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IN FOCUS: INNOVATIVE STRENGTH AND CUSTOMER FOCUS

"We are actively looking for solutions with clear customer benefits"

Customer focus is deeply rooted in Wascosa's DNA. The company has always seen itself not just as a provider, but as an active partner for its customers – with one clear objective: to develop solutions that offer real added value. These include modular, flexible concepts that automate processes, making them more efficient and secure. Customers are involved in development right from the start – their requirements are incorporated directly into the innovations. The specific benefits of this approach can be seen not only in the interviews with CEO Markus Vaerst and CTO / CBDO Irmhild Saabel in this Infoletter, but also at Wascosa's stand at the Transport Logistic 2025 trade fair in Munich (stand FM 704/5 in the outdoor area).

CONTINUED ON PAGE 3 —

LETTER

NEWS FOR THE FREIGHT

WAGON INDUSTRY





Dear readers,

For us at Wascosa, customer focus is more than just a principle – it's part of our DNA. We don't just lease freight wagons, we work with our customers to develop solutions that offer real added value. In doing so, we consistently see things from the customer's perspective. This is the only way to create innovations that offer tangible benefits in everyday use.

We are presenting a selection of our latest innovations in this Infoletter, which will be published shortly before the Transport Logistic trade fair in Munich from 2 to 5 June 2025. You can also see some of these innovations for yourself live at the Wascosa stand. All these solutions have one thing in common: they help our customers to overcome daily challenges more efficiently, safely and economically.

The new ILAB RW 40 SC superstructure is just one example. As an extension to our Wascosa flex freight system[®], it enables flexible and cost-efficient handling of hot slabs and coils in rail transport (see p. 8). Another highlight is the new Tanoos wagon, developed for DB Cargo and K+S. It is currently the most modern bulk freight wagon in Europe. It has been consistently optimised to meet customer requirements (see p. 14). We are also breaking new ground when it comes to digitalisation: the new wheelset portal will allow us to digitalise all the processes relating to maintenance and logistics (see p. 16). And finally, we are making document processing much more efficient with the help of generative AI (see p. 9).

We are delighted to present these and other examples of our innovative strength in this Infoletter. You will have the opportunity to see many of these innovations live at our stand and to discuss them with us. The entire Wascosa team is looking forward to meeting you and exchanging ideas at the trade fair in Munich. We want to continue to break new ground with you.

We hope you enjoy reading this issue and find it inspiring,

Markus Vaerst

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IN FOCUS

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The Wascosa safe tank car®, a product innovation for the transport of chlorine and sulphur dioxide.

Markus Vaerst, why is it so important for Wascosa to have a strong customer focus?

Customer focus has always been a core value for us at Wascosa. We don't just lease wagons, we actively look for solutions that offer our customers clear benefits. In doing so, we see things from the only possible perspective – our customer's. Wascosa has always applied this principle. In association with our partners, we have successfully launched a large number of innovations on the market and taken our customer service to a new high level. This journey continues. We are once again presenting a full range of new products both in this Infoletter and at the Transport Logistic trade fair. "Going new ways" is and remains our motto.

How would you define "customer focus" specifically in the context of rail freight transport?

Rail freight transport is all about optimised and efficient logistics chains throughout Europe. Customer focus begins by recognising market trends at an early stage in order to develop innovations that pick up on these trends. Customer proximity is our top priority because at the end of the day, it is our customers' individual logistics processes that make it possible for us to successfully customise solutions for them. Freight wagons play a crucial role, as they represent the interface to our customers. That's why we engage with our customers and markets in depth and break new ground time and again – in cooperation with our customers.

What role does customer focus play when it comes to competitiveness in our industry?

Developing a solution from the customer's perspective that offers them clear benefits is what sets Wascosa apart from its competitors. Being able to develop and make this solution available rapidly is another important aspect. The fact that we are a lean organisation that can make quick decisions is a great asset.

So everything depends on the benefits that Wascosa can offer customers with its freight wagon systems?

Exactly. There is more than one way to achieve your objective. Sometimes it's a matter of increasing the payload of the train to save on freight costs, and sometimes modular concepts are needed based on our flex freight system®. This system reduces the number of wagons that our customers have to deploy. Automation solutions are also playing an increasingly important role, as they can help to reduce labour costs. Last but not least, safety is vital to guarantee the protection of our customers' employees, as well as the general public.

What are the biggest challenges associated with implementing the principle of customer focus in rail freight transport?

The main challenge is making sure you have the right mindset. Then you need to have the necessary expertise on board so that you can quickly assess which options are available for implementation. We are very well positioned in this respect, with our long-standing CTO Irm-

We don't just lease wagons, we actively look for solutions that offer our customers clear benefits. MARKUS VAERST CEO, WASCOSA AG

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IN FOCUS

hild Saabel and our digitalisation expert Daniel Rost. Our customers must be prepared to adopt new approaches and, if necessary, to implement changes in their own area of activity. Many customers are on a journey anyway, and are actively driving change in their business to improve efficiency.

Can you give any examples of how Wascosa has acted in a particularly customer-focused way?

Our general aim in the Wascosa team is to do everything we can to ensure that our customers are satisfied with our wagons and our service. As well as guaranteeing the quality of the wagons themselves, this includes offering top customer service and professional advice with a high level of expertise. This allows us to create concepts that offer specific benefits for our customers. At the end of the day, it is the people in the Wascosa team who make the difference. My latest highlight is our new Tanoos wagon for DB Cargo and K + S – the most modern







Developing a solution from the customer's perspective that offers them clear benefits is what sets Wascosa apart from its competitors.

MARKUS VAERST CEO, WASCOSA AG

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fertiliser wagon in Europe (covered self-discharging wagon roof that can be opened in a sliding movement). This wagon was specially designed to meet the needs of the customer, taking into account the conditions of use and the specific requirements associated with moisture-sensitive bulk freight. We took a proven design and harnessed years of experience to drive forward the development and optimise the design in terms of transport efficiency (payload/train length) and handling during loading and unloading, including occupational safety. This was only possible thanks to the professional project management by our experts, who maintained a constant dialogue with the parties involved, particularly DB Cargo, K + S and the wagon manufacturer Greenbrier.

And which Wascosa innovation benefits the entire industry?

Our fully automated FANPS 2.0 track ballast wagon with radio remote control, electric drives and an autonomous energy supply represents ultimate automation, efficiency and safety. The expansion and renovation of our European infrastructure is at the top of the political and economic agenda, and rightly so. This is the only way to succeed in revolutionising transport. We are very proud to have a wagon on the market that supports these objectives and that is attracting more and more users in various European countries. Many more examples are described in this Infoletter. You will also have the chance to discuss them with us in a relaxed atmosphere at the trade fair.





W W Our uncompromising customer focus and innovative strength form the basis for our success.

IRMHILD SAABEL CTO / CBDO, WASCOSA AG



Video: The automated track ballast discharge wagon FANPS 2.0 in use with its anti-dust water spray system.

The fully automated FANPS 2.0 track ballast wagon represents ultimate automation, efficiency and safety.

"We develop all our product innovations with the customer"

Irmhild Saabel, can you give us some examples of products developed by Wascosa with a particular focus on the customer?

The latest expansion of our Wascosa flex freight system® is a very good example. The customer from the steel industry transports hot coils and hot slabs between different sites. The temperature of the coils and slabs is almost 400 degrees when they are loaded. The customer was experiencing major problems with their old standard freight wagons for transporting coils and slabs (Shmmns wagons). Due to the extreme operating conditions, including the loading temperature and loads, cracks appeared in the wagon structure on numerous occasions. Wagons had to be taken out of operation, making it impossible to guarantee the necessary transport capacity.

How was the problem solved?

By switching to the modular Wascosa flex freight system®, where the high temperature only affects the specially designed removable superstructure. Even if this superstructure becomes damaged, it can be replaced with a spare superstructure without the whole wagon having to be taken out of service. This wagon can be seen live at the Wascosa stand at the Transport Logistic 2025 trade fair in Munich.

What are Wascosa's customer-focused product innovations?

In principle, none of our product innovations, such as the Wascosa Safe tank car®, the Wascosa flex freight system® or the Tank car 3000, were developed by Wascosa on its own. They were created in association with partners and, above all, with our customers. For the Safe tank car®, for example, the customer clearly defined their requirements before placing the order. They wanted to lease tank wagons to transport sulphur dioxide (SO₂), which would establish a completely new safety standard on the market. The tank wagons had to offer much more than the previous technical solutions and go well beyond the legal requirements of the regulations concerning the international carriage of dangerous goods by rail (RID). Wascosa bravely accepted this challenge.

What does that mean?

When we received the order, I had only been at Wascosa for just over a year. Personally, I had no idea how a wagon for transporting this type of product should be designed or what the safety standards were at the time, let alone how they could be improved.

Was it still possible to satisfy the customer's expectations?

Yes, they were more than satisfied. The customer was even awarded first place in the Responsible Care Competition by the German Chemical Industry Association (VCI) for the Wascosa safe tank car® in 2015. The European Chemical Industry Council (Cefic) adopted the then "revolutionary" concept of providing a safe cross-over platform for shunting personnel at the end of each wag-

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on as a basic recommendation for the construction of all tank wagons. Since then, the principle has been incorporated into many new-build series, including those of our competitors.

What technical advantages and benefits does Wascosa offer customers?

The Wascosa tank car 3000[®] is a good example of this. Just like for the Wascosa safe tank car[®], the customer from the mineral oil industry wanted wagons that guaranteed greater safety not only for their personnel, but also for wagon operation. During the development of the safe tank car, we completely redefined our "Safety Package", which consists of various modules such as two cross-over platforms, an anti-climbing device and derailment detectors. Our customers can select individual

modules from this package to put together their own "Safety Package". Following the Wascosa safe tank car® project, we were commissioned to equip a large series of new wagons with their own "Safety Package". This was not required by the RID, but purely at the customer's request.

K S To stay ahead of the competition, you must not only satisfy the customer, but also impress them with your service.

IRMHILD SAABEL CTO / CBDO, WASCOSA AG

How do you identify the needs of your customers and how do you incorporate them into the technical development of new products?

Quite simply by inviting the customer to sit at the table with us during design meetings. There are always several design reviews for new developments, and we systematically involve the customer. A product development is only finalised at the "Final Design Review" stage, once the wagon design has been approved by everyone, including the customer.

Are there any specific customer requirements that are particularly difficult to implement?

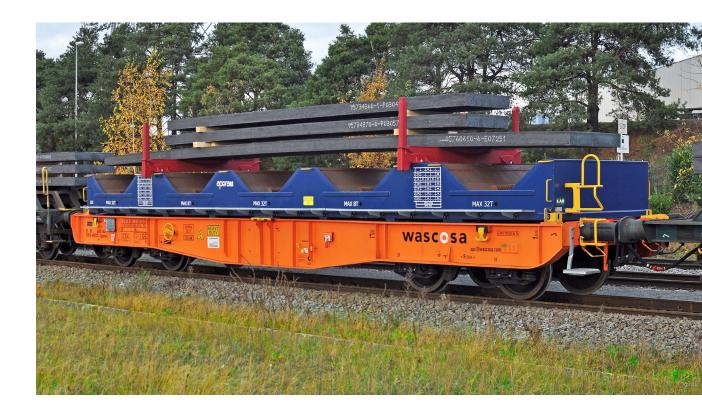
It's always difficult when virtually no changes can be made to the loading and unloading processes on account of the existing wagon underframe. The optimisation options are often so limited that you can only offer a "modern" version of the same type of wagon, with a slightly higher payload, for instance.

Can you describe the process for developing new, customer-focused product innovations?

The customer is at the centre of our development process as well. Development projects are divided into three phases: product development, production monitoring/quality assurance and quality verifications before finalising the warranty. During product development, design processes are implemented with the customer and the manufacturer or partner.

What current product or service innovations do you offer to meet your customers' needs even more effectively?

We are currently aiming to automate freight wagon handling. Lots of customers are working on fully automated loading and unloading concepts which avoid staff having to manually operate the wagon. The topic of occupational safety is also becoming increasingly important.



Wascosa flex freight system®



The modular Wascosa flex freight system® can be customised to meet customers' logistics needs.



Video: Wascosa image trailer. We the rebels. Movers of change.



Check out the new Wascosa website: www.wascosa.com

How were these innovations received by customers?

More and more customers want to automate freight wagon loading and unloading as much as possible. Their main objective is not to reduce staff costs, but mostly to improve occupational health and safety. This is especially the case if dangerous situations arise during loading or unloading, for instance if loads are suspended or could come into contact with the employee. Our FANPS 2.0 wagons, which enable the operator to empty track ballast from a safe distance by radio remote control, are currently attracting a great deal of interest. Customers greatly appreciate this innovation, especially when it is combined with a water spray system which significantly reduces the amount of dust generated when discharging ballast, thereby protecting the operator's health.

Another example is the loading and unloading of coil wagons. The aim is to be able to complete loading and unloading operations without any operating personnel at all in the future. The first steps are currently being taken to make this possible, for instance by using a radio remote control system to open the flat top of the wagons. This will also be on display and in action at the Wascosa stand at the Transport Logistic 2025 trade fair in Munich. **O**

Versatile superstructures for modular freight wagons

Introducing a new innovative solution for modular wagons, developed together with Wascosa and its customer, which fits perfectly into Wascosa's freight wagon fleet strategy. The ILAB RW 40 SC superstructure has been purpose designed for Wascosa, to enable flexible, easy and cost-efficient handling of hot slabs and coils as part of their transport by rail wagon.



PELLE THELL Project and sales Manager Railway at ILAB Container

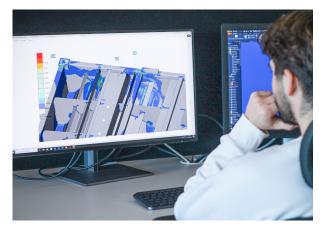


The increased demand for rail transport has brought with it many new opportunities for ILAB Container. In Scandinavia, for example, the needs of users change from summer to winter. One way of offering cost-effective and flexible solutions is to use flat wagons with interchangeable superstructures designed in line with customer requirements. A modular solution like the Wascosa flex freight system® means wagons which last longer because they can be used repeatedly with different types of superstructures.

Product Development

The RW 40 SC project was born at a meeting in April 2023 at which Wascosa presented its flexible concept and asked ILAB Container to find a quick and safe solution for this specific project. ILAB Container had experience with this concept because the company had previously produced and delivered several superstructures for the Scandinavian market, where they are currently used on Wascosa freight wagons operating in Sweden.

The RW 40 SC superstructure has been designed to carry hot slabs in one direction and coils in the opposite direction, with a total maximum payload of 64 tonnes. The loading temperature of the coils can be as high as +395°C. The resulting product is a superstructure which fully meets the end customer's specifications for transporting steel as part of a modular wagon system which will replace the old conventional wagons.



Product analysis and tests

Several FEM analyses and impact simulations have been carried out by the team of engineers from ILAB Container to identify where the structure is most exposed to stress and to find the symbiosis between maximum weight and temperature on the superstructure.

A piano key system is mounted at the bottom of each cradle to secure the hot coils against lateral forces. The piano key system also enables shorter loading times for each coil in the cradle. ILAB Container has also worked closely with the wagon producer on a loading scheme for the coils designed to achieve maximum payload. **O**

ILAB Container



Based in Tranås (Sweden), ILAB Container, which is part of the SULO Group, has been providing the steel market with high-end technology solutions for more than 30 years. The superstructures themselves are manufactured in Poland, by the company JK Miłosz Kiedrowski, which itself has been a close and trusted partner of ILAB Container for 25 years. Equipped with modern, high-tech machinery, the factory has about 500 employees and operates to the highest working environment standards. ILAB Container is proud to be a Wascosa partner at the Transport Logistic exhibition in Munich, where it will be a co-presenter at Wascosa's stand.

www.ilabcontainer.se

A smarter way to process documents: how AI increases efficiency

tion of emails based on AI wagon number recognition and suggestions of which invoice information should be read. However, this is only a small step on the path to the necessary level of process automation.

Approaches based on "classic machine learning methods", in which individual document types have to be "trained" by employees, fail in practice for two main reasons:

Many processes in rail freight transport still involve exchanging documents between partners – despite progress in digitalisation. Modern AI methods promise a remedy: they automate document processes and make everyday work more efficient and attractive.



DR OLAF RADANT Principal at Eraneos

DR MARC LÄMMEL Senior Manager Data Science at Eraneos



DR DANIEL ROST Head of Digitalisation and Processes at Wascosa



Adobe Stock

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Even though standardisation and digitalisation initiatives are becoming increasingly important in cross-sector processes (see also the article in Infoletter 42), large numbers of documents still need to be exchanged. Wascosa alone receives several hundred documents every day, for example. These documents then have to be forwarded to the relevant people internally, processed and filed. What is more, relevant data must be transferred to IT systems, usually manually, in order to be made available in digital form for subsequent processes. As the number of documents grows in proportion to the number of wagons, high processing efficiency is a critical aspect of a strategic growth strategy.

Considerable challenges

Partial automation had already been achieved in the past, for example by means of the automated distribu-

- Lack of capacity and high training costs in the specialist departments for model training.
- The form of the incoming documents, even with well-defined content, e.g. for reporting the technical measurement data of a freight wagon, varies greatly in the rail freight network across Europe, where we have more than 100 partners.

Solution

A new approach based on AI language models should now help to automate processing as much as possible. It can be used for documents filled out in different layouts, languages and formats, even if they are partly handwritten. An initial prototype for processing damage reports that wagon keepers regularly receive from railway companies demonstrates the significant potential of the technology for our sector.

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Language model automation

Documents - often as PDF attachments to an email - are converted into readable text using a tried and tested OCR (Optical Character Recognition) algorithm. We use established recognition algorithms and save ourselves the trouble of building our own complex models. The type of document is then automatically determined from the text (e.g. damage report, invoice or lease agreement). This makes it possible to control which information is taken into account for further processing. To interpret the content of each document, we use a modern, universally usable language model, specifically GPT-4. This model "understands" the previously recognised text and extracts the relevant content. The results are transferred to a predefined diagram - for example with fields for wagons and damage codes. This then allows the information to be processed by conventional IT systems. New diagrams can be introduced with just a few additional instructions (prompts). This means that the solution can be extended to other use cases without extensive retraining.

People remain indispensable

Although the process is largely automated, human expertise remains indispensable. Specialists must check important results before the data is definitively transferred to the IT systems. This approach – also known as grey processing – increases reliability and promotes trust in the AI-supported solution.

Our solution demonstrates how modern AI methods can be used for SGV:

- Time and cost savings: the automated process speeds up document processing and reduces the workload for employees.
- High flexibility: whether for damage reports, invoices or lease agreements – the model can be expanded to include new document types with minimal effort.
- Reliable results: downstream grey processing guarantees quality assurance.

The solution will be operated in the Wascosa cloud infrastructure and will be an integral part of the IT landscape in the future. The focus is on creating an integrated and reliable system that offers the specialist departments real added value. Thanks to this approach, we are shaping the next step in the digitalisation of freight transport processes – whilst creating a solid basis for further innovative applications at the same time. **O**

Eraneos – your partner for digital transformation

Eraneos is a global management and technology consultancy firm that assists companies throughout the digital transformation process – from the strategy definition through to the implementation phase. We have a deep understanding of the industry and use state-ofthe-art technologies to help our customers to successfully shape their digital future.

Our core sectors include **public services**, **financial services**, **transport & logistics**, **the automotive industry**, **energy & utilities and life sciences**. We offer a wide range of **strategic and technological services**:

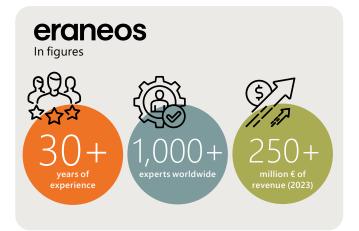
Corporate Strategy Development of future-proof business strategies

- Digital Business Digital innovations for sustainable growth
- Organisational Excellence & Transformation Creation of efficient, agile structures
- Sourcing & IT Advisory Optimisation of IT and sourcing strategies
- Data & AI Utilisation of data intelligence for competitive advantages
- Cyber security Protection of digital assets and risk minimisation

Our customers are at the heart of everything we do – we provide tailor-made solutions with a lasting impact. As an independent partner, we support organisations worldwide, ranging from Fortune 500 companies to hidden champions, with over 1,000 experts in 13 international offices.

Eraneos combines the expertise of the former companies AWK, Ginkgo, Quint & Anchormen under a new name. Our objective is to actively help shape the digital era and guide companies on their transformation journey – in a structured, efficient manner and with a clear focus on their success.

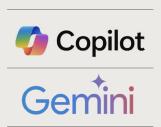
Your success is what drives us – Eraneos stands for excellence in strategy, technology and implementation.



What are language models?

Al language models are advanced neural networks that have been trained to understand and generate human language. These models process a given input text (prompt) and generate a contextually relevant response based on it, giving the impression that they understand and produce natural language. We encounter them in everyday life in the form of applications such as ChatGPT from OpenAl, Copilot from Microsoft or Gemini from Google. These models can handle a wide range of tasks, from text generation and intelligent searches in large volumes of text to creative writing.





Despite their impressive capabilities, AI language models also have limitations. They occasionally tend to hallucinate or give false answers and cannot directly name the sources of their information. In addition, they reach their limits when processing very long texts and drawing conclusions in complex contexts.

Overall, AI language models represent a significant advance in artificial intelligence that opens up new possibilities for human-machine interaction and at the same time raises important questions regarding their responsible use and further development.

NiKRASA 3.0 – the new seamless solution for integrating intermodal transport networks

Two minutes is all it takes to tranship a semi-trailer using the highly versatile NiKRASA 3.0 solution, which, thanks to the latest manufacturing technology, is also the lightest system of its kind in existence, with a tare weight of 2.5 tonnes. What's more, each NiKRASA platform is fitted with holders to enable fivefold stacking, thus saving on storage space. Welcome to the optimum solution for integrating intermodal transport networks.

An interview with terminal operator Mr Giuseppe Acquaro

Mr Acquaro, you have been using the NiKRASA solution since 2016. What is your conclusion as the operator of the largest terminal in Italy?

This technology allows us to transfer road units onto intermodal trains, offering significant CO2 savings. In the first twelve months of use, NiKRASA allowed us to increase the client's circulation by 20%. Subsequently, TX Logistik invested in improving the platform, making it even more efficient, and this allowed us to consolidate the results obtained. As the manager of the largest terminal in Italy, I can say that this technology has had an extremely positive impact: it has optimised transhipment operations between road and rail transport, reducing loading times and increasing overall efficiency.

Quiseppe Acquaro, Iris Hilb and Ugo Dibennardo at Terminali Italia in Verona (from left to right).

Thanks to some very clever design work from its engineers, TX Logistik AG has now developed the fastest, most flexible and easy-to-use solution for transhipping non-craneable road trailers onto single and double pocket rail wagons (and back again). And the fact that approximately 90% of the estimated 2.5 million semi-trailers in use throughout Europe are non-craneable means that the potential for the Nikrasa 3.0 system is quite simply immense.



The platform is placed next to the freight wagon.



K >> In the first twelve months of use, NiKRASA allowed us to increase the client's circulation by 20%.

GIUSEPPE ACQUARO CEO AND GENERAL MANAGER, TERMINALI ITALIA

Is it not the case that such a solution is operationally complex for you?

Terminali Italia in Verona QE is a pioneer in the use of NiKRASA at a national level, and for about 2 years the Customer has been using the solution at 2 other Terminals of the network, Bologna and Segrate. Innovative technology like NiKRASA always requires some adaptation at the beginning. However, once the procedure was integrated, it turned out to be a well-designed solution and relatively simple to manage. In fact, it helped reduce operational complexity, allowing us to handle higher volumes of goods without compromising either delivery times or service quality.

How would you like to use the NiKRASA 3.0 version in the future?

In the future, and as our customer has been satisfied with the management of NiKRASA platforms, especially the new 3.0 version, we plan to further expand our intermodal transfer capacity, aiming at increasingly ecological and versatile solutions. The aim is to fully exploit the potential of NiKRASA, constantly increasing the possibility of transferring road trailers to rail and consolidating the role of the Verona terminal as a strategic hub for intermodal transport. **O**



Video: How the NiKRASA platform 3.0 works.





Innovative freight wagon for corrosive loads

For decades, DB Cargo has been transporting K+S products, which are used in agriculture and a variety of industrial applications. The long-term logistic partnership was sealed in 2023 with a contract extension for a further 10 years, covering more than 70 million tonnes of goods. The optimum freight wagon is now actually being used, thus sending a clear signal in favour of environmentally friendly rail transport. Tanoos 2.0 is the result of a partnership between DB Cargo, K + S, Wascosa and Greenbrier.



DANIEL RODENBERG Equipment management at DB Cargo

The right equipment is a key component of future-proof rail logistics, as this is the only way to ensure the success of even the best transport concepts. But what is the right equipment for transporting K+S products, which place special demands on the corrosion resistance of wagons and have to be moved in large quantities? This was precisely the question posed by an interdisciplinary working group made up of DB Cargo and K + S experts in spring 2022. Market research revealed that there had been no new developments in freight wagon construction in this area for decades. The freight wagons available on the market were either outdated or not suitable for transporting salt. The working group analysed and evaluated potential solutions, including the possibility of modular concepts. In the end, the result was clear: the right freight wagon was an optimised Tanoos. Further development began under the working title Tanoos 2.0.

Strategic partners sought to build the new wagon

The go-ahead for the freight wagon procurement project took place six months after the initial discussions, and the search began for a suitable partner to procure up to 650 new freight wagons. Wascosa made a good impression as a leasing company with a long history of using Greenbrier Europe wagons and with a winning wagon concept and experience in designing new-build projects comprising large numbers of units. The partnership officially began in November 2023.

Creation of the first prototype

An important impetus was given for future cooperation right at the start of the project when a wagon from Wascosa's portfolio was selected in early 2024 for initial loading and unloading tests at K + S production sites. This wagon already had the first basic characteristics of the planned superstructure. Testing a specific wagon on the customer infrastructure at this early stage was a first. The Tanoos 2.0 was optimised based on the findings of these tests. The specifications were finalised, and construction of the first Tanoos 2.0 prototype began in Romania in spring 2024.

A team of experts from K + S, DB Cargo, Wascosa and Greenbrier continuously monitored the progress of the prototype. By the summer of 2024, the finalised prototype was ready for inspection at the plant in Arad. In

order to test the full suitability of the concept, the project partners decided on site that the prototype would also have to be taken to Germany for loading and unloading tests. In the winter of 2024,the as yet unapproved prototype, accompanied byDB Cargo, travelled through five countries directly to one of K + S's production sites. Numerous loading and unloading tests were then conducted with positive results: the prototype met all the requirements.

The solution for corrosive loads

What makes the new freight wagon ideal for corrosive loads?

Lightweight and powerful

By shortening the wagon underframe by 40 cm compared to the previous market standard, the tare weight was reduced by 1.5 tonnes. At the same time, the load volume was increased by 3 m^3 compared to loaded in the traditional way by opening the sliding doors. Remains of the load often stick to the inside walls of the superstructure. They can be detached by hitting the side walls. If there are no striking surfaces, the protective paint flakes off over time, and the corrosion caused by the load leads to high downstream maintenance costs. The stainless steel striking surfaces significantly increase the longevity of the wagon and represent a customer benefit.

A successful concept with a robust solution

Wascosa delivered the first bulk freight wagons of the new Tanoos 2.0 model in May 2025 – just one and a half years after the order was placed. The successful and extremely rapid development and testing of the new freight wagon marks a significant advance in the transport of corrosive loads. The close collaboration between all the project partners ensured the creation of a pioneering freight wagon in the form of the Tanoos 2.0. **O**



DB Cargo

With around 30,000 employees and operating in 17 European countries and as far afield as China, DB Cargo is one of the leading providers of rail freight transport in Europe. The company portfolio includes block trains, single wagons and combined transport, as well as other services such as storage, monitoring, transhipment, pre-carriage and onward carriage. In the bulk freight sector, DB Cargo transports around 13 million tonnes a year for the fertiliser, building materials and energy industries.

K + S

K + S is one of the largest fertiliser manufacturers and salt suppliers in Europe with around 11,000 employees, production sites on two continents and a global distribution network. Headquartered in Germany, K + S operates in various countries and has customers in the agricultural, industrial, pharmaceutical and consumer goods sectors.

the Tanoos previously in use. The Tanoos 2.0 model can now load 68 tonnes with a volume of 78 m³.

Optimised block train capability

Thanks to the new wagon length, additional wagons can be added to a block train. More cargo for the same train length increases not only efficiency, but also the environmental benefits of rail transport. An ideal combination!

Durable and corrosion-resistant

The silver stainless steel striking surfaces on the sides of the freight wagon are not only a design element, but also offer a practical advantage. The wagon is un-

Do you still have questions?

Please contact the DB Cargo sales representative.

MARIAN ZIMMERMANN

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Wheelset portal: our digital solution for efficient maintenance

Wascosa's new wheelset portal digitalises all the processes relating to the maintenance and logistics of wheelsets. This speeds up the entire workflow and takes the pressure off the workshops.



SANG-HYUN HAN Head of Wheelset and Spare Parts Management

Developed with partners

Wascosa and its maintenance partner RailMaint have been working on this digital solution since December 2022. The aim was to create a practical solution from the outset. The initial functions were developed, tested and optimised one step at a time. Thanks to the experience gained, the system was continuously improved and made more user-friendly. The integration of the second partner workshop, Josef Meyer Rail, improved the wheelset repair workflow even further, particularly for verifying invoices, approving cost estimates and categorising maintenance measures. Challenges during the system changeover were rapidly identified and resolved. The European partner workshops have now been fully connected to the system with remarkable success.

Contribution to digitalisation

Thanks to the new wheelset portal, Wascosa is making a further contribution to the digitalisation of the industry. The system will ensure that Wascosa is well prepared for further growth in the future. **O**

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		09358-25	VAC2500776	11.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	rmd-flos	KV AKZEPTIERT	31.03.2025
		09600-25	VAC2500795	12.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	rmd-saho	KV AKZEPTIERT	26.03.2025
		09033-25	VAC2500749	07.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	rmd-saho	WARTE AUF RECHNUNG	25.03.2025
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		09431-25	VAC2500779	11.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	md-saho	KV AKZEPTIERT	25.03.2025
		09224-25	VAC2500765	10.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	md-saho	WARTE AUF DOKUMENTE	24.03.2025
		09287-25	VAC2500768	10.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	md-saho	KV AKZEPTIERT	19.03.2025
		09589-25	VAC2500793	12.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	md-saho	KV AKZEPTIERT	19.03.2025
		09238-25	VAC2500766	10.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	rmd-saho	WARTE AUF DOKUMENTE	18.03.2025
		09017-25	VAC2500746	07.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	md-saho	KV AKZEPTIERT	18.03.2025
		09041-25	VAC2500750	07.03.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	md-saho	KV AKZEPTIERT	18.03.2025
		07944-25	VAC2500632	26.02.2025	RMD-WERK	RailMaint GmbH Werk Duisburg	rmd-saho	KV AKZEPTIERT	12.03.2025

Wascosa manages

over 70,000 wheelsets to keep a fleet of more than 17,000 wagons moving throughout Europe. SANG-HYUN HAN WASCOSA AG

Key features of the wheelset portal

- Ordering and charging wheelset repair stages (IS1 IS3)
- XML and PDF data transfer, invoices via ZUGFeRD
- Direct access to all relevant wheelset information for optimised classification of reconditioning requirements, e.g. mileage and last maintenance
- Factory installation and removal of wheelsets
- Coupling of expansion reasons with the requirements for each maintenance level in accordance with the VPI guidelines and the Wascosa Wheelset Manual (RSHB)
- Stock overview
- Wheelset renumbering

Europe. A complex task of this kind requires a powerful digital system that is capable of supporting the future growth of Wascosa's fleet. Wascosa has created a wheelset portal that acts as a digital platform to simplify all the processes relating to the ordering, maintenance and data transfer of wheelsets. This innovative solution also covers all internal wheelset logistics processes. The benefits for our partner workshops are obvious: a digital interface that offers various automation functions reduces the administrative workload for the workshops and Wascosa, and speeds up the workflow as a result.

Wascosa manages over 70,000 wheelsets to keep a fleet

of more than 17,000 wagons moving throughout

Optimised, sustainable logistics

Located near to the Hungarian-Ukrainian border, East-West Gate (EWG) is Europe's largest land-based intermodal terminal. As part of its drive to improve efficiency and sustainability and to reduce transport costs, EWG has leased 120 innovative high-capacity freight wagons from Wascosa.



VINAR ROMAN Chief Executive Officer, East-West Intermodal Logistics Plc.

With a handling capacity of one million TEU per year and the ability to load semi-trailers onto rail, the EWG terminal has gained particular strategic importance in light of restricted Black Sea port operations due to the war in Ukraine. It now plays a key role in the transhipment of Ukrainian agricultural exports – such as grain and vegetable oil – destined for Western European ports, especially those in Italy and the Adriatic region.

Challenges in Logistics and Sustainability

EWG faces several challenges, including the unpredictability of Ukrainian export logistics, optimising rail capacity, and ensuring sustainable operations. The war in Ukraine has meant constantly changing export routes, requiring flexibility and the ability to adapt quickly. Additionally, in line with the European Green Deal, EWG continues to develop sustainable solutions and renewable energy sources. One of the primary logistical concerns is balancing the incoming and outgoing freight volumes to ensure smooth transhipment processes. This requires advanced planning and real-time operational adjustments, which EWG achieves using state-of-the-art digital tracking and automation systems.

Part of a long-term logistics strategy

EWG selected Wascosa's green tank car® with its tare weight of 22 tonnes and the 20 tonne green freight car® because they can carry up to 15% more cargo, which makes them more efficient than older models and also means reduced shipping costs. Additionally, these wagons provide significant sustainability benefits, as they are designed exclusively for non-fossil goods, such as Ukrainian crude vegetable oil and grain, supporting eco-friendly freight solutions.

The decision by EWG to lease 60 "green freight car®" grain wagons, and 60 "green tank car®" tank wagons from Wascosa, which were delivered in the spring and summer of 2024 respectively, ensures that EWG can efficiently handle the diverse requirements of agricultural transportation, with both bulk freight and liquid cargo solutions available for delivering goods to the Italian market.

The Benefits of Wascosa Wagons

The use of the more efficient Wascosa wagons has resulted in significant savings for EWG and its clients and has made rail logistics a more attractively priced and sustainable option for traders and shippers in line with EU climate goals. Furthermore, the fact that these wag-

K >> The use of the more efficient Wascosa freight wagons has resulted in significant savings.

VINAR ROMAN CHIEF EXECUTIVE OFFICER, EAST-WEST INTERMODAL LOGISTICS PLC.

ons can operate on any European standard gauge railway means greater flexibility and efficiency, which has aided EWG in its commitment towards modernising logistics infrastructure and to setting a new standard in European rail transport.

The partnership between EWG and Wascosa clearly demonstrates how modern logistics solutions using new freight wagons not only improve efficiency but also promote eco-friendly freight transport, for the long-term benefit of the entire European logistics sector. By integrating innovative rail solutions with high-tech op-

erational management, EWG continues to play a crucial role in the future of intermodal logistics in Europe. **O**

EWG

East-West Gate is located in Fényeslitke (Hungary), and was officially opened in October 2022. The terminal has a maximum handling capacity of one million TEU per year, specialising in intermodal logistics, including both containerised and bulk cargo transport. It is equipped with state-of-the-art technology, such as 5G-based remote-controlled cranes and a 3D digital twin system that enables real-time tracking and optimisation of cargo flow. Sustainability is a core priority for EWG, as the terminal incorporates electric terminal vehicles, a heat pump-based heating and cooling system, and has plans for future solar farm developments.

eastwestil.com/en/



Calendar

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DATE	EVENT	СІТҮ	WEBSITE
2025			
14.5.2025	VAP Forum on Freight Transport	Zurich, Switzerland	cargorail.ch
1415.5.2025	The Rise of IoT & Big Data in Rail	Cologne, Germany	iotandbigdatainrail.com
1415.5.2025	Railway Supplier Summit	Vienna, Austria	railwaysuppliersummit.com/
2021.5.2025	RFG Spring Group Meeting	London, UK	rfg.org.uk/event/
2022.5.2025	IAF International Exhibition	Münster, Germany	iaf-messe.com/en/
2123.5.2025	ITF Summit 2025	Leipzig, Germany	itf-oecd.org
23.5.2025	UIP General Assembly and Keepers' Summit	Valencia, Spain	uiprail.org
27.5.2025	RNE General Assembly	Hybrid (Krakow, PO&online)	rne.eu/calendar/
25.6.2025	Transport Logistic 2025	Munich, Germany	transportlogistic.de/en/
35.6.2025	13th International Railway Summit	Vienna, Austria	irits.org/irs13/
5.6.2025	International Level Crossing Awareness Day (ILCAD)	York, UK	ilcad.org/
1112.6.2025	UNIFE General Assembly	Warsaw, Poland	unife.org/events/
1718.6.2025	VPI General Meeting 2025/DAC Live Event	Berlin, Germany	vpihamburg.de
1719.6.2025	VDV Annual Convention 2025	Hamburg, Germany	vdv.de
1819.6.2025	Rail Live 2025	Long Marston, UK	raillive.org.uk/
1820.6.2025	Eurasia Rail	lstanbul, Turkey	eurasiarail.eu/en/main
23.7.2025	UIC 104th General Assembly	Lisbon, Portugal	uic.org
24.9.2025	9th Railway Forum 2025	Berlin, Germany	en.railwayforum.de
2225.9.2025	EPCA Annual Meeting	Berlin, Germany	epca.eu/events/59th-annual-meeting
2324.9.2025	5th BME/VDV Intermodal Congress	Duisburg, Germany	bme.de/veranstaltungen/formate/kongresse/
2325.9.2025	Mecateameetings 2025	Montceau-les-Mines, France	server.matchmaking-studio.com/en/ Mecateameetings2025/
2326.9.2025	ТКАКО	Gdansk, Poland	trakoexpo.com/en/
25.9.2025	Annual Rail Freight Conference	London, UK	rfg.org.uk/event/
30.92.10.2025	EXPO Ferroviaria	Milan, Italy	expoferroviaria.com/
46.10.2025	11th International Transport & Logistics Exhibition	Warsaw, Poland	translogistica.pl/en
1415.10.2025	UIC Global FRMCS Conference	Paris, France	uicfrmcs.org/frmcs-2025-conference
1416.10.2025	TransLogistica Romania	Bucharest, Romania	translogistica.ro/en/
2123.10.2025	Intermodal Europe	Barcelona, Spain	triumfo.de/intermodal-europe/
45.11.2025	Intelligent Rail Summit '25	Bled, Slovenia	events.railtech.com/
46.11.2025	TransLogistica Poland	Warsaw, Poland	translogistica.pl/en/
2628.11.2025	Rail Live 2025	Madrid, Spain	terrapinn.com/conference/rail-live
2628.11.2025	European Silk Road Summit	Vienna, Austria	silkroadsummit.eu/

Imprint

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NiKRASA 3.0 – the state-ofthe-art solution for loading truck trailers onto rail

Freight transport by road is increasing constantly on the rise and is placing an ever-greater burden on infrastructure and the environment. It is time to shift freight to rail.

