

COMPANY MAGAZINE

VAHLE KONKRET



21



VAHLE KONKRET

Dear readers,

Slowly but surely, normality is returning after the pandemic. As a medium-sized company, we notice this in the market just as much as the population does in everyday life: We are all becoming more mobile again – and as a system provider for mobile data and energy transmission, this naturally plays perfectly into our hands. Never before has the importance and necessity of smart and reliable system solutions for the digital world been so clearly demonstrated to us as over the past months and years. And VAHLE knows what matters now and in the future: We are innovative, and are turning the visions and requirements of our customers into our solutions. I think it's the combination of the highest quality, the right price, reliability and speed that makes us so successful nationally and internationally across a wide range of industries.

In the automotive industry, for example, VAHLE is the world market leader. Our electrification and control technology as well as our data transmission systems are used worldwide by all well-known car manufacturers and their suppliers. One example of successful cooperation in this area is the Nexen Tire plant in the Czech Republic (page 7).

Likewise, in the area of port logistics, VAHLE is also an innovator. With our technology, ports around the world are becoming more efficient, cost-effective and greener: Step by step, the major port operators are converting their diesel crane systems to electric power using our products, automating them and ensuring safe and trouble-free data transmission (page 10).

We are also the world market leader in the field of amusement parks and the associated rollercoasters and rides, which we supply with systems for power supply and state-of-the-art positioning technology (page 12). We make sure that tourists fly over the Brazilian rainforest (page 6), that entire ferries float above the Kiel Canal (page 8), that we have a cosy Scandinavian atmosphere (page 9) and, last but not least, VAHLE ensures that fans of Nordic beer don't run out of their favourite tippie (page 14). And traditionally, crane technology remains a very important component of the VAHLE market portfolio (page 13).

Last but not least, our own headquarters in Kamen is the best example of how the labour and whole job areas have changed due to automation. Four VAHLE employees give examples of how much more efficient and easier their work has become (page 3).

I hope you enjoy reading "VAHLE konkret".

Sincerely,
Achim Dries



THE INTERACTION OF MAN AND MACHINE

How automation has altered the working environment for VAHLE employees

Sven Klose has spent more than half his life at VAHLE: He was 16 years old when he started his apprenticeship 20 years ago. Back then, there was just one hall, where material was still pulled out of the storage areas with pallet trucks, forklifts or even by hand: "I cleared out shelves here where the conveyor system is now. Up with the ladder, 20 current collectors over the shoulder and back down with the ladder", he laughs. The incoming goods department was also integrated into the hall at that time – which often meant the inevitable happened: The item an employee needed at that very moment was, of course, right at the back mixed up with all the other things. Today, in the modern VAHLE logistics centre, the incoming goods area is separated from the warehouse, and thankfully no one is required to climb up or down ladders any more: In the automatic small parts warehouse, state-of-the-art miniloads travel continuously along the rack aisles, bringing material to free spaces or taking what is needed at that moment. The "pick-to-light system" that has been implemented is also fast and effective: Four colleagues work alongside each other at four picking stations, with each order being

assigned a colour. LEDs in the assigned colour light up on the shelves where the components which make up the order are located. As soon as the employee has removed it, they press the light off. The item is now automatically recorded in SAP. If there are multiple items in an order, the employee goes to the nearest light, until the light flashes for the last item in the order. That's the signal that the order is now complete. On the relevant screens at the picking stations, employees can view all the information pertaining to the order: Delivery number, image of the material, number of pieces, remaining stock, etc. This eliminates the need for the many "empty runs" of former times, which Sven Klose can still remember well: "I easily covered 15 km a day, and that was in heavy safety shoes. After one year, the soles were frequently worn out." These days, the team leader is happy that his and his colleagues' work is less physically demanding, while at the same time up to 40 percent more effective. But he still has no need to worry about his fitness: "I've got a young daughter who keeps me on my toes!"

"THE EMPLOYEE NO LONGER NEEDS TO COME TO THE MATERIAL, THE MATERIAL COMES TO THEM"

Sven Klose, team leader
Order picking and incoming goods





“THE ETERNAL SEARCH IS OVER”

Tanja Gellert, team leader shipping, internal goods traffic and loading

Tanja Gellert's path led directly from the classroom to VAHLE in Kamen. She began her training as an industrial clerk here 26 years ago. The conditions back then would be difficult for the trainees of today to imagine: “Back then, we only had one PC in the office, which had to be shared by six people. Not everyone was allowed on it”, the current team leader for shipping recalls. But even as more and more computers came to be used, processing orders was often tedious and complicated. Each order was printed out and distributed by hand. For colleagues in the office, that meant constantly standing up, going to the printer, taking the printout to the hall, handing it to the employee in charge and going back to their desk. “I was doing 20,000 steps, and that was in an office job”, explains Tanja Gellert. “Looking back, it's crazy that we managed to do it all in the first place. We were constantly looking for something: Where's the printout with the order? Where's the material for it? Which employee is in charge of this? Today, all the computers are linked up. We press a couple of buttons and a colleague in the logistics centre has all the info they need on their screen.”

And this good networking is not only apparent in the digital world, but also in the real VAHLE world: Whereas the individual departments such as warehouse, shipping and loading used to be strictly separate areas, today all teams work side by side and are in constant contact. For Tanja Gellert and her team of 21, automation at VAHLE is essential: “For the customer, we've become faster and added more value, while at the same time the work is less demanding, both physically and on the nerves of the colleagues,” she grins. And last but not least, automation is good for the environment. Previously, they would get through two to three packs of paper a day. Every month that added up to a whole pallet (50,000 sheets). Today, it's one tenth of that – and will soon be even less: VAHLE plans to equip employees in the logistics centre with smartphones and tablets, all connected to SAP. The paperless office is not far away.

“WE ARE IN CONSTANT CONTACT WITH EACH OTHER”

Andreas Pohl, team leader length-based manufacturing and curve construction

Andreas Pohl is a true VAHLE veteran: Following his apprenticeship as a production mechanic, he spent 11 years in accessories production, in charge of conductor systems, curve construction and charging contacts. He worked his way up to foreman and ultimately to team leader. In addition to the completely different production processes (“they're worlds apart”), it's the team concept at VAHLE that is one of the most crucial changes for him: The various different departments in production get on very well with each other and work in close cooperation. Several times a week, employees exchange ideas in production meetings – and all colleagues are involved in changes and innovations right from the start. “When as an apprentice I used to ask why something was done a certain way rather than another, the standard answer was: Because that's the way it's always been done”, recalls Andreas Pohl. There were two or three experts who had an overview of everything, everyone else had to constantly ask for information.



Today, all the processes are much more transparent, and colleagues have the same level of knowledge. And to keep it that way, everything important is recorded on a team board in the hall: Contact persons, problems that have cropped up, and very importantly, feedback. “Our employees also query processes and make suggestions for improvement. They feel valued and taken seriously, which is crucial in order for them to identify with VAHLE products.”

“I think the change process has reached the minds of the employees,” Pohl says with certainty. Just like his colleagues, he wears a dark blue VAHLE polo shirt as a sign of togetherness and corporate identity. “As a young guy, I would run through the factory hall in a football jersey. This here is a different look today, including for customers who come into our showroom.”



Yannick Scholz certainly never dreamed that an internship during his studies would turn into a permanent position as a team leader at VAHLE. In 2017, he got his first taste of VAHLE at the plant in Kamen, and it seems the experience made a lasting impression on him. Despite a subsequent internship at automotive giant Audi, Yannick returned to Kamen as a student trainee in 2019.

In his master's thesis as an industrial engineer, he dealt in detail with the issue of "Production optimisation of the KBH conductor line," and was subsequently hired directly by VAHLE. "I worked my way once through all of the production departments here and formed my own impression", says the 28-year-old. "The employees on site are the experts, they have the specialist knowledge. It's only when you're in production yourself that you can visualise where to make adjustments in material flow, purchasing and logistics in order to optimise manufacturing processes sustainably". Non-value-adding activities, such as searching for materials or unnecessary walking distances are to be avoided, the aim being for the machine to support the human, not replace them entirely, says Scholz: "The colleague at the production machine intuitively knows how a conductor rail should be placed, for example, and if it's crooked, he corrects it immediately. You have to painstakingly teach a robot all this, and even the smallest error can lead to a production stop".

"I KNOW OF ONLY A FEW COMPANIES IN WHICH LEAN MANAGEMENT IS IMPLEMENTED AS QUICKLY AND EFFECTIVELY AS AT VAHLE"

**Yannick Scholz,
team leader Industrial Engineering**

The top priority for any change to the production process is to get employees on board right from the start, and to involve them in all processes. Before the massive storage and retrieval machine was installed in VAHLE's Production U, three employees were permitted to test it in a training session directly at the plant manufacturer. There are also workshops for all employees whenever something new is implemented in the company. "We explain to our colleagues exactly why we are doing something, and what effects it will have, for example in terms of occupational safety or ergonomics. And employees can contribute their ideas and suggestions in the workshops. Here at VAHLE, you can help shape the processes from top to bottom at all levels, which is what makes working here so special and exciting for me."





BENEATH YOU, PARADISE

VAHLE is letting tourists “fly” over the Brazilian rainforest



Skyglass Canela is the name of the latest attraction in the Serra Gaúcha, a mountain range in southern Brazil. Concealed behind it is a glass viewing platform 360 metres above the beloved Ferradura valley.

If the view of the natural paradise through the glass floor is not breathtaking enough for you, passengers can take a seat in the monorail panorama train attached directly below the platform.

The train has 10 suspended chairs that travel along the 35-metre loop, allowing passengers to enjoy the magnificent bird's-eye view of the Brazilian rainforest with their feet dangling and butterflies in their stomachs.

The panorama railway is powered by over 90 metres of VAHLE's 4-pole U15/25C system. The conductor system is particularly easy to maintain due to their open construction.



Until now, the only similar viewing platforms made from steel and glass were the Grand Canyon in the USA and in Guandong Province in China. Combined with the monorail below, Skyglass Canela is an attraction that is unique worldwide, made possible by innovations from VAHLE.



EVERYTHING REVOLVES AROUND TYRES HERE

VAHLE is part of Nexen Tire's state-of-the-art manufacturing facility

Nexen Tire is known to many football fans in Germany as the official partner of the Bundesliga club Eintracht Frankfurt. But apart from the studded boots, however, the core business of the South Korean company is the production of a very different type of product: In recent years, Nexen Tire has become one of the leading tyre manufacturers worldwide. In 2019, to the manufacturing facilities in Korea and China were added the first in Europe, in Zatec, Czech Republic, about 70 km northwest of Prague.

The state-of-the-art factory is fully automated. This means that before the tyres go on to spin on a VW, Porsche or Fiat, they can be driven – with the help of CPS® (Contactless Power Supply). Using this VAHLE technology, a total of six electric monorail systems (EMS) are provided with contactless power in the new factory, over a total length of more than 1.5 kilometres. There are also two electric floor tracks of 126 metres each in the shelving pre-zone.

Nexen Tire has good reason for implementing CPS® here: As things can get quite dirty, even in the most modern tyre production, conventional conductor systems would become clogged up far too quickly, jeopardising the reliable energy supply. In this respect, the non-contact CPS® technology from VAHLE is the perfect system to use in production: low-maintenance, dirt-resistant and nonwearing. In addition, all regulators are equipped with fans to prevent overheating at room temperatures of 50°C.

However the VAHLE "classics", the U25 and the VKS, still make their grand appearance in the new Nexen Tire plant, namely in the high-bay warehouse. Here, a total of more than 3,600 metres of U25 and 1,300 metres of VKS 4-pole conductor systems were installed in order to



move the rack aisles horizontally and vertically fully automatically and to store and retrieve tyres and transport them onwards.

The entire project was implemented on site by Solutech, the VAHLE representative in Korea. Since the opening in April 2019, the plant has been running smoothly, producing about 16,000 passenger car and lorry tyres daily. In the coming years, production is to be increased from the current 3 million to up to 12 million tyres per year. The management of Nexen Tire is very satisfied with the reliability of the system, as a result of which the follow-up order for VAHLE was not long coming: Another tyre plant will soon be equipped with the same CPS® system.





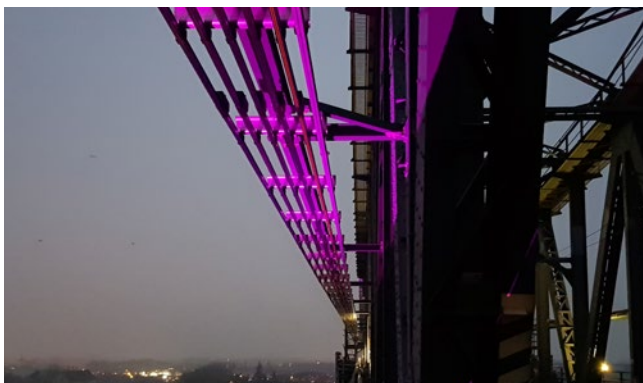
BY CAR ACROSS THE KIEL CANAL

VAHLE technology is allowing the Rendsburg floating ferry to “walk on water”

The railway bridge in Rendsburg is a little like the Golden Gate Bridge of Schleswig-Holstein: It is both a landmark of the city as well as a tourist highlight and a busy traffic artery via the Kiel Canal, the important railway link to Scandinavia.

The bridge is unique in the world, however, on account of the floating ferry attached to it, across which a main road runs. For more than 100 years, the ferry carried commuters and tourists across the Kiel Canal between Osterrönfeld and Rendsburg every 15 minutes, until it collided with a freighter in January 2016 and was completely destroyed. Since the accident, approximately 1,700 people have had to take long detours every day to get from one side of the canal to the other. As a result, the completion of the “Floating Ferry 2.0” in spring 2022 is all the more eagerly awaited.

The challenge for planners and engineers: The new floating ferry had to look exactly like the original (listed) model – but of course at the same time meet all modern standards. For the energy and data transmission, the designers relied on the expertise of the VAHLE Group.



The ferry is a true miracle of technology because it can't actually float, but is suspended from 12 steel cables under a bridge support. Detailed planning and construction work were required for the perfect illusion of “floating”. On both sides of the bridge, 135 metres of 5-pole U35/200 conductor system from VAHLE were installed. A heating element is installed in the conductor rails to ensure that the floating ferry can also operate smoothly in winter. Brush wear testers indicate in good time when the carbon brush needs to be replaced. This prevents an unwanted shutdown of the ferry service. In addition, the VAHLE SMGX data communication system with video surveillance of the ferry ensures the greatest possible safety for staff and passengers. A ferry captain is still on duty, but the floating ferry would be capable of operating autonomously. In the event of a power failure, an emergency generator takes over the supply.

The installation of the VAHLE conductor system and data transmission was only possible during track closures, and was not a job for fitters with a fear of heights: At a height of almost 50 metres, material weighing several tonnes was distributed on the bridge at night with the aid of a track excavator, and assembled from a mobile scaffold.

For the people of Rendsburg, the new suspension ferry is far more than just the return of a landmark: It can carry up to 100 people and 4 cars per trip. It can also travel at low tide, needs less energy than a ferry and is cheaper to build than a vehicle bridge with the same clearance for shipping traffic.

And – probably the most important factor for the hundreds of students who use the floating ferry every day – it even has WiFi.

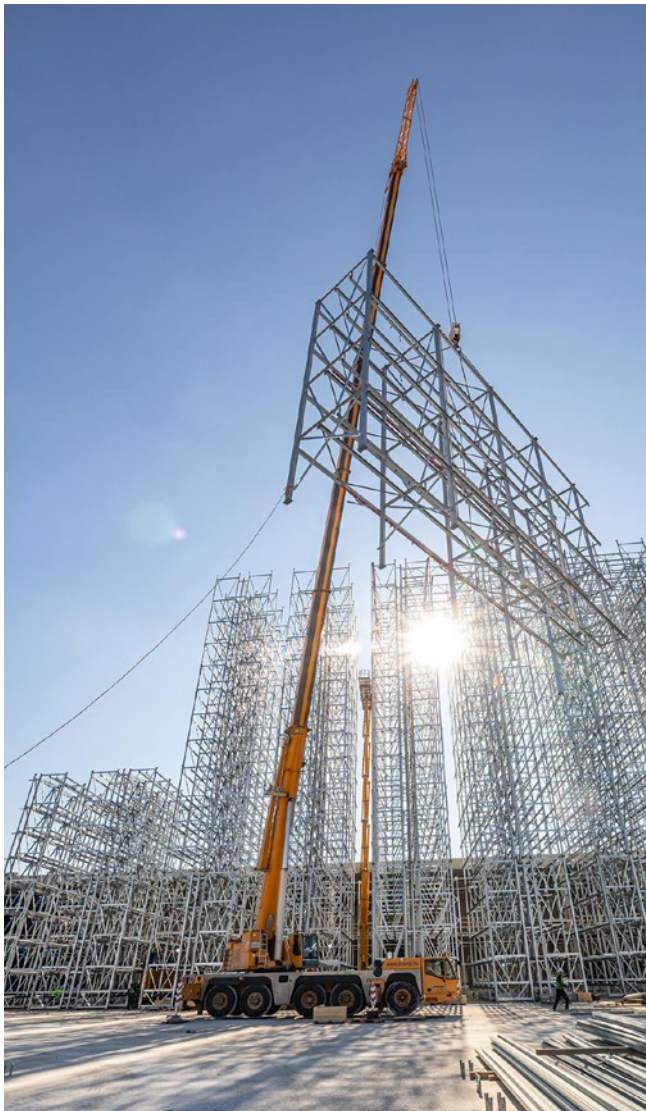


MUCH MORE THAN JUST A BED WAREHOUSE

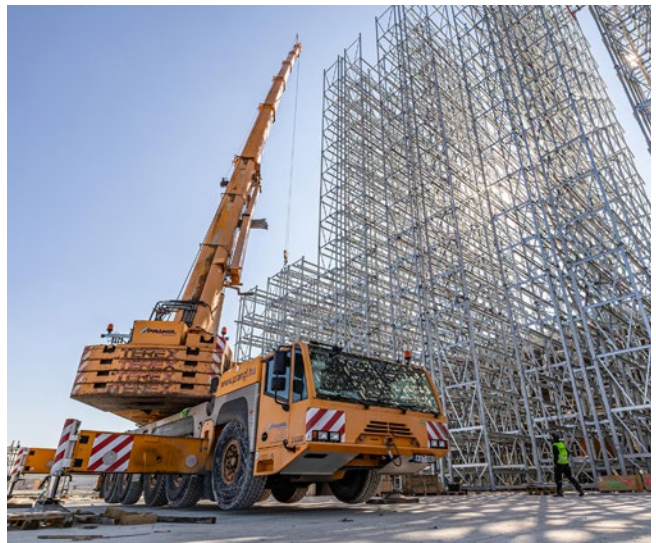
The JYSK furniture chain is building a distribution centre with VAHLE energy

More than 90 percent of Germans know with “DÄNISCHES BETTENLAGER” as a furniture store for Scandinavian furniture and home accessories. The Danish parent company, JYSK, is not yet that well-known in this country, but that will change as of autumn 2021: At that point, all branches in Germany and Austria will be renamed from “DÄNISCHES BETTENLAGER” to “JYSK”, as they are known in 49 other countries around the world.

The Danish furniture giant is not only investing in the rebrand, but also in logistics: JYSK is currently building a modern distribution centre near Budapest in Hungary. The 200 million euro building is scheduled for completion in mid-2022, after which it will supply the branches in Hungary and a number of countries in the region. The building alone is more than 143,000 square metres and has space for over 200,000 pallets.



Two 12-aisle high-bay warehouses form the core of the fully automated overall storage system. And VAHLE is bringing the whole thing to life. More than 4,500 metres of VAHLE’s VKS10 conductor line have been installed to make sure it’s possible to move quickly and safely along the total of 24 aisles: 160 metres per aisle with a height of 37 metres per lift mast.



In the future, 400 EUR-pallets per hour will be capable of being moved at the JYSK distribution centre in Hungary. Storage capacity will at least double.

The Danish word “jysk” means something or someone from the Danish peninsula of Jutland, where the company opened its first store, and where the international headquarters are located in Brabrand near Aarhus. The Jutlanders are renowned for being hard-working, down-to-earth and reliable – the same goes for the people of Westphalia. The cooperation between JYSK and VAHLE on this mammoth project went as smoothly as you would expect. And the environment is also benefiting: With the new distribution centre, JYSK expects to save about 4.5 million kilometres of road transport annually.





“WE DARED TO BE THE FIRST TO DO IT THIS WAY. OTHERS ARE NOW FOLLOWING.”

VAHLE is also an innovator in port logistics

“Laem Chabang was the initial trigger. This major project showed port operators around the world: We can rely on VAHLE’s data communication at all times.” Jürgen Henkel, Global Key Account Manager at VAHLE, is responsible for the whole project of Laem Chabang, the largest deep-water port in Thailand. It is the world’s first “remote-operated” terminal in the port world and is fully semi-automatically controlled. This means that a crane operator no longer has to clamber into a driver’s cab, but can operate several cranes simultaneously from a “command centre” in the port terminal using a joystick.

The basic requirement for this, of course, is that the data is not disturbed by other signals and that no unauthorised person can control the cranes from the outside. “That’s why we integrated the VAHLE SMGX data communication system. By the way, the X stands for extreme,” Jürgen Henkel explains, “SMGX is interference-free and does not influence other frequencies or signals.”

The advantages for port operator Hutchinson are clear: Production is increased, work processes are simplified and employee safety is guaranteed. But the environment also benefits from the system: CO2 emissions are significantly reduced, as are noise levels in and around the port area. “This is an absolute flagship project and without doubt the future of the port industry. Other operators will follow suit, and VAHLE can also seamlessly integrate its innovative automation products into existing third-party systems,” Jürgen Henkel says by way of reassurance.

VAHLE has been accompanying the electrification of ports worldwide for many years: As far back as 2011, ports in Panama, Mexico, Hong Kong and Turkey, among others, were made more efficient and sustainable with VAHLE technology: At that time, the first step towards more environmentally conscious port logistics was converting the energy supply from diesel to electricity. The container rubber-tyred gantry cranes (RTGs), which shift around the containers at the storage yard, were electrified with VAHLE conductor systems – thereby becoming eRTGs. A further milestone in 2015 was the conversion of the largest container port in the UK, the port of Felixstowe.



It is not only electrified by VAHLE, but since then has also been automated: More than 70 RTGs and almost 70 container blocks are now equipped with SMGX data communication and positioning here. The data transmission rate of the SMGX system is up to 700 Mbit per second and can safely transmit both video signals and other data, for example emergency stop signals.

Existing customers such as the Port of Felixstowe rely 100% on VAHLE and are already planning to expand the new automated Berth 9 terminal. A further expansion of 10 container blocks and 17 RTGs is planned for the next few years.



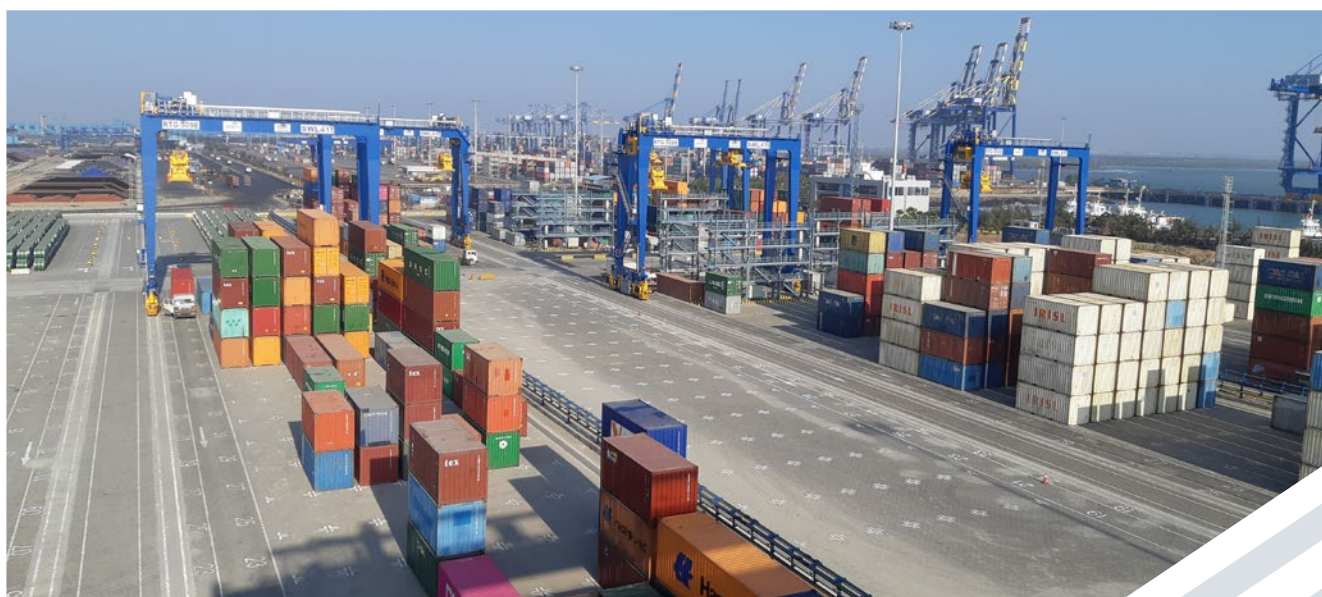
Huge ports in China, Singapore, Indonesia, England, India, Malaysia or the USA have been and are made promising with our system solutions ever since. The importance of smooth port logistics was brought home to all of us in the spring of 2021, when a 400-metre container ship lay across the Suez Canal, blocking the main connection between Asia and Europe for six days. Hundreds of ships were jammed in both directions, with the incident leading to immense costs.

In order to minimize such risks in the future, smaller transshipment terminals are being built in which the containers are loaded from large deep-sea ports onto smaller ships. This of course must happen as quickly as possible, so this investment pays off. That is why the terminal operators will also rely on full automation in these small ports, which in turn will benefit VAHLE. Global Key Account Manager Jürgen Henkel is convinced: "A promising future market is emerging here, for which Vahle already has the answers."

In addition to Hutchinson, other world market leaders in the port industry are increasingly relying on VAHLE technology. The very successful cooperation with India's largest port operator, the Adani Group, has been running for three years. Since the start of the first projects in Kattupalli and Mundra in 2019, the partnership has continued to develop. VAHLE is now working with Adani in four terminals with regard to electrification and automation. If the customer so wishes, they can get the "all-round carefree package" for their project: From the planning phase to construction and technical support to the training of port staff.

The first two automated RTG projects are now also in the USA. Together with the operators GulfTainer and Ports America, VAHLE has already electrified and automated the first container blocks at the ports in Wilmington and Chesapeake. Further expansion stages are planned for the coming years. Then over 27 container blocks are to be equipped with around 30km of conductor systems from Kamen. For the mobile equipment on eRTGs, VAHLE is working with Konecranes from Finland, which means another milestone for the Kamen system provider in the port business.

With the latest projects in India and the USA, VAHLE is not only assuming local responsibility to operate sustainably and environmentally friendly, but is also using the technology to help reduce CO2 emissions worldwide and protect the environment.





THE FASTEST MOUSTACHE IN THE WORLD

Super Mario whizzes through the amusement park on VAHLE rails

Banana peels, lightning bolts or fireballs – Super Mario can deftly dodge anything in his fast kart, but the coronavirus hit the beloved plumber with full force.

The opening of Super Nintendo World at Universal Studios Japan in Osaka had to be postponed several times due to the pandemic, but the latest highlight of the popular theme park finally opened to visitors in March 2021.

Through an oversized warp pipe, you enter the brightly coloured Nintendo world, full of characters and items that you know from the Super Mario games: Yoshi, Bowser, Donkey Kong, mushrooms, walls and of course the familiar music.

The entire park is interactive. Visitors can use a power-up wristband and matching app to solve tasks at the attractions via QR codes, collect stickers, check their current score and much more.

But what would Mario be without a kart? In Super Nintendo World, there are two rides developed by Japanese amusement park specialist Sansei Technologies and powered by VAHLE systems.

The greatest thrill is undoubtedly offered by Mario Kart Koopa's Challenge – a car race in which you collect coins and launch turtle shells at competitors, among other things. To bring the video game into "reality", the drivers are fitted with AR glasses and can independently target other drivers using buttons in the car and achieve their own high score.

Yoshi's Adventure is a little more relaxing and is also suitable for younger children. Here you ride a Yoshi along the treasure map and search for three different coloured eggs. When you discover one of them, you can press the matching button. The tried and tested U20 conductor system from VAHLE are used in both rides and guarantee smooth and safe fun in the new Nintendo World.

International spin-offs are already in the works, after all, the mustachioed plumber has millions of fans all over the world: "It's-a me, Mario! Woohoo!"





THE COLOSSUS OF DUISBURG

VAHLE powers huge overhead crane in thyssenkrupp steelworks

This crane crosses all dimensions: In the largest steelworks in Duisburg, the Oxygenstahlwerk 2 of thyssenkrupp Steel Europe AG, a two-girder overhead crane weighing around 830 tonnes was installed in June 2021, with a span of 40 metres and a load capacity of 390 tonnes. That means this crane itself weighs as much as three detached houses, and could easily transport two adult blue whales!

So it's not surprising that this crane is the largest of its kind ever built by crane construction specialists Kranbau Köthen from Saxony-Anhalt. Despite its enormous size, it's pretty fast. With a lifting speed of 10 metres per minute, it transports the ladle with 265 tonnes of liquid steel. Almost 70 of these ladles are lifted here every day – and if the crane fails, the whole steelworks comes to a standstill.

This makes the highest level of reliability in the power supply all the more important, and that's where our customers rely on proven VAHLE technology.

For this installation we supplied 300 metres of F45/600 open conductor system (7-pole) and two cable trolley systems. The hoist is designed with redundancy, i.e. in the event of a motor failure, it can continue at half speed. Multiple redundancies are also provided in the switchgear to ensure high availability of the crane.

Transporting this colossus from Köthen to Duisburg was a logistical feat. A total of eight heavy goods transports with police escort were required to bring the individual parts safely to the steelworks, and three barges spent five days on the Elbe river and on the canals and the Rhine to reach the works' own port of Duisburg-Schwegeln.

But it was worth the effort: The giant crane at the thyssenkrupp steelworks in Duisburg Beeckerwerth also works perfectly thanks to its VAHLE power supply, thereby ensuring that more than 5 million tonnes of steel leave the plant every year.



THE ART OF BREWING FROM THE NORTH

VAHLE supplies power to Störtebeker Braumanufaktur

Beer from the Baltic port city of Stralsund was already considered particularly delicious back in the days of the Hanseatic League 800 years ago, and was a real export hit. The popularity of Störtebeker brewed specialties remains unbroken. The range of Störtebeker brewed specialties includes more than 20 different beers, available in two bottle sizes and in various containers. The logistics in the brewery are correspondingly complex.

Last year, the company had a new bottling plant with a capacity of 40,000 returnable glass bottles per hour and a high-bay warehouse with almost 30,000 pallet spaces built by System Logistics.



And as the system provider, VAHLE is really getting the bottles “rolling”: More than 330 metres of conductor system (U10), positioning (APOS Magnetic) and control system (DCS X 300) – it all comes from VAHLE. An electric floor track from GPI GmbH connects the existing and the new filling line as well as the high-bay warehouse, the sorting of empties and the outgoing goods area with each other.

The 30-metre high, fully automatic high-bay warehouse with its six aisles is controlled by MIAS stacker cranes. The electric floor track supplies the warehouse with empties such as bottles and crates, as well as with ready-to-sell containers.

In the aisles of the warehouse the VAHLE VKS10 conductor system is used, which is installed in a specially developed support profile to protect it from any falling parts in the high-bay warehouse. No further auxiliary supports are necessary, so the conductor system can be mounted directly on the existing shelf stands. The VKS10 also reliably supplies energy in the mast to move approximately 4,000 pallets per day.

It's almost unimaginable that all warehouse movements here had to be carried out with forklift trucks before.

And because Germans' appetite for Störtebeker brewed specialties continues in full force, an expansion of the electric floor track and the high-bay warehouse is almost in the pipeline – or in Stralsund harbour, to be precise. VAHLE will certainly remain on board.



MISSION ACCOMPLISHED

Thanks to VAHLE, the world's largest observation wheel is turning in Dubai

Just under four years after Paul Vahle GmbH & Co. KG was awarded the contract to power the Ain Dubai, work on the world's largest observation wheel is now complete. It was a mammoth project in the truest sense of the word: 48 luxury cabins with parquet floors, sofas and tables offer space for 1,900 guests. At a height of more than 250 metres, they are offered a breathtaking view of the Dubai Marina, the Palm Island and the Burj Al Arab.



To enable the colossus to get moving, the VAHLE project team installed around 15 kilometres of conductor system encased in high-temperature-resistant special plastic, and almost 100 control cabinets. The impressive lighting is provided by 65,000 LEDs on the rim. These too are supplied with power from VAHLE.

At this enormous height, the risk of lightning strikes is high, which is why VAHLE also supplied 1.5 kilometres of specially tested busbars as lightning conductors. In the event of a strike, the lightning is discharged into the ground via the spindle and support.

The Ain Dubai has been turning since 21 October 2021 – and is significantly larger again than, for example, the Singapore Flyer (165 m), which is also powered by the Kamen-based system provider. “The work on the Ain Dubai presented our team with great challenges,” VAHLE Managing Director Achim Dries says. “The schedule for this complex project was very tight and demanded a lot from our designers and production. Our installation team was on site around the clock for almost six months. Now everything is running and lighting up reliably and has been approved by the relevant safety authorities. As a medium-sized company in the leisure sector, we are proud to be turning the very big wheels.”

And the next project is already being planned: With their expert knowledge, the VAHLE engineers also impressed those responsible for the “Sun of Moscow.” In contrast to the hot and humid climate in Dubai, the icy cold in winter is more of a problem in the Russian capital. But VAHLE has already developed the solution: heated conductor systems. To be continued...

DONATION CAMPAIGN FOR FLOOD VICTIMS

VAHLE and employees help

The night of July 14 - 15, 2021 will remain a terrible memory for us all for a long time to come. More than 180 people in North Rhine-Westphalia (NRW) and Rhineland-Palatinate died in Germany's worst flood disaster since the storm surge of 1962. Many thousands more lost their houses and ultimately their homes. Entire streets were washed away by the masses of water, and villages were flooded. The clean-up will take months and the despair of those affected in the flooded areas is great.

But the willingness among the population to help out is just as great, and VAHLE employees as well as the shareholder family are also demonstrating their solidarity with the flood victims: A special VAHLE donation account was set up via the “Lichtblicke” campaign by local radio stations in NRW, to which employees could send their donation. In the end a five-digit amount was transferred to Lichtblicke.

We would like to express our sincere thanks to all who donated, and wish the affected families in the flood areas all the best!





YOUR VISION – OUR SOLUTION

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