carries out work on agricultural machinery. They often have to travel to refineries and harbor areas to repair or tend to vehicles on site. W. Schütt maintains numerous service partnerships in order to do justice to the variety of activities - for example with well-known manufacturers of trailers and superstructures, trailer axles and braking systems, including Knorr-Bremse. The service partnership with Knorr-Bremse TruckServices is important to Managing Director Oliver Schütt. “There are systems from Knorr-Bremse in many trucks and trailers. If we ever get stuck, the hotline is always available to us. No matter who we have on the line, their expertise is always top-notch. The support from the Knorr-Bremse TruckServices technical field service is also very good,” reports Oliver Schütt.

One of these sales representatives is Michael Broszehl. Oliver Schütt and his team have a special relationship with him. Broszehl began his career around 40 years ago as an apprentice at W. Schütt, before completing his master craftsman’s qualification and moving to the Munich-based company ten years ago to take on another new challenge. It is not least this long-standing trusting relationship that helps W. Schütt to keep its company promise on both working days and public holidays: “Adherence to deadlines and flexibility are essential.”



The emergency service at Christmas is shared between several people. The family is important.

The lungs of the commercial vehicle

The compressor supplies the pneumatic system of a commercial vehicle with compressed air.

Without it, no modern truck would be able to stop safely on the road.

For more than 100 years Knorr-Bremse has been driving compressor technology forward.



KNORR-BREMSE
120 YEARS
1905 - 2025



Knorr-Bremse compressors through the ages



When **Knorr-Bremse** introduced the first air brake for trucks in 1923, the compressor was a simple, belt-driven unit. Even then, the motto was: If you can control the air supply, you can control safety. The compressor became the centerpiece of a pneumatic system that connected brakes, clutches and suspensions. In the 1950s and 1960s, engineers perfected the piston compressor: quieter, more durable, variable. The modular logic allowed customized combinations for different vehicle types - a decisive step towards efficiency in development and service.

Over time, compressors became more powerful and efficient: New materials reduced wear, optimized oil supply increased longevity and valve innovations increased cost-effectiveness. In 1990, Knorr-Bremse introduced the ESS energy-saving system - the compressor switches between air delivery and idling phase as required, thereby saving energy. From the 1990s onwards, compressed air control with electronic braking systems came more into focus: Sensors and control units precisely regulate and control the air supply. The compressor became reliable and sustainable thanks to low oil ejection, and its characteristics were integrated into the control logic.

In order to adapt the compressors to the ever-increasing price of diesel fuel, compressors with a shut-off clutch were brought to series maturity around 2010. This meant that the compressors, which were now driven directly by the engine, could be switched off when the brake system was completely full. Modern compressors are precisely controllable, modular and can be combined with air treatment systems. Today, energy-saving compressor variants with cost-effective ESS through to compressors with only minimal energy consumption with clutch are available.

In 2012, compressor technology once again reached a turning point: Electric and hybrid commercial vehicles transformed the compressed air system. Knorr-Bremse responded with the series production of electrically driven rotary compressors that are compact, energy-efficient and quiet.

The technologies of the future are focused on energy efficiency and sustainability: Electric screw and vane compressors are particularly quiet and efficient. Knorr-Bremse is making air supply systems more compact, cleaner and more integrated. But the principle from 1923 remains alive: Air as a reliable source of energy for safety and comfort.



1923

The beginning of an era

With the introduction of the first air brake for trucks, Knorr-Bremse develops its own single-cylinder compressor. It delivers around 5 bar pressure for the reservoirs - and establishes the era of compressed air systems in road transport.

After the war, Knorr-Bremse resumes production of modern piston compressors. Improved materials, greater stability and optimized valves make the air compressors a central component of safe commercial vehicle technology.

The new compressor family follows a modular system: the same basic components, variable designs. They are quieter, easier to maintain and more efficient - a concept that makes Knorr-Bremse the technology leader in Europe.

1950s

New start in Munich



1960s

The construction kit is created

With the ESS energy-saving system, Knorr-Bremse reduces the power consumption of its compressors by up to 70 percent when idling. New valve technology and water-cooled cylinder heads improve efficiency and durability - a milestone for sustainability.

Integration into electronic braking systems (EBS) places new demands on pressure control and diagnostics. Knorr-Bremse compressors are becoming more intelligent - more precisely controlled and part of digital safety architectures.

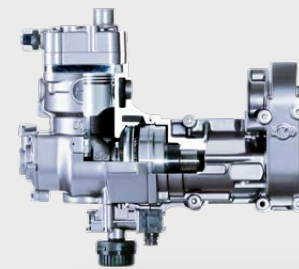
1980s

Save energy with ESS



1990s

The leap into electronics



2010

Clutch compressor saves energy

The screw compressor replaces pistons with rotating compression. It is quieter, low-vibration and permanently efficient - ideal for hybrid and electric vehicles. Knorr-Bremse is thus opening a new chapter in air supply.

2012

Screw compressor for new drives



2025

Electric, low-oil, networked

Today's compressors from Knorr-Bremse are characterized by improved efficiency, reliability and low emissions. In order to save fuel, the engine-driven compressors utilize a new cut-off clutch that only switches the compressor on when required. For electric and hybrid vehicles, rotary compressors were designed back in 2012 that are switched on using an electric direct drive. They also have intelligent thermal management systems that reduce oil consumption and carbon formation, thereby increasing the purity of the compressed air.

Rail as a pioneer

The origins of Knorr-Bremse's compressor development lie in rail transport. As early as the end of the 19th century, steam pressure was used in steam locomotives to compress air for braking systems and Knorr-Bremse produced air pumps in various designs at an early stage. With the advent of electric and diesel locomotives, these air pumps were replaced by oil-lubricated piston compressors with electric or belt-driven drives. In the 1980s, screw compressors were added to rail vehicles, which still operate with virtually no wear today. Since the 2000s, the portfolio has been expanded with oil-free piston compressors, distinguished by their unique selling point of environmental friendliness.

Today, Knorr-Bremse offers compressors with flow rates exceeding 5,000 l/min, combined with air drying and treatment systems that operate reliably even under extreme climatic conditions, as complete air supply units. The next step toward intelligent, demand-controlled air supply systems has already been taken with AirSupply Smart.

Always one step ahead of the competition

Central Motors & Equipment (CME) shows how spare parts trading, service and premium partnerships are redefining the aftermarket in the United Arab Emirates.



“Knorr-Bremse is a technological leader and almost unrivaled.”

Rajkumar Venkatapathy, Country Business Director of CME

For 67 years, the Al Fahim Group has been synonymous with quality and reliability in the automotive sector in the United Arab Emirates. In addition to vehicle sales and parts trading, the group is also active in hotel and property management with over 1,000 employees. Central Motors & Equipment (CME) plays a special role within the corporate family: The division focuses on the aftermarket, develops its own brands and sells spare parts from original equipment manufacturers (OEM) as well as premium accessories for passenger cars and commercial vehicles. „We work closely with our partners to offer our end customers in the region high-quality service, availability and innovative products,” emphasizes Rajkumar Venkatapathy.

Venkatapathy is Country Business Director at CME and has over 27 years of experience in the automotive industry. „I started my career in spare parts sales and quality control and later worked in product development. I managed production facilities for batteries and rubber-to-metal parts for leading vehicle manufacturers and am currently responsible for spare parts, tools and workshop equipment for the aftermarket,” he explains. „My technical knowledge as a mechanical engineer and my experience help me to lead the company successfully.” CME is divided into three main areas: Automotive Aftermarket, Power Tools and Tires. „We are not just a trading company, but also a sales partner for the brands that actively promote their products on the market and support our customers from ordering to on-site service,” explains Venkatapathy.

One of CME’s great strengths is its fast logistics. The central warehouse in Jebel Ali, Dubai, is supported by an external logistics partner, and small warehouses in Abu Dhabi, Al Ain, Dubai and Sharjah ensures that orders are delivered on the same day or the next morning at the latest. „Our customers know that they will receive fast deliveries from us, whether they are retailers, fleets or end customers,” says Venkatapathy.

The partnership with Knorr-Bremse is crucial for CME. „I have been working directly with Knorr-Bremse for over eight years and indirectly for almost 20 years.

Knorr-Bremse is a technological leader and almost unrivalled. Customers demand products such as valves, ECU units, brake calipers and brake pads,” explains Venkatapathy.

CME is currently working together with Knorr-Bremse and a major French tire manufacturer on a multi-brand



service center for commercial vehicles. The aim is to create a workshop concept that can repair trucks of different brands - a concept that would be almost impossible to realize without the Knorr-Bremse Diagnostics software. „Knorr-Bremse Diagnostics enables us to operate multi-brand workshops efficiently and ensures the highest service quality,” says Venkatapathy.

Another plus is the consistent customer focus. „We pass on everything that Knorr-Bremse offers us directly to our customers - including bonus programs, marketing support, signage and vehicle branding. We also train our employees in communication, brand marketing and technology. Our technicians are expertly trained and solve problems directly on site,” explains Venkatapathy. This holistic understanding of service clearly sets CME apart from its competitors.

CME operates its own workshops, including the largest Mercedes workshop in the world. With five of its own locations and 45 partner workshops under the umbrella of BCS Concepts, the company covers the entire spectrum of services and at the same time strengthens the bond with its major customers.

The quality of employee selection is a key success factor. „We prefer applicants from the Emirates and carry out several tests before we hire someone. The challenge of finding qualified new employees is huge,” emphasizes Venkatapathy. Currency fluctuations, cash flow issues, parallel imports and inferior copies of quality products also exacerbate the situation. Nevertheless, CME is successfully holding its own in the market.

CME's quality philosophy is inextricably linked to Knorr-Bremse. „Our aim is to sell only high-quality products. All partnerships are long-term - with Knorr-Bremse for almost 27 years. Customers know that they will receive quality from us, even if the price is a little higher,” says Venkatapathy.

Looking to the future, CME plans to expand its market presence in several neighboring countries and develop new products. „Knorr-Bremse recognizes our value and supports our expansion. Together we are the number one in the Middle East,” summarizes Venkatapathy.



Unwavering: Jochen Hahn still has his sights firmly set on European title number seven.



Braking power meets title hunger

Together with Knorr-Bremse, Jochen Hahn proves season after season how strongly technology and passion work together.

When Jochen Hahn talks about his partnership with Knorr-Bremse, you immediately realize that it's about more than just sponsorship. For over two decades, the six-time European champion and the Munich-based technology group have enjoyed a close working relationship - characterized by shared values, technical excellence and genuine team spirit. „We feel part of the Knorr-Bremse family,” says Hahn. „Over the years, we have experienced how trust creates real added value - on and off the racetrack.”

Knorr-Bremse supplies far more than just the logo on the truck. Many of the components installed come directly from Knorr-Bremse - and make a decisive contribution to the performance of the race truck. „The quality of the components is crucial to our success. It extends far beyond the brakes and reflects the innovative strength of Knorr-Bremse,” explains Hahn. The company is also pulling in the same direction when it comes to sustainability and future technologies. Whether with EconX® parts or in projects relating to e-mobility and alternative drive systems - the Hahn Racing team is closely involved in

development processes. „We can see that Knorr-Bremse will play an important role in the field of e-mobility. It's impressive to see the commitment the company is showing here,” says Hahn. In sporting terms, the racing pro can look back on a strong 2025 season - once again finishing runner-up in the European Championship behind his long-term rival Norbert Kiss. „We had fair, intense duels and were able to show that we are close,” summarizes Hahn. After rebuilding the truck in the winter, the team quickly caught up with the front-runners again. But the hunger for first place is greater than ever: „We haven't been this close to the title for a long time. We want the crown back in 2026 - and we're already testing every detail to achieve this.” There is no question that Knorr-Bremse's expertise and engineering skills will also be on board in the future. Hahn is convinced: „This partnership cannot be taken for granted. It thrives on open communication, mutual trust and a passion for technical perfection. This is exactly what makes us strong together - yesterday, today and tomorrow.”



Frohe**Weihnachten**



Merry**Christmas**



KNORR-BREMSE