

WAGENBORG NEDLIFT

Management Review 2022

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#### **About this Management Review**

This is the anual Management Review van Wagenborg Nedlift B.V.. Tis review covers activities and events which took place in 2022. Our aim is to communicate the information as accurately, punctually, clearly and reliably as possible.



# Foreword by the Executive

A hugely eventful year has been behind us. At the start of 2022, we were still wondering what role COVID-19 would play. And yes, this year too, Corona was still part of our lives. Yet this time, the impact came mainly from a different angle.

The war that broke out in February between Russia and Ukraine turned the whole world upside down. The suffering is almost incalculable: millions of people are fleeing and the war is claiming many lives. The effects are felt worldwide: food security and food affordability are a major challenge. The same was true for fuel supply and skyrocketing fuel prices that greatly affected our lives.

Besides the above challenges, we faced one shock after another in September. In three weeks, we lost three colleagues through natural death. Having to miss them, we still feel that every day.... These were very tough weeks and the impact on our company was huge. Our world stood still at that moment. And yet we had to pick up the thread. No matter how difficult that was.

Fortunately, we also have some good news to report. For instance, we can really be more than satisfied with the positive results of the Preventive Medical Examination. It means that the sustainable employability of our employees is excellent. We attach great importance to this, as our employees are our greatest capital. Following on from this, we were therefore delighted to be recertified for Step 3 of the Safety Ladder. We passed with flying colours. And that too is important, because safety and safety awareness remain high on our list of priorities.

Sustainability remains a strategic factor of importance. Every investment we make is in line with our sustainability strategy. A good example is the new, unique box jacking system that our Projects department commissioned. This fully electric and computer-controlled system can effortlessly jack 3,200 tonnes with a height range of 20 metres. We also took delivery of our new flagship LTM 1650.8.1. The investment in this 700-tonne crane is part of the sustainable cooperation programme we entered into with Liebherr. We talk more about this in the 'Innovation and sustainability' section.

Also in 2022, we did everything possible to unburden our customers. Working together to find the best

solution is woven through our work like a thread. From our clients, we again received many compliments on our employees and the assignments carried out. That is an extra motivation for us to keep our services at a high level!

In closing, we would like to thank all our employees for their positive contributions this year. As a team, even under challenging circumstances, we can move mountains. We would like to thank you as a customer for the pleasant cooperation and trust you place in Wagenborg Nedlift. You can count on us again in 2023!

#### We wish you much reading pleasure!

**Gerard Bastiaansen** 

Managing Director

Jos Megens

Financial Director



# 2022

# In a nutshell

#### **January**

Wagenborg Nedlift joins KYP Project. Using KYP to order cranes via the Wagenborg Online app.

KYP~ PROJECT

#### **February**

High-quality lifting work in Groningen. Placement of temporary bridge over Noord-Willemskanaal and Brailleweg.



#### March

3 ESTA Awards. We won awards in the categories up to 120 tonnes lifting capacity, Combined techniques & SPMT.



#### **April**

New flagship in crane fleet: LTM-1650-8.1



#### May

Work at the Old Sea Lock in Farmsum.



#### **June**

Kamen's Artwork. Placement of 'express bridge'.



#### July

Placement of a cycle, pedestrian & pipeline bridge Essen-Karnap (DE).



#### **August**

Expansion of our fleet with a 300-tonne crane: the Grove GMK6300L-1



#### **September**

25 new employees trained as lifting supervisor and/or operator.



#### October

Delamine Delfzijl. Maintenance and expansion.



#### **November**

Precision work and sophisticated logistics for Hywind Tampen.



#### **December**

Virtual Reality Booth is working overtime. Experience what it's like to work as a crane operator in our VR Cabine.





# Kamen's ortwork

'Expressbrücke' are what they are called in Germany. They are bridges that can be erected or exchanged within a short time using accelerated construction or pre-assembled bridge sections. A great help, as they minimise congestion and traffic disruption. Which is nice for businesses and residents of a country where some 4,000 (!) bridges still have to be replaced in the next 10 years.

The 'Artwork of Kamen' is also such an Expressbrücke and can rightly be called a work of art: the entire new bridge deck in the A2 at Kamen was pre-assembled on a nearby construction site and installed in its entirety. Weighing 725 tonnes and measuring  $17 \times 19$  metres, it is certainly not a small boy.

An exquisite job, then, for Wagenborg Nedlift's bridge team.

#### **Jacking operation**

'It does not seem too difficult, moving and placing such a flat deck, but there is more to it than meets the eye,' Bart van den Belt, project manager at Wagenborg Nedlift, explains. 'This is because such a bridge deck is built at about 2.5 metres above ground level but has to be placed at a height of over 5 metres. That means there was a hefty jacking operation involved first to raise the deck to height.

Because of the weight and stability, we used our jacking system with eight 250-tonne climbing jacks for this purpose. To raise the deck to about 5 metres, more than 1,700 auger beams were needed. We opted for bamboo jacking beams for this: as they are very dimensionally stable and strong. Ideal for an operation like this.'



Bart van den Belt, projectmanager Wagenborg Nedlift

#### **Support structure**

'Meanwhile, we prepared the SPMT combination of  $2\times16$  axle lines,' continues Bart. 'On this, we made a strong support construction that allowed us to transport the bridge deck at height. Under this support construction, we positioned the 600-tonne jacking system. This allowed us to raise the deck another 80 cm or so to transport it over the abutments and then lower it again and drop it off,' Bart continues.

#### **Successful operation**

On the Friday before Whitsun, the time had come: the bridge deck was at height. Using SPMTs, the Kamen Artwork was slowly transported to its final position in the A2 motorway. By the end of the morning, the job was done and the new bridge deck was in place

From the end of July, this carriageway will be put back into use, after which the other half of the road will be up for renewal.









# HSEQ SAFETY CAMPAIGN





# 3. A clean and safe world for everyone

#### 3.1 Incident reporting

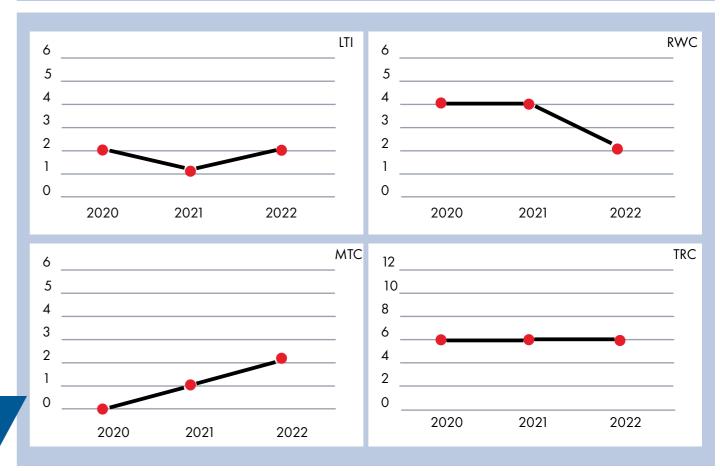
Wagenborg Nedlift's safety objective is: zero accidents. Every accident is one too many.

2022 was not entirely without incidents. The number of incidents, as shown in the table below, remained the same in 2022 as in 2021. In 2022, the number of RWCs (Restricted Work Cases) decreased from 4 to 2, but the number of LTIs (Lost Time Injuries) increased from 1 to 2. The same goes for the number of MTCs (Medical Treatment Cases) which increased from 1 to 2.

In the remainder of this chapter, we will explain how we work towards achieving our safety objective in various sections. Active involvement of our employees is very important in this respect, as discussed in section 6.2 (Safety campaigns) and 6.5 (MoreApp).

Questions about our incident reporting and other HSEQ-related matters can be submitted to our HSEQ department: nedlift.hseq@wagenborg.com.

Description of key indicator	2020	2021	2022
,			
Number of Fatalities	0	0	0
Lost Time Injuries (LTI)	2	1	2
Restricted Work Cases (RWC)	4	4	2
Medical Treatment Cases (MTC)	0	1	2
Total Recordable Cases (TRC)	6	6	6

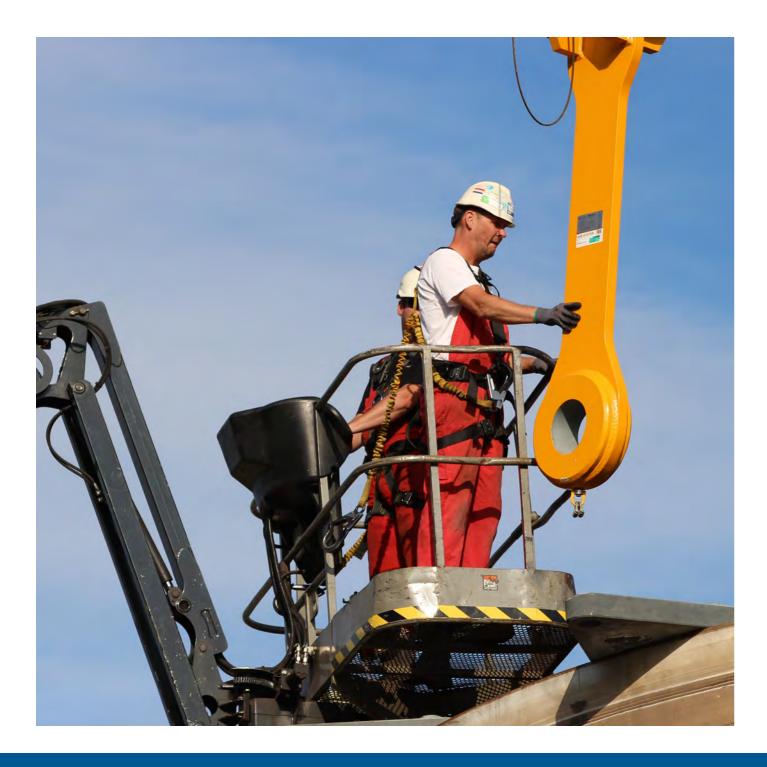


"What I saw on Monday was a controlled execution of a sound execution plan. Compliments to you and your team on site, hiring drivers included."

#### 3.2 Safety campaign

Safety awareness of our employees is (and continues to be) extremely important in order to ensure a positive safety culture within the organisation. To draw attention to 'Safety at work' in an original way, the HSEQ department launched a new safety campaign with the slogan: 'Everyone returns home SAFELY at the end of the working day, EVERY DAY'. In addition to our usual poster campaigns, all employees received a lunch box with the text: 'Safety ladder: safety at work – it's vital!'

We also organised so-called safety snacks. These were meetings where employees from different departments were given the opportunity to talk about safety openly and directly. In addition, we paid extra attention to the improvement proposals they submitted. As a result, we received three times as many submissions compared to previous years. The two best improvement proposals were awarded a nice prize and trophy.



"I just wanted to express my thanks and happiness. Super service and great how you think and solve problems. [...] A big compliment to you and the drivers. I am very satisfied with Wagenborg."

#### 3.3 Audits and certifications

In early March, a surveillance audit was held for the certification of:

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 VCA-P 2017/6.0

No discrepancies were found and the audits ended with good results. Several 'opportunities for improvement' have now been implemented and other areas for improvement are currently being worked on. This allows Wagenborg Nedlift to work continuously on improving and optimising its services and their quality.

#### **VVT Erkend**

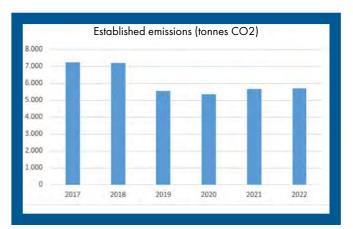
Once again, Wagenborg Nedlift received the VVT approval from the Vereniging Verticaal Transport.

#### **Safety Culture Ladder**

We are continuously improving safety awareness and our safety culture. An interim audit of SCL-3 (Step 3 Safety Ladder) was carried out in December. The auditors indicated that Wagenborg Nedlift is well within the margins for step 3.

Some highlights from the report included the good improvement cycle we apply within Wagenborg Nedlift, following an incident. Management meetings, working groups, introduction of the multi-eye principle, translation cards, toolbox breakfast sessions during working hours: all contribute to the continuous improvement we want to make in the field of safety.

Like in 2021, this year too it emerged that employees have a great commitment to the company. Another positive aspect is the fact that attention is paid to the person behind the employee. At Nedlift, for instance, we have 'the good talk' instead of a performance review. And the lines of communication within the organisation are short.



#### 3.4 Our 'footprint'

Wagenborg Nedlift's CO2 footprint for 2022 will be verified in February 2023 by an independent institution, according to NEN-ISO-14064-1. The possibility of CO2 compensation has been included in our new framework contracts.

#### 3.5 MoreApp

The MoreApp is largely integrated into our systems and is now part of our day-to-day operations. General toolboxes, customer-specific toolboxes and training/work instructions were prepared and shared via the MoreApp.

#### 3.6 EcoVadis

Wagenborg Nedlift achieved a score of 49 on the EcoVadis sustainability assessment. This score represents a 'good', and we are proud of it. The EcoVadis sustainability assessment evaluates the extent to which the principles of Corporate Social Responsibility are integrated into the business and management system. The EcoVadis Sustainability Scorecard illustrates performance on 21 indicators in four areas: environment, labour and human rights, ethics and sustainable procurement.

You can read more about EcoVadis at www.ecovadis.com.

## CPR can be taught

## AED-training for employees

We often carry out our work in remote locations and sometimes it is in a small group. For this reason, some colleagues wondered whether a mobile AED could be purchased. Naturally, we complied with this request. For us, this too is part of safety. From now on, an AED can always be added to the project equipment.

This request triggered the HSEQ department to increase knowledge of CPR within Wagenborg Nedlift. CPR and being able to use an AED are skills that can come in handy at any time of the day. Both during and outside working hours.

A survey among Wagenborg Nedlift employees resulted in 60 applications. The management decided to offer this training to employees annually. The reactions of the participants in the first training sessions were very positive.

"For me, the training was partly a refresher course, because I had already learned how to perform CPR in the past. I had already applied my knowledge in practice. When I was running, I came across a man who had collapsed while running. Fortunately, I got there quickly. Together with another passer-by, I was able to intervene immediately by performing CPR.

With a good result, thankfully: the man is alive and still running. For me, this event was the motivation to sign up for AED training. Surprisingly, I also gained new insights. For example, the pace of CPR is a lot faster than when I learned it years ago. As for the AED: it's child's play. The device tells you exactly what to do."



"I am not a hero in the medical field. But suppose someone needs my help, I want to know how to act. I had already heard that using the AED was simple. Still, it's good to have practised with it in a situation without stress. Learning the basics of CPR was also very useful. Nice to have this knowledge at home."

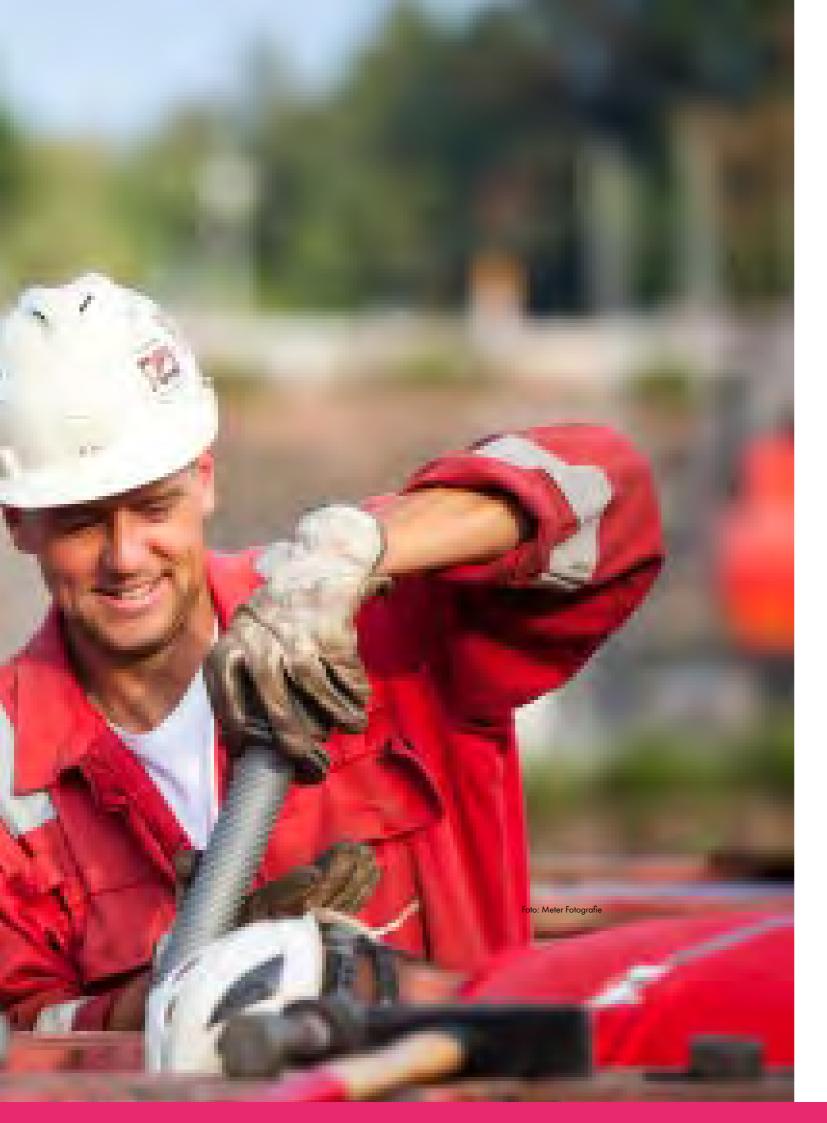
"I signed up for the AED training because I didn't know what to do the moment someone needed my help. I really liked that the group was small in which the training was given. This allowed everyone to practice on the dummy. I am a lot of information richer, but hope to never have to use it."

In the Netherlands, there are 8000 out-of-hospital reanimations a year. In over 75% of cases, bystanders are there to resuscitate the victim. The survival rate for a cardiac arrest is 23% on average and 90% of victims who survive CPR make up for it after resuscitation.

Previously, the chance of surviving a cardiac arrest was much lower and the quality of life after a cardiac arrest was also much lower. This improved due to immediate resuscitation by bystanders, quick and successful deployment of AEDs, expanded treatment options by ambulance providers and better treatment in hospital. (Source: hartstichting.nl)







4.

# Our people

a big & passionate team

In 2022, we invested heavily in the development of our employees. They followed work-related courses necessary to carry out their functions, which helped us maintain the quality of our services at a high level. This also ensured that employees enjoy working with us.

Additionally, we invested in the personal development of our employees, which is interesting for all parties involved. Training and growth opportunities increase motivation and job satisfaction and are an important unique selling point in recruiting new colleagues.

#### **4.1 Training**Specialist training

Regarding training, in total,
14 new employees were
trained as crane supervisors,
and 11 as machine operators.
Moreover, mandatory function
and vocational training were
followed or extended.

New crane operators not only follow an external course but also start their careers as crane operators with a thorough internal training program. Our internal mentor guides them intensively for the first two weeks before they move on to the external course. They can also turn to him for additional training after their course, and he serves as a mentor for them. The first steps in practice are taken under the wings of experienced colleagues, thereby sharing and safeguarding valuable professional knowledge.

#### **Personal development**

We offer ample space for personal development, not only to provide growth opportunities but also to increase motivation and job satisfaction. Our employees often make use of a personal subsidy from the STL (Foundation for Transport and Logistics) to follow courses. In 2022, STL made a personal subsidy amount of € 3,000 available per employee.

#### **In-house professional training**Our work is highly specialized, and our

employees are continuously trained, which we do internally. These training courses are not offered externally, such as those focused on working with our own equipment, such as a jackscrew training or training to work with SPMTs or overhead cranes. As communication is a significant factor during work, new employees receive communication

training.

This training contributes to dealing with difficult situations, creating mutual understanding and respect, and ensuring good teamwork. These internal vocational training courses ensure that our employees are well-prepared, enabling them to deliver high-quality work safely.

#### 4.2 Absebteeism

In 2022, the absenteeism percentage increased significantly compared to 2021, from 3.8% to 5.5%. We saw a considerable increase in short-term absenteeism, especially compared to the COVID-19 years before. While there was almost no short-term absenteeism during COVID-19, it returned in extreme form in 2022. Additionally, the intensity of the average flu also increased, resulting in a longer recovery period. On average, an employee reported being sick 0.7 times in 2022 (compared to 0.5 times in 2021).

Compared to the industry and the national average, we are still doing better. The average duration of absenteeism decreased from 25 days

to 23 days in 2022 compared to 2021, meaning that the number of long-term sick employees decreased. We continue to try and empower and retain employees with the use of company social work, individual coaching, and personal attention. This is important for now and the future.

#### 4.3 Investing in employees

We believe in investing in our employees and do so in many ways. One of them is by offering the opportunity to undergo an annual "preventive medical examination". This examination assesses the sustainable employability of employees. Not only physical health, lifestyle, and work

experience are assessed, but also topics such as aggression and violence, mobility, and work ability.

Based on the examination results, our employees are eligible for fully subsidized personal guidance on physical and mental fitness, lifestyle, or career

As an employer, we receive a "group report" after the examinations with the average scores. Depending on the results, we may or may not take action.

#### 4.4 Investments in health & vitality

In 2022, all employees were able to participate in the employability check.
As a result of this check (plus results from employees' visits to the health bus),
Wagenborg Nedlift received a group report.

The results were positive. When it comes to work variety, support from colleagues and supervisors, and performance feedback, we scored high points.

Looking at learning and development opportunities, we scored almost 3 times higher than the market average. Another notable result is the high level of employee engagement. It's a result we're proud of!

"Yesterday I saw a good team with expertise and

with well-groomed-looking equipment. Very positive

to watch the team's attitude despite the long waiting

Furthermore, we offer our employees a financial allowance for activities that promote (physical and mental) health and vitality. For example, membership fees for a sports club, programs that help with quitting smoking, and personal coaching. And the bicycle plan is part of our secondary employment conditions.





Compact crane Palfinger PK 27002-SH

# BALANCING ON A GREEN ROPE

Large equipment, horizontal, vertical and heavy transport are typical for Wagenborg Nedlift's work. This seems in sharp contrast to its steadily growing focus on sustainability. But is it? Johan Dorgelo, Commercial Director, explains.

#### Livable planet

At first glance, it seems contradictory: sustainability and heavy transport. Nonetheless, there is a green thread woven through all Wagenborg Nedlift's activities. Firstly, from an intrinsic motivation to keep our planet liveable for future generations. Secondly, because we have to deal with laws and regulations, including at the locations where we work. "Think of construction sites without noise and odour pollution for local residents. Or inner cities with zero-emission policies," Dorgelo explains. "What matters now is green (construction) services with the least possible impact on people and the environment. Sustainability has therefore become a strategic factor of importance."



Johan Dorgelo, Commercial Director Wagenborg Nedlift.

#### Investing in sustainable equipment makes sense

Wagenborg Nedlift's sustainability strategy includes concrete objectives. These goals have been set until the year 2050. One of the main objectives is to reduce CO2 emissions. "We want to significantly reduce emissions from our crane and vehicle fleet within the Netherlands and within Europe.

And yes, that is quite a challenge," confirms Dorgelo.

#### More sustainable equipment

"Wagenborg Nedlift's aim is always to meet the highest achievable sustainability standard at the moment," continues the Commercial Director. "In recent years, our priority has therefore been to rejuvenate and green the fleet. Together with Liebherr, for instance, we have drawn up a rejuvenation plan for our fleet. 25 new Liebherr machines will replace older mobile (tower) cranes in the period from 2021 to 2025."

Liebherr's cranes feature ECOdrive and ECOmode technology as standard. This reduces fuel consumption and noise while driving and during lifting operations. In addition, these engines are extremely suitable for HVO (Hydrotreated Vegetable Oil) fuel. HVO is a synthetic biodiesel made from used cooking oil. This fuel achieves an 87% saving in CO2 emissions compared to fossil fuel

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Enerpac jacking system

#### Extra step(s)

Dorgelo: "Within Wagenborg Nedlift, we are always looking for the balance between sustainability and commercial feasibility. This means that the choice does not always fall on buying new equipment. For example, we recently opted for an extensive overhaul of our Sennebogen crawler cranes, equipping these machines with Euro 6 engines. As a result, they can now run on HVO fuel. And for the knuckleboom cranes, we have purchased power packs so that these cranes are now fully electric even in outlying areas."

Inner-city projects face increasingly stringent requirements. Yet the working environment often does not yet meet all preconditions for hoisting operations to be fully electric. But a handy solution has been devised for this too. If the power supply at a location is insufficient, the new battery trailer comes in handy. With this huge power pack, the cranes can run fully electric for 8 hours, in other words, cleanly and without noise pollution.

#### Focused on the future

When deciding whether to invest in new equipment or in an upgrade, we always look at the longer term. The cranes in our fleet will still meet the current requirements in 15 years' time. We use a term of 12 years for our trailers and semis and eight years for our trucks.

Sometimes, sustainable choices made earlier in the chain also work out positively for the company. Nowadays, steel products are produced more and more sustainably. This makes the cycle from the production of a crane to its recycling at the end of its service life more sustainable. So that also makes a machine as a whole more sustainable.

#### **Return of Investment**

"In our work, we often have to deal with environmental zones and the associated requirements," says Dorgelo. "We regularly work on the Second Maasvlakte, for example, where only vehicles with Euro 6 engines have access. Having the latest Liebherr mobile cranes in the 500-tonne and 700-tonne classes, among others, this is no longer a restriction for us: our project resources and equipment can be used anywhere." In short: a sustainable investment policy pays off for people, the environment and continuity.



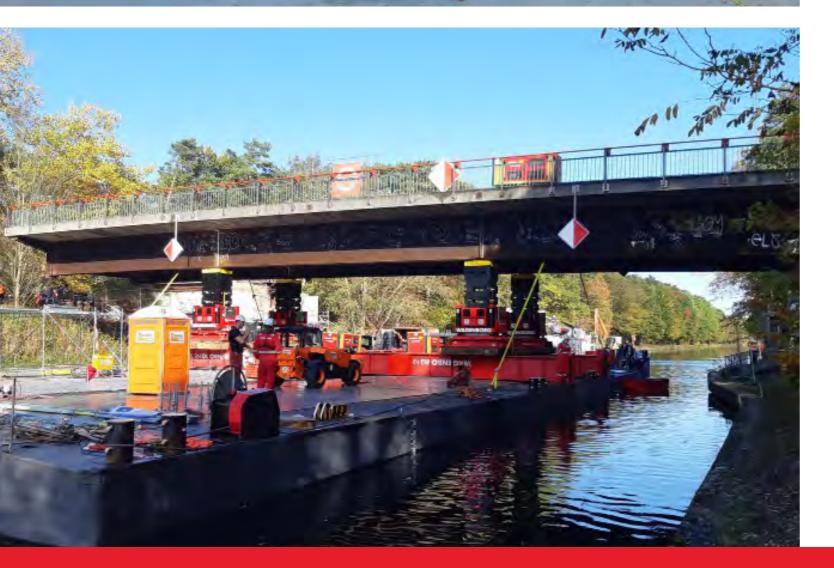
Mobile towercrane Liebherr



Knuckle boom crane 92 tm



# SACEURI SAME CONTRACTOR OF THE SAME CONTRACTO



# Special bridge relocation im Berlim



On a beautiful autumn day in October, Wagenborg Nedlift's bridge team carried out a special operation near Berlin. The Fahlenberg Bridge was moved 100 metres there by means of a sophisticated jack-up and barge operation.

The 600-tonne-plus and 40-metre-long Fahlenbergbrücke spans the Oder-Spree Canal and connects the town of Gosen with the Berlin-Müggelheim district. The old bridge is being replaced by a new one. During this new construction, the old bridge will serve as a temporary bridge on the diversion route.

For the relocation operation, the Wagenborg Nedlift team deployed a combination of techniques. First, a set of coupling pontoons with support beams on top. This created a stable surface for the jacking system that had to lift the bridge from the abutments. This jacking system was only recently commissioned by Wagenborg Nedlift.

The Fahlenbergbrücke project is therefore one of the first projects for this latest addition to jacking technology. The new jacking system uses jacking elements, is equipped with the latest technology in jacking technology and is computer-controlled. A perfect system for jacking a bridge like the Fahlenberg Bridge. To release the bridge from the abutments in a controlled and safe

manner, the client positioned additional jacks on both sides of the

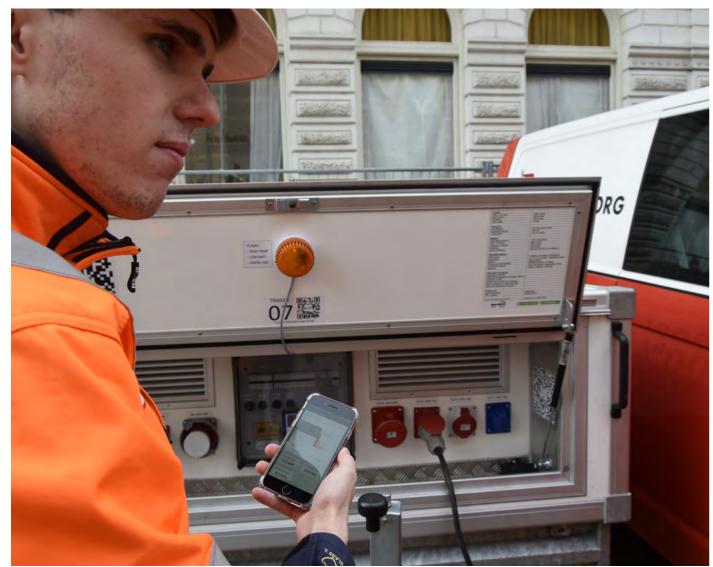
Around noon, the time had come and the public was treated to a fine piece of craftsmanship by the bridge team. The bridge was silently raised and lifted from its abutments using the jacking system and jacks. After the bridge was completely freed and secured securely, the pontoons slowly moved towards the diversion route, 100 metres away. Such precision steering by the tug skippers! On arrival at the location, the client first took care of any work still needed on the pontoons.

The next day, the entire jacking operation took place in reverse order and the bridge was placed on the temporary abutments of the diversion route. With just as much calm and care as it had started the day before.

## New equipment

### innovative & sustainable

For Wagenborg Nedlift, sustainability is an important strategic factor. We see it as our duty to society and future generations to make maximum contributions to a livable world. Investing in innovative, sustainable equipment is a logical step towards achieving this goal. With this, we make an important contribution to the sustainability of construction work in the Netherlands and beyond. Below is an update of the latest developments.



Some of our mobile tower cranes run a whole day on power using a battery cart or construction power.



Liebherr LTM 1650-8.1

#### 5.1 Unique jack-up system

This unique jack-up system was high on the wish list of our Projects department for ultra-heavy jacking projects. With the new jack-up system, loads with a weight of up to 3200 tons can be effortlessly jacked. The new acquisition has a height range of up to 20 meters and is equipped with so-called adjustable top-barrels: adjustable top parts, equipped with a cylinder. This makes alignment during a jacking operation easy, making the system flexible and efficient. The capacity, combined with the adjustable top barrels, makes this new system unique in its kind. The new jacking system uses jacking elements instead of beams. The jacking elements are placed at the bottom of the jacking units. Employees therefore do not have to work at height during a jacking operation, which benefits safety. Moreover, the entire system is computer-controlled and fully electrically driven.

#### 5.2 E-mover

This small powerhouse is fully electrically driven and moves loads up to 30 tons. The e-mover is specially designed for industrial machine moves. It is super agile in tight corners and small spaces and has a 360-degree swivel range. The e-mover is remotely controlled.

#### 5.3 Greening and rejuvenating our fleet

For several years now, Wagenborg Nedlift has been greening and rejuvenating its fleet. The sustainability strategy we have drawn up contains concrete objectives set until 2050. One of the objectives is to reduce CO2 emissions: within the Netherlands by 95% and within Europe by 50%. This year, we have invested heavily in new equipment. Sustainability remains an important guiding principle.



E-mover.

In 2021, we started a sustainable cooperation program with Liebherr. We joined forces to rejuvenate and make our crane fleet more sustainable. Through this program, we have taken an option for the delivery of 25 cranes in the period 2021-2025. Cranes that serve to replace older mobile (tower) cranes.

#### Powerhouse LTM 1650-8.1

It is with pride that we received the new flagship of the crane fleet on April 14. This showpiece from the 700-ton class is part of the sustainable cooperation program with Liebherr. Old lifting and drive technologies make way for new ones, which enable us to achieve a significant reduction in CO2 and nitrogen oxide emissions. For example, the LTM 1650-8.1 is equipped with EcoDrive technology that ensures that the crane becomes more comfortable and quieter by reducing the engine speed. The crane is equipped with a main boom of no less than 80 meters. And in full ornate, a hook height of even 152 meters can be achieved!

#### GROVE GMK 6300L-1

In August, the newest model from the 300-ton range of Manitowoc arrived on the grounds in Hengelo. This new 6-axle crane has very efficient and clean Stage V engines, which saves on fuel consumption and limits harmful emissions. This machine also scores high on safety. It is equipped with a load-sensing camera, side-view camera, reverse camera, and extra work lighting on the side and back of the crane. This ensures that our machine operators always have a good view of the lifting work and the immediate surroundings around the crane. This improves safety.

#### 3x Liebherr LTM 1090-4.2

We also expanded our fleet in 2022 with no less than 3 100-ton Liebherr mobile telescopic cranes. These cranes are also equipped with ECOdrive and ECOmode, which reduce fuel consumption and noise emissions - better for the driver and the environment. The equipment with VarioBallast® and VarioBase® increases capacity, safety, and flexibility.

Figure 2. Investments 2022

gure 2. Investments 2022



#### Investments 2022

Liebherr LTM 1650-8.1 3x Liebherr LTM 1090-4.2

Spierings SK 1265-AT6

2 x Nooteboom 7-axle trailer

GROVE GMK 6300L-1

Stage V Euro 6 engine for Sennebogen

Jack-up system

E-mover

Site Vosholen

# Extreme precision and sophisticated logistics

## for Hywind Tampen

About 140 kilometers off the Norwegian Coast, a unique floating wind farm is being constructed: the Hywind Tampen Floating Offshore Windfarm Project. 11 floating wind turbines, together generating 88 mw of power, will power the 5 offshore oil platforms at Snorre and Gullfaks.

#### **Bolt holes**

A unique project in many ways, which also involves Dutch input. Breman Machinery is performing specialized machining on the bottom sections of the masts of the wind turbines. These so-called bottom sections will be leveled and provided with bolt holes. This is necessary to attach the bottom sections to the floating foundation.

#### **Giant sections**

Especially for this purpose, the bottom sections of all 11 turbines were transported from the production site in Bilbao via Rotterdam to Breman Machinery in Genemuiden (NL). With a height of 10 meters, diameter of 8.40 meters and a weight of 180 tons each, this is no small feat!

#### **Extremely precise**

Leveling the bottom and drilling these bolt holes is therefore a precision job of the highest order. And it has to be extremely precise: down to +/- two tenths of a millimeter! That is exactly why you need to be at Breman Machinery in Genemuiden.

The experts at Breman Machinery have the right expertise, experience and special machines to level and make bolt holes with extreme precision in giant parts like these bottom sections.





#### Back....

Wagenborg Nedlift's team came in to execute the transport and lifting activities on site in Genemuiden. This involved unloading the bottom sections from the barge using mobile cranes and transporting them to the construction hall.

For unloading the giant sections, the lifting specialists deployed, among others, the new Liebherr 700-tonnes capacity crane, the LTM 1650-8.1.

Transport was carried out using Scheuerle intercombi modular axle lines.

#### ... and forth

After processing, the bottom sections returned to Bilbao via the same route. This logistical operation was carried out several times in order to process all eleven bottom sections in Genemuiden.

#### Offshore

Meanwhile, the installation of the offshore floating wind turbines is in full swing and a number of wind turbines are already operational. The complete Hywind Tampen wind farm is expected to be commissioned during 2023.









#### **6.1 Customer satisfaction**

We would like to know if our customers are satisfied with our services. It is important to keep a finger on the pulse of whether our work is in line with the wishes and expectations of the customer. We also want to know what our potential improvement points are.

Therefore, in 2022, we sent a digital customer satisfaction survey to our top 100 customers. The results of this survey lead to a well-founded picture of customer satisfaction. We register compliments and any complaints and follow them up if necessary.

#### **6.2** Times magazine

Do you want to be informed and stay up-to-date on news and backgrounds about Wagenborg activities and projects? Our company magazine Times is published once a year (in both English and Dutch) and is packed with compelling interviews, reports, and interesting facts. The latest innovations and developments are highlighted. It is truly an interesting magazine for customers, relations, and employees.

Times is not only about Wagenborg projects and developments in the world but also about our customers and collaboration projects. We are happy to offer our customers a platform in our magazine

To receive our company magazine 'Times' periodically, you can email nedlift.communicatie@wagenborg.com.



#### **6.3 Military Boekelo**

The perfect mix of 'Top sports, Business & Pleasure' and above all a unique experience: that is Military Boekelo - Enschede.

Top riders from all over the world come to East Netherlands with their horses to participate in one of the world's best Military competitions. What started as an equestrian event has now also grown into one of the largest business-to-business events in the Netherlands.

In 2022, we were able to welcome our relations, in great weather conditions, in our hospitality area, near the first obstacles after the start of the cross-country. While enjoying a snack and a drink, we and our relations enjoyed this beautiful sports event together.



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For years now, Wagenborg Nedlift has been working to build lasting relationships with its customers and partners both at home and abroad. Time after time, this has enabled Wagenborg Nedlift to offer unique, highly-skilled and safe solutions in the field of heavy transport, lifting, engineering and supplementary services.

A strong focus on safe work practices, wellthought-out engineering, efficient project management and the use of modern and sustainable materials forms the pillars upon which the company is built. Wagenborg Nedlift is a division of Royal Wagenborg.

Royal Wagenborg offers a wide range of maritime solutions in the field of shipping, offshore services, towage, maritime management, warehousing, transhipment and heavy transport and lifting. The family-owned company, which is over a hundred years old now, has more than 3,000 employees.



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