Management Review 2023

IN THIS EDITION:

WAGENBORG NEDLIFT

Content

About this Management Review
This is the anual Management Review from Wagenborg Nedlift B.V.. This review covers activities and events which took place in 2023. Our aim is to communicate the information as accurately, punctually, clearly and reliably as possible.

Foreword by the management board

Dear reader,

2023 was a very good year for Wagenborg Nedlift. We're growing, both quantitatively and qualitatively. From the first month to the last, we have successfully completed many technically challenging orders for our customers. The volume and complexity of the work meant that our team regularly had to make extra efforts. But, both inside and outside, Nedlift staff are joining forces. Working together and moving mountains in a good mutual atmosphere are characteristic of our people. Our customers express their appreciation for this and we receive many compliments about it.

In 2023, the focus was also on the next step in professionalising our organisation. We have paid a lot of attention to recruitment, training and promotion of employees. We have made good progress with this. IT now uses a new Business Intelligence tool that gives us in-depth insights into results. In addition, the audits were again passed successfully; a result we are proud of.

In the fields of innovation and sustainability, we have made a great leap forward in realising our sustainability ambition. Our journey in the search for a future-proof (sustainable) mobile telescopic crane in the lower class up to 60 tonnes started in 2019. It was a search with a surprising outcome. In the article on page 35 we tell the full story. In addition, our fleet was extended with various cranes, trucks and project equipment, enabling us to continue to meet the growing market demand for sustainable equipment.

Although there were many highlights in 2023, in this foreword we would also like to take a moment to reflect on the death of our colleague Jan Holland. After battling his illness for years, he lost that battle in June. We miss him at work and for the person he was.

We conclude with a sincere thank you to all our colleagues for the drive and commitment they have shown this year. And of course we would like to thank our clients for their trust and challenging jobs!

Enjoy the read!

Gerard Bastiaansen
Managing Director

Jos Megens
Finance Director

CHAPTER 1

2023 in a nutshell

January:
Transport innovative CO2 capture installation

February:
Five brand new MAN trucks

March:
Sustainability session for customers

April:
Lifting the Euvelgunner bridge

May:
Transformers in transport

June:
Transport section EasyMax

July:
Transport LNG tanks Geleen

August:
Expansion of Liebherr fleet

September:
Ecovadis sustainability

October:
Relocation of 125 metre-long German bridge

November:
Smart lifting solution in Salzbergen

December:
Load testing services

ARTICLE

Teamwork at ‘Violette Brücke’ in Duisburg

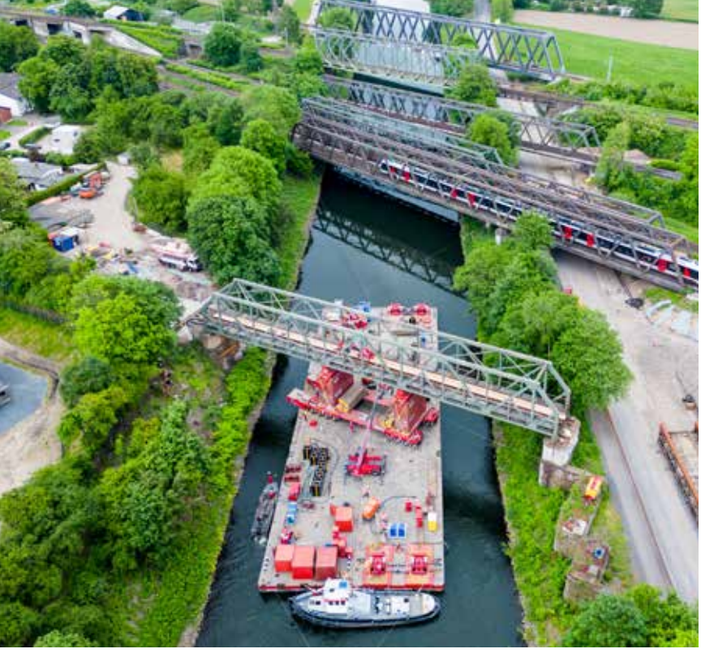
Numerous bridges connect the banks in the Ruhr basin. This is also the case in Duisburg, where four adjacent railway bridges over the Ruhr Canal have been given colour names to tell them apart. After the ‘Gelbe Brücke’ (yellow bridge) was replaced a few years ago, it was now the turn of the ‘Violette Brücke’ (purple bridge), a truss railway bridge from 1918.

Ancient bridge

‘Moving a 106-year-old bridge has its challenges’, says Arjan Bossers, a project manager at Wagenborg Nedlift. ‘The bridge was at the end of its lifespan. This means that the structure may no longer be equally reliable in all places. It was therefore important to use the correct working method to safely remove the central part of the bridge.To that end, we built two large container support structures on our SPMT trailers. The supported SPMTs were positioned on a coupled pontoon from our colleagues, Wagenborg Towage. This enabled us to navigate under the middle section of the bridge. Before the removal operation, our hoisting team lifted the abutment bridges using the 500-tonne and 700-tonne mobile cranes.’

Exciting moment

Then came an exciting moment: releasing the bridge from its abutments. ‘Fortunately, the dismantling specialists had already made the necessary preparations for this’, says colleague Alwin Schuitema, supervisor and operations manager for this project. ‘Using the trailer hydraulics and a ballast operation with the pontoon, we lifted the bridge off the abutments without any problems and then rotated it 90 degrees. We then used the JS250 box jacking system to lower the bridge 10 metres so it was positioned on the pontoon at working height. The demolition contractor then dismantled it.’



Own sliding system

The new railway bridge, a colossus with a length of 110 metres and a weight of 900 tonnes, was ready and waiting on the construction site next to the railway. ‘After the old bridge was dismantled and removed, we set up the pontoon for the new bridge to be moved in. A completely different method to the dismantling process’, says Alwin.

‘First, we reassembled the JS250 box jacking system on the pontoon’, adds Jordy Batema, assembly worker. ‘This handy and ergonomic system is very strong and a solution for this bridge, which we jacked up to a height of 10 metres.’ Warre te Riet Scholten, project engineer: ‘says new sliding system was installed on top of the box jacking system. We developed this sliding system in-house with our own team of engineers to allow bridges like this to be inserted efficiently and safely.’

‘The new sliding system is an excellent addition to our other bridge installation techniques. It’s an excellent solution for this project!’

Warre te Riet Scholten, engineer

‘Together they put their shoulders to the wheel and ensured this challenging job went smoothly. An achievement I’m proud of!’

Arjan Bossers, project manager

Meanwhile, hard work was also carried out on the land side. Henrie van den Berg, transport supervisor: ‘The SPMTs were deployed on the land side to manoeuvre the bridge. The Modular Support System was set up on top of the SPMTs. And on top of that, our sliding system, or ‘Verschubwippe’ as they call it in German, was installed.’

Handover

‘We spent several days working on the installation of the new bridge. Arjan explains this was done in several phases. ‘The bridge had to be ‘handed over’ a couple of times. The Wagenborg sliding system in combination with a set of strand jacks proved indispensable: this allowed the bridge to be moved over the canal. Finally, we placed the bridge on the abutments and our work was done.’

The Wagenborg approach

‘For a multifaceted and complex job like this, we involve the entire team in the project at an early stage’, says Arjan. ‘Alwin and Warre participated in meetings with the client and made project site visits. And Henrie gave his vision on the developed transport solution. We include the experiences and input of our people on the job in the preparation phase, so the team is already attuned to each other before the work starts. This really pays off during the execution phase. And once a project is completed, we always conduct an internal project evaluation. The points for improvement that emerge from this, are included for future projects. That’s how we grow both as a team and a business.’

Great teamwork

Arjan: ‘How I look back on this project? This was another great example of teamwork by our professionals. The conditions certainly weren’t easy with the extremely warm and sunny weather of recent weeks.’

CHAPTER 2

A safe and clean world for everyone

Wagenborg Nedlift's safety objective is: no accidents. Every accident is one too many.

The year 2023 was not entirely incident-free. The number of incidents, as shown in the table below, fell to 4 in 2023, compared to 6 in 2022. In 2023, the number of RWCs (Restricted Work Cases) fell from 2 to 0, but the number of MTCs (Medical Treatment Cases) rose from 2 to 3. At 1 LTI, LTIs (Lost Time Injuries) are back at the same level as in 2021.

Elsewhere in this chapter we explain how we aim to achieve our safety objective. The fact that we are actively involving our employees in this is very important, and this is shown in paragraphs 2.1 Safety campaign and 2.4 The MoreApp.

If you have any questions about our incident reporting and other HSEQ-related matters, please contact our HSEQ department on nedlift.hseq@wagenborg.com.

Incident reporting

Description of key figure	2020	2021	2022	2023
Number of Fatalities	0	0	0	0
Lost Time Injuries (LTI)	2	1	2	1
Restricted Work Cases (RWC)	4	4	2	0
Medical Treatment Cases (MTC)	0	1	2	3
Total Recordable Cases (TRC)	6	6	6	4

2.1 Safety campaign

In 2023 we started developing the new safety campaign. The theme of the campaign is: 'Safety first. Hit the pause button!'. The aim of the campaign is to increase safety awareness, reduce accidents and, above all, to achieve proactive safety behaviour: when you're at work, don't be afraid to press the pause button if you think it's necessary.

The campaign has not yet officially started in 2023, but its prior announcement has already led to a positive response. Under the heading 'pause button', Nedlift employees pressed the fictitious button several times. This led to a brief interruption of work, allowing for deviations to be assessed. This meant we intervened in time before an incident occurred.

We will roll out the new campaign in 2024. We use the following communication media: our internal newsletter, videos, narrowcasting, posters, roll-up banners and toolbox meetings.

In 2023 we again organised various Safety Snack Events. We discussed several educational incidents in class for each division. These meetings are intended to create awareness about situations that are apparently safe, but which have unexpectedly led to an incident. It is an accessible way to talk about safety.

Because we paid extra attention to the improvement proposals, there were more submissions compared to 2022. Thinking about safety is appreciated and rewarded. If possible, we will implement a good improvement proposal and the submitter will receive a gift. At the end of the year, the management board and works council selected the two best improvement proposals. The submitters of these proposals received a gift.

Overview of number of improvement proposals:

2019	9
2020	21
2021	70
2022	43
2023	55

2.2 Audits and certifications

At the beginning of March, an audit took place for the certification of:

ISO 9001:2015 (Quality management)
ISO 14001:2015 (Environmental management)
ISO 45001:2018 (Occupational health and safety management)
VCA-P 2017/6.0 (SCC Checklist Petrochemicals)

Attentive auditors noted 2 points of attention during the audits. Fortunately, we were able to quickly correct these points.

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

Just like last year, it emerged that employees have a great sense of commitment towards the company. The attention for the person behind the employee is also positive. At Nedlift, for example, we have 'a good conversation' instead of a performance review, and the lines of communication within the organisation are short.

We received tips with which we can improve our safety policy even more, so we can work towards certification for Step 4 of the Safety Culture Ladder in the coming years.

VVT Recognised

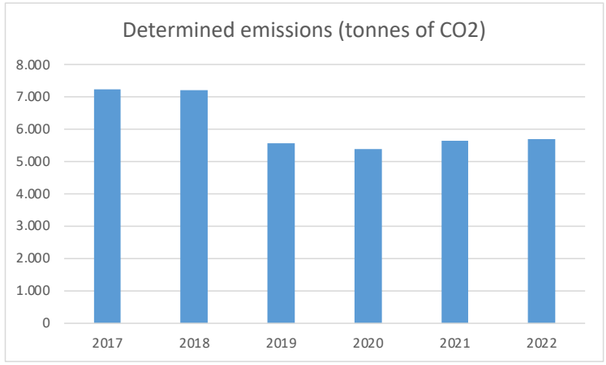
In 2023, Wagenborg Nedlift again received the VVT Recognition from the Vertical Transport Association.

Safety Culture Ladder

We continuously work to improve safety awareness and our safety culture. An interim audit of the SCL-3 (Safety Ladder step 3) was carried out in December. The auditors indicated that Wagenborg Nedlift falls comfortably within the margins for step 3.

2.3 Our footprint

Wagenborg Nedlift's CO2 footprint for 2023 will be tested by an independent institution in April 2024, in accordance with NEN-ISO-14064-1. Our new framework contracts include the option for CO2 compensation.



2.4 MoreApp

The MoreApp is largely integrated into our systems and is now part of our daily business. Toolboxes, workplace inspections, improvement proposals and incident reports are submitted via the MoreApp.

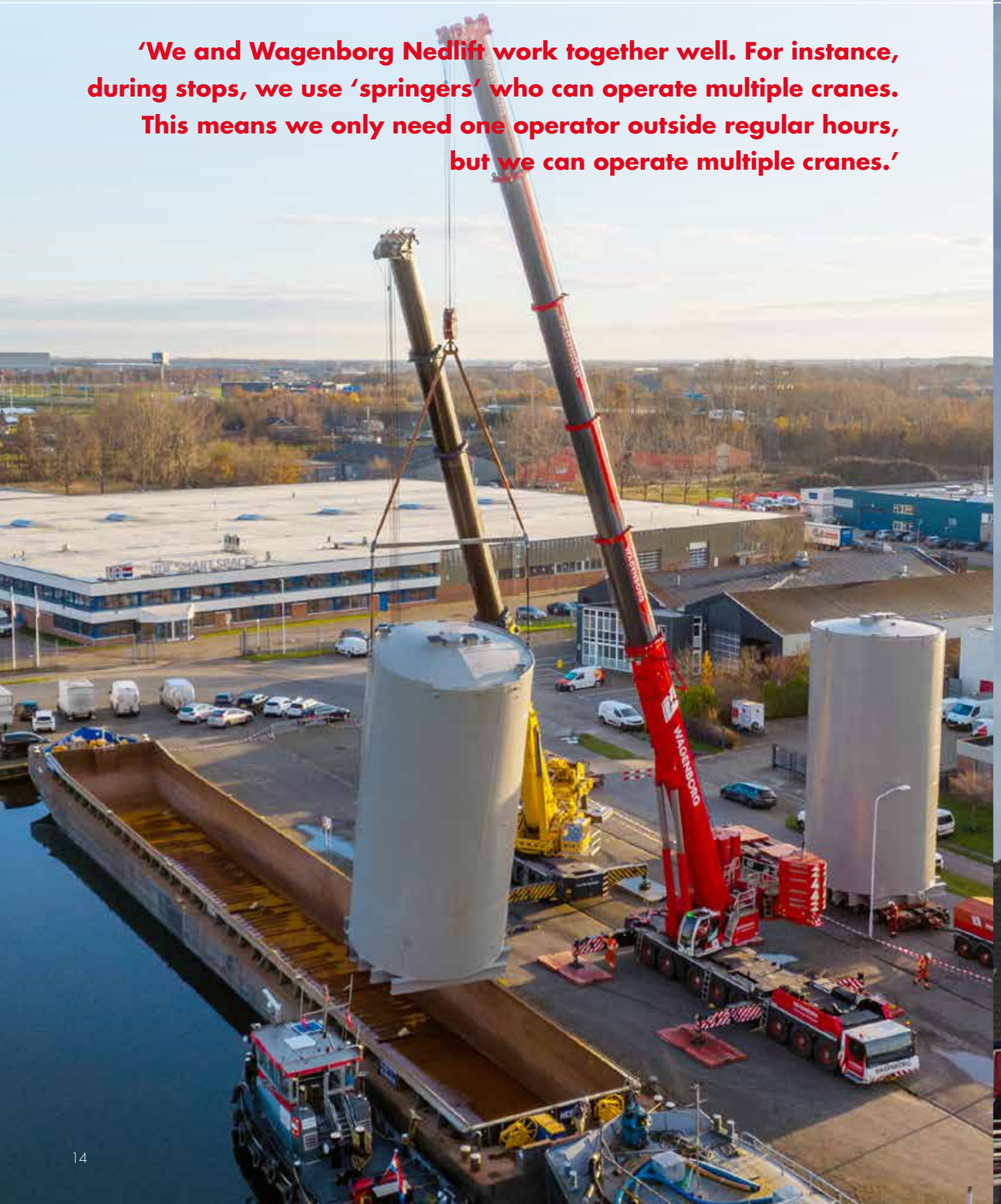
2.5 EcoVadis

In the EcoVadis sustainability assessment, Wagenborg Nedlift scored 54 points higher than last year. This places Wagenborg Nedlift among the best 35% of all assessed companies and among the top in its industry, and we're proud of that!

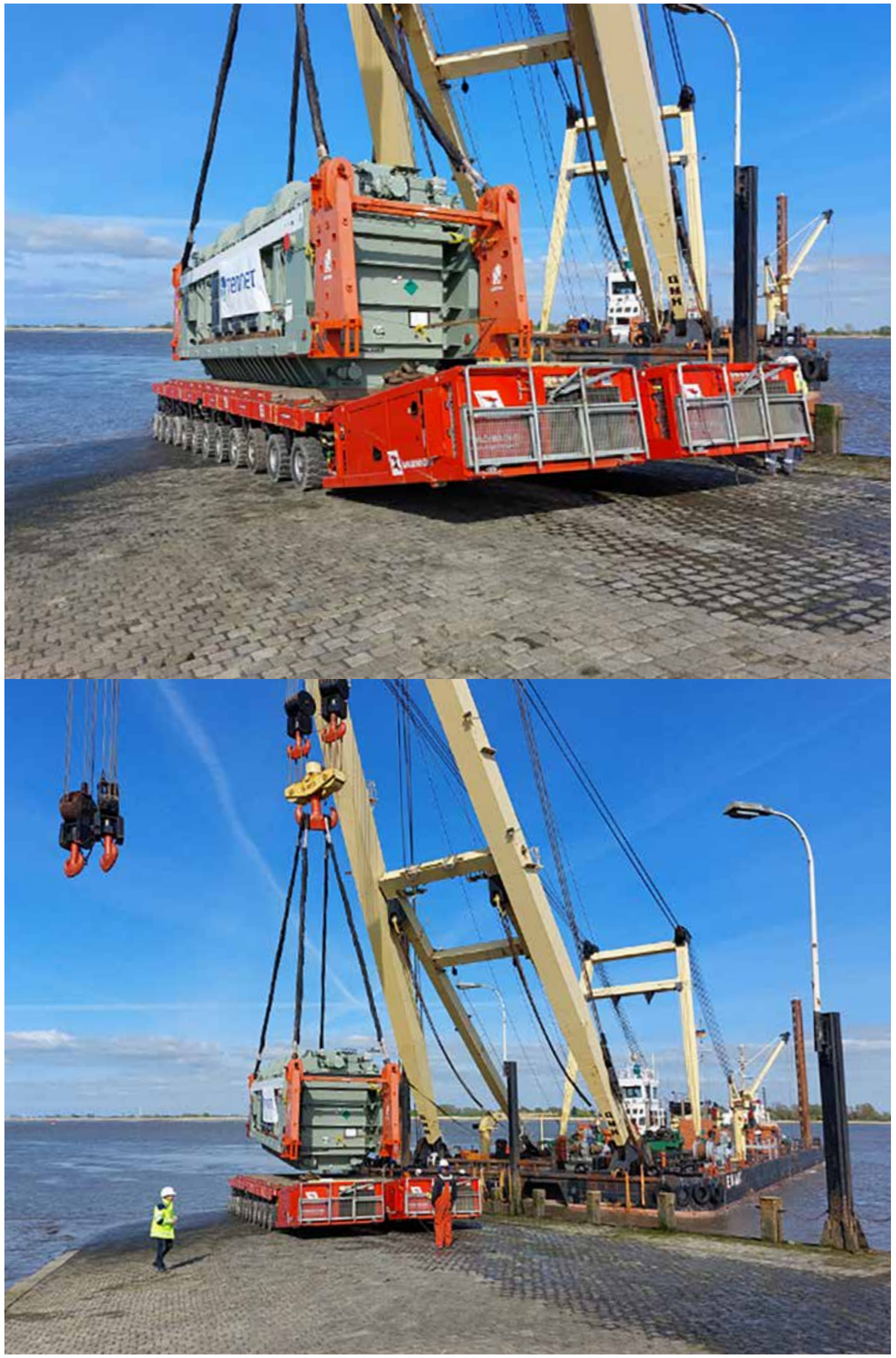
The EcoVadis sustainability assessment evaluates the extent to which the principles of Corporate Social Responsibility are integrated into the business and management systems. The EcoVadis Sustainability Scorecard illustrates performance across 21 indicators in four themes: environment, labour and human rights, ethics and sustainable purchasing.

More information about EcoVadis can be found at www.ecovadis.com.

‘We and Wagenborg Nedlift work together well. For instance, during stops, we use ‘springers’ who can operate multiple cranes. This means we only need one operator outside regular hours, but we can operate multiple cranes.’



‘We were all impressed with the Wagenborg team, how professionally they did the job. Many compliments for how they went about it. It’s clear that safety was top priority during the job.’



ARTICLE

Transformers in transport

Germany, just like the Netherlands, is working on expanding the electricity network. This is a result of the increasing demand for electricity in combination with a growing supply of sustainably generated energy from (offshore) wind and sun. These expansion projects sometimes require heavy transformers.

Slope of 9%

In Northern Germany, the team had to transport a transformer weighing no less than 395 tonnes to its final destination. With the help of the 'Enak', a large floating sheerleg, this colossus was loaded onto SPMTs at the ferry pier in Kleinensiel. The transport combination then had to negotiate a slope of no less than 9% to get to the top of the dike. Certainly no easy feat for equipment and operator!

Once arrived on the main route to the high-voltage station, the giant transport continued its way unhindered. At the destination, the 500-tonne lifting portal was ready to unload the transformer and place it on the foundation. Mission accomplished!

Multimodal

More than 100 kilometres away, two large mobile cranes were used to unload a series of six transformers - weighing 320 tonnes each - from the inland vessel. Each transformer was loaded onto a 14-axle conventional trailer via a tandem lift operation by the 700-tonne and 800-tonne Liebherr powerhouses. The trailer temporarily 'parked' the transformer a little further away.

These transformers will be taken to their final destination by train. This is done using a special two-part heavy transport train set, with the transformer suspended in-between. The Wagenborg Nedlift team prepares each transformer on the track with a jacking action. In the coming weeks, the special rail vehicle will take the transformers to their destination one by one. Multimodal transport at its best!

CHAPTER 3

Our people: a large & driven team

The year 2023 was all about recognising, appreciating and utilising the talents of our employees. We have again invested heavily in their development, both in following work-related training and training in the field of personal development. We believe that because we invest in people, we are able to maintain the quality of our services at a high level.

We believe that a good employer invests in employees, ensures good onboarding and takes into account the increasingly important balance between work and private life.

3.1 Investing in employees

We believe it is important to invest in our employees and we do this in various ways. In 2023, for instance, we strongly focused on optimising our onboarding process. Good onboarding is crucial. Not only does it help to give new employees a strong foundation for a successful start in their new role, but it also increases their commitment and satisfaction. A warm welcome has a positive influence on the organisation's performance and effectiveness. From the first impression to a structured induction programme; we have examined everything and adjusted if necessary. Further fine-tuning of the onboarding process is scheduled for 2024.

3.2 Training courses

This year, we have again invested heavily in the development of our employees. In addition to all professional and job-mandated training, we pay a lot of personal attention to the wishes and needs of individual employees. We believe these training courses are important to offer our employees career opportunities, but also to increase motivation and job satisfaction. The need for this is evident from the number of employees who applied for a personal subsidy from STL (Transport and Logistics Foundation). In 2023, STL made a personal subsidy of €3,000 per employee available for training. Some examples of training courses our employees have followed in 2023: coaching on the job, coaching for managers, insight into influence and training in the field of communication and technical skills.

Our internal teacher trained various groups of new employees for the positions of assembly worker or crane operator. It is important to continue to guarantee the quality of these courses. In 2023, a project group was actively involved in the (further) development of these training courses. The new training plan for crane operators ensures that the quality of our services remains at a high level.

In addition, in 2023 we started developing in-company training courses for a thorough knowledge transfer from our 'old' to our 'new' employees. These training courses are tailored to our field, which is so specialised that we can only develop them internally. This concerns, for instance, training to be able to work safely with our own equipment. Examples include jacking training, SPMT training or overhead crane training.

3.3 Absenteeism

The well-known flu months were back in 2023. Short-term absenteeism was significantly higher in the winter months than in the spring and summer. In particular, the intensity of the average flu was stronger compared to previous years, which meant it took longer for staff to recover. On average, an employee reported sick 0.7 times in 2023 (the same as in 2022).

The absenteeism rate has fallen from 5.5% to 4.7% compared to 2022. This is mainly due to a decrease in the number of long-term ill people in 2023. With staff welfare, individual coaching and personal attention, we continue to try to empower and retain employees. For now, but certainly also in the future!

3.4 Recruitment and selection

Today's tight labour market requires employers to distinguish themselves in the market. Employer branding, social media and events for the recruitment of new colleagues are also indispensable within Nedlift.

In 2023, we therefore paid a lot of attention to visibility on the labour market. We have shown our face in secondary and higher education. An ideal tool that we use is our Virtual Reality simulator. Students take a seat in the chair of a crane operator in our converted crane cabin and put on VR glasses. While they play a game, they experience what the job of a crane operator entails.

3.5 Investing in health & vitality

We believe it is important to invest in our employees and we do this in various ways. Each year, we offer employees the chance to participate in a 'preventive medical examination'. This examination maps the sustainable employability of employees. Not only physical health, lifestyle and work experience are discussed, but also topics such as aggression and violence, mobility and work ability.

Based on the examination results, our employees can make fully subsidised use of personal guidance in the fields of physical and mental condition, lifestyle or career. As an employer, we receive a 'group report' after the examinations, containing the average scores. Depending on the results, we may or may not take action on this.

We also offer our employees financial compensation for activities that promote (physical and mental) health and vitality. Examples include the membership costs of a sports club, programmes that help you quit smoking and personal coaching. The bicycle plan is part of our fringe benefits.

Fotograaf: Erik Veldhuizen

ARTICLE

Ring Road South Project: a gigantic project

Combinatie Herepoort is the building consortium that is carrying out the conversion of the ring road. Wagenborg Nedlift has been involved in the project since the start in 2018. Project leader Harry Oudman, work planner Rick Kleiverda, and supervisor Jan Dinkla talk about 5 years of the Ring Road South Project.

"When there is an emergency, I'm first on the scene. Drive down there, take a look at what's going on, solve the problem." Those words typify work planner Rick Kleiverda. "That's the beauty of working on the ring road. So close, literally just around the corner from the office. If I'm not sure or if I want to know something, I go and take a look and measure one more time. What is great about Wagenborg is that you have so much freedom to develop." And Rick should know. A few years ago he started work as a trainee operator, and later he became springer for small and large cranes. Something he loved to do, for the variety too.

Solution-driven

In 2021, Rick switched to work planning. As work planner he is responsible for the individual rental of cranes. He was inducted into the jobs that were carried out on the ring road. Most orders were centred on the below-grade location of the ring road and the Julianaplein. When he was still on a crane, Rick could be found there too on a regular basis. That proved to be an advantage, because the contacts had already been made. "You need to be sure of yourself in this job. Given my age, I really had to prove myself. By now I've built up enough credit and it's a good group of people to work with. When something needs to happen, we often get 'Why don't you call Rick'."

"No two days are the same in my work and that makes it interesting. It's a combination of technical insight, good maths, and dealing with people," is how Rick summarises his job. "Many of my orders come from Combinatie Herepoort. My best job is the temporary bridges of Retro Bridge over the Julianaplein."

Circular construction

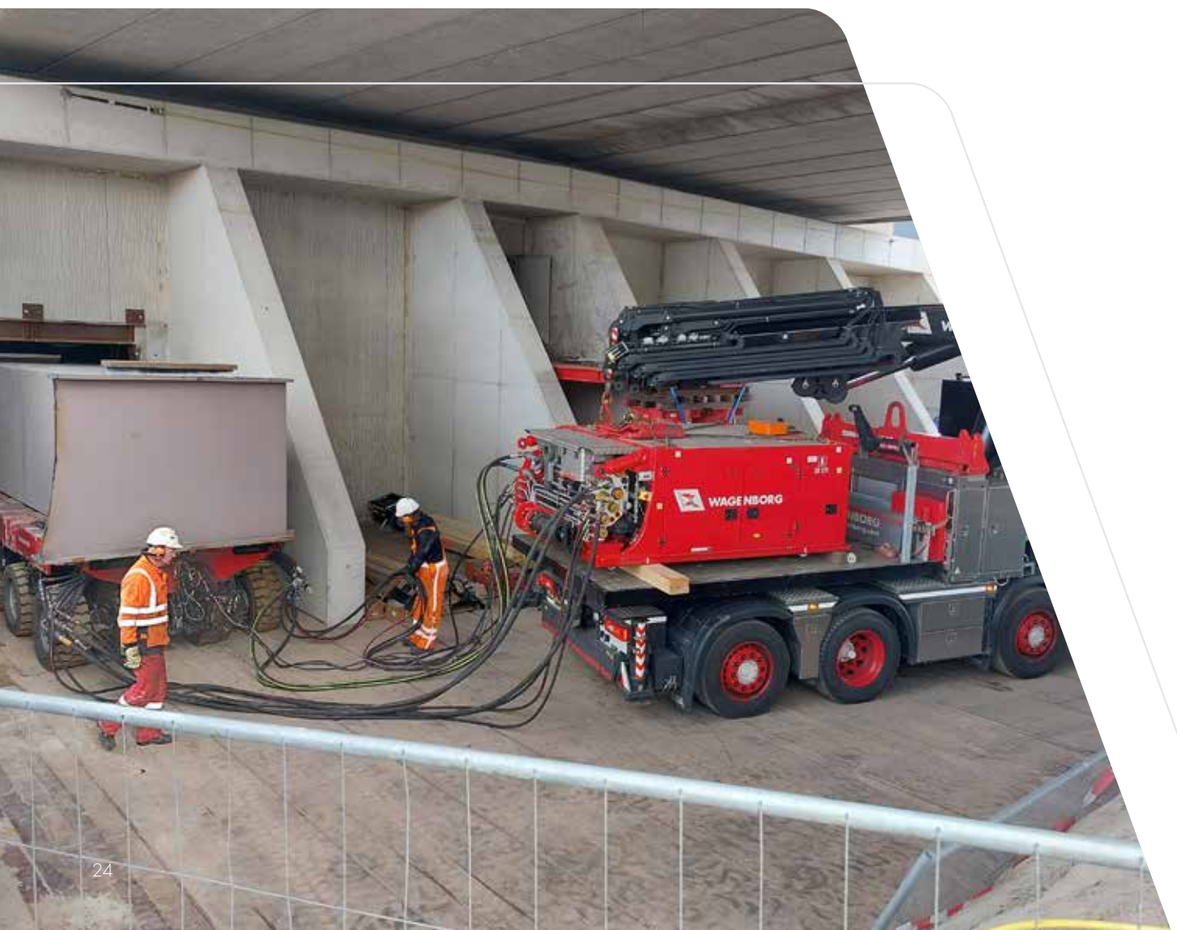
Rick looks back on some other orders: “Lifting out the concrete girders to replace the old viaduct and removing the abutments at Paterswoldseweg were nice jobs too. Not many people know that the concrete girders of the old ring road in Groningen have been recycled in a viaduct in Hoenderloo.”

Circular construction has high priority in the approach to the southern ring road. Many of the old construction materials, such as noise screens, guide rails or bridge components, are reused. Materials that are not reused one-on-one are recycled. In the most ideal scenario they are actually upcycled. That is a method where materials are incorporated into a new product, whereby the quality of the material stays the same or is improved. “And, you know what? Everything we have removed and replaced, Harry helped to build back in the day,” concludes Rick.

Completing the circle

Harry and the ring road are inextricably linked. His career at Wagenborg (Lommerts in those days) started more than 40 years ago. He started as a holiday worker and trainee and developed along with the company. During his placement he worked on the construction of the ring road in Groningen. It is rather special that 40 years on he is involved with the ring road again. As Business Unit Manager Projects he returned to the Ring Road South project in 2018. In the years in between, there were many projects he worked on. He lost his heart to assembly work. “I just love the cooperation. For my placement of the intermediate technical school in road engineering and hydraulics, I was with the contractor that built a part of the ring road. And Lommerts had been given the order to position the concrete girders. We worked from Europaweg to the bridge across the Eems canal.”

“In first instance we started at the southern ring road with the individual rental of cranes. Then we received more project-based enquiries. For example, the logistics for sheet piling for a below-grade location. From Haitsma Beton we received the order to lay all the prefab concrete girders. And that’s how we received the order to the replace the Euvelgunner bridge”, remembers Harry.



The match with the clients

“The guiding theme is that we support all the projects we accept from beginning to end. For example, we inserted a complete viaduct near the Gasunie building with our SPMTs. The cooperation with the clients, supervisors, and project leaders is what makes this work fun. You feel welcome at Combinatie Herepoort. They never go away empty-handed: we do everything for them. That’s the beauty of working together for many years. It doesn’t matter if you need to plug away in the rain all day, you are part of the construction team. That’s only possible when you’re right there with these people, you create a bond. It also clicks, because they get on with it at Combinatie Herepoort. They roll up their sleeves like we do. It can be quite a challenge to build in a city centre under time pressure. But the challenge makes it great,” says Harry.

In 2021, Harry will take a step back to the role of project leader. The young guard is taking over the baton. “The human factor and the sense of belonging is typical Wagenborg. I also really feel at home in sister companies like Wagenborg Stevedoring. We are a true family business. I have had all the opportunities and was given the opportunity to develop back in the day. I want others to be able to develop too. When I retire, there cannot be a gap. Sometimes you shadow, sometimes you leave them to it, and sometimes you need to steer a little. It is important to give freedom, because that means you can let go more and more. You see them all grow.”

Project Euvelgunner bridge

Jan Dinkla confirms Harry's story. He also works on the ring road. He made the move from supervisor to work planner and aims to develop to the role of project leader. Harry and Jan worked together on replacing the Euvelgunner bridge.

Jan is pleased with his learning from Harry. "The opportunities you get from Harry are really important for your development. He gives you free rein, but keeps an eye on everything. And he comes to the rescue before you get stuck. I learn lots from Harry in working with him because he's like a walking encyclopaedia. And the way he looks ahead, you really learn from that. Like his way of thinking. In the office that starts with proposals and work planning. He's always ahead of the game because that helps to prevent certain issues."

"The Euvelgunner bridge is a challenging project", says Jan. "It comes with about a year of preparations. We need to replace the bridge leaves, the driving mechanism, and the ballast chests. Replacing the heavy movement mechanism of the bridge was a jigsaw. The workspace in the two concrete basements was only a few tens of square metres in size, without room for cranes and other usual equipment. The old mechanism of the bridge is a collection of steel structures, gearboxes and counterweights that ensure the bridge leaves can be raised when ships have to pass underneath. Some parts are metres long and weigh tens of thousands of kilos, including the ballast chests, weighing 140 tonnes each. They're positioned in two concrete bascule basements near the bridge, one for each bridge leave."

Agreements produce good cooperation

Rick, Harry and Jan share the same view of the good cooperation with Combinatie Herepoort and the companies they work with on the ring road. As said: the cooperating parties have a lot in common. Safety perhaps the most important of all. "That is also the most important change compared to 40 years ago. In essence the work has remained the same. Major changes have only taken place in terms of safety, working conditions, and equipment. The work has become much safer and these days you need all manner of certificates to be able to do the work at all. Combinatie Herepoort prioritises safety and that is a good fit with our company policy", concludes Harry.

CHAPTER 4

Innovative & sustainable new equipment

Sustainability is of strategic and vital importance to Wagenborg. As a family business, we take our responsibility towards the society and environment in which we operate. We therefore strive to minimise the negative impact of our activities, including CO2 emissions. Not only at sea, but also on land.

We see it as our duty to society and to future generations, to contribute optimally to a liveable world. Investing in innovative and sustainable equipment is a logical step in achieving this. Our aim is to always meet the highest achievable sustainability standards of the moment. In doing so, we are significantly contributing to the increased sustainability of building and construction work in the Netherlands and further afield.

In recent years, we have invested heavily based on our multi-year sustainability strategy. All our new Liebherr cranes have clean Stage V engines that generate much lower emissions. The ECOmode and ECOdrive also bring down noise emissions and fuel consumption enormously. We also invested in electric mini-cranes and articulated telescopic cranes, among other things.

An update on the latest investments and developments is given below.

4.1 eCrafter

For our branch at the Industrial Park in Delfzijl, we were looking for a vehicle for the relatively short distances we cover at the park. The VW eCrafter we purchased is fully electric and therefore fits in seamlessly with our sustainability programme.

4.2 XCMG hybrid demo mobile telescopic crane

The market in which we operate increasingly requires sustainable machines. Years ago, we started looking for a mobile telescopic crane in the class up to 60 tonnes that could operate completely emission-free. Through our network, we came into contact with XCMG, a Chinese manufacturer. Together we developed the very first hybrid crane. In 2022, we tested this crane extensively for six months. We have completed this demo period to our complete satisfaction. Thanks to this successful collaboration, XCMG and Wagenborg Nedlift will take important steps in the field of sustainability. Our objective is to expand this type of crane, after the design and introduction phase, with cranes in the 80, 120 and 300-tonne classes. Depending on market needs and demand.

4.3 VOLVO FH with 92TM Palfinger

The articulated telescopic crane is fitted with an electro-hydraulic power pack that enables emission-free and virtually noiseless work.

4.4 Greening the fleet

Wagenborg Nedlift has been greening and rejuvenating its fleet for a number of years now. The sustainability strategy we have drawn up contains specific objectives that have been set until 2050. One of the objectives is to reduce CO2 emissions: within the Netherlands by 95% and within Europe by 50%. We have invested heavily in new equipment this year. Sustainability remains an important starting point. In 2023, we added 6 small pool vehicles to our fleet. Instead of rental cars that can be less economical and/or environmentally friendly, our employees now use these cars to visit locations.

4.5 Main investments

- Liebherr LTM1090
- 2 x Liebherr LTM1150
- SPMT Module 4-axle
- 5 x MAN 6x4 ballast tractor
- Articulated telescopic crane
- Purchase of car + trailer ground protection mats
- Trailer for 150-tonne crane
- Lifting portal
- Forklift truck
- VW eCrafter
- Jack, horseshoe jack, 150 tonnes, aluminium
- 2 forklift trucks
- 16-tonne forklift truck
- Faymonville 3-axle Multimax

‘This impressive example of teamwork is a milestone in the construction of our large-scale CO2 capture installation in both senses of the word. Craftsmanship and job satisfaction are characteristic of the way in which the work was carried out by the crew.’

It resulted in a Safety and Excellence award from the client.

ARTIKEL

First 60-tonne hybrid crane in the world added to the Nedlift fleet

The Wagenborg Nedlift fleet comprises 100 cranes of various European brands. This changed in 2023: the first hybrid telescopic crane in the class up to 60 tonnes was delivered from China to Wagenborg Nedlift. Was the choice of a crane from Chinese manufacturer XCMG completely unexpected? No, not if we consider the history of this process that played out behind the scenes for more than four years. Then you see that this advanced and future-proof crane is the result of highly successful cooperation between XCMG and Wagenborg Nedlift.

At the end of 2019, Jan-Ebe Boerema, at that time Head of the Technical Service of Wagenborg Nedlift, issued a tender in which he asked specifically for a solution for a future-proof, sustainable crane in the class up to 60 tonnes lifting capacity. Boerema looks back: "I only received conventional solutions that did not answer my question. More and more of our customers were asking for sustainable lifting solutions for their construction projects. But there weren't any. So, we took the lead. By complete coincidence I came into contact with a Chinese-Dutch lady who is a co-owner of a company in top-quality hydraulic components in Groningen. A company with a close link with XCMG. And that's how the ball started rolling."

Sports hall

Early 2020, Boerema was to fly to China for an introduction but Covid-19 spoiled the fun. The first contacts were by email. XCMG proved to be looking for a partner who could help them find their way in the West-European market. When Boerema shared his requirements, there was a meeting on Teams. Nedlift was represented by the Managing Director Gerard Bastiaansen, Sander Wolters (Senior Mechanic), and Brian Geerdink (Crane Operator). When the connection was made, they were looking at a sports hall with 50 Chinese XCMG employees who literally wrote down everything that was said.

European standards

"XCMG had already produced a small, fully hybrid, 25-tonne crane. I said that that was exactly the type of crane we were looking for, but as a 60-tonne version that complied with all the requirements for the European market", explains Bastiaansen. "In 2015, Nedlift built the first electric compact crane, but it was not a series production. We have learnt a lot from this, which enables us to explain in great detail what we expect from a machine.

'My idea was to integrate the batteries into the counterweight and XCMG started with that.'

Gerard Bastiaansen, Managing Director Wagenborg Nedlift

And that is a hybrid machine, produced as a series, CE certified, and TCVT tested. It is also important that we do not confine ourselves to running on just electricity. Our work sometimes takes place in the middle of nowhere and when the battery is empty, the operator still needs to continue. A larger crane with a larger lifting capacity naturally needs more batteries but there was no ready-made solution for that."

BAUMA 2022

The cultural differences appeared to produce a gap, and contact was at a low ebb. "Until we suddenly received a call just before Bauma 2022, a major equipment exhibition in Germany. That hybrid crane we had talked about was at the trade fair. With a diesel engine from Germany, and hydraulics from the north of the Netherlands", says Bastiaansen.

Trial period

During a trial period, the hybrid XCA60_EV was fully incorporated in the Nedlift fleet. Wolters: "During all those months, there was not a single fault or problem. A lot had to be improved, certainly, our requirements are high. But we were truly enthusiastic about the machine we had. We did a lot of testing during the new construction of Twence's CO2 installation in Hengelo, where technicians from XCMG and employees from the testing agency Aboma were also present."

"The main points for improvement were operator comfort and machine operation. Dutch operators perform various actions at the same time, which is highly unusual in China. So, the XCA60_EV was adjusted to the 'Dutch' way of working. Operations also changed in the workshop with the arrival of hybrid cranes. We are working with battery packs and high voltage, and attend courses to track the developments. Not to mention that working with high voltage means there is no margin for error. None whatsoever."

'When you work with this crane, you have total silence. The construction workers have also complimented me on the low-noise operation.'

Brian Geerdink, Crane Operator Wagenborg Nedlift

Version 2.0

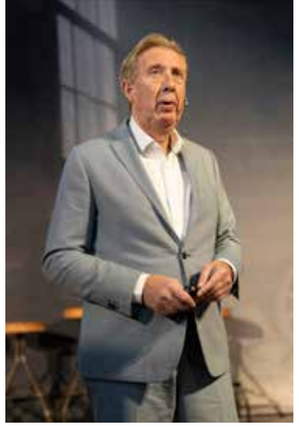
Whilst operator Brian Geerdink tested the machine comprehensively, all the findings were shared directly with China. At the end of the test period, XCMG already had a mark 2.0 ready and waiting. Geerdink is enthusiastic: "This really is a luxury crane that can be used anywhere at all. I can work on it all day in construction and pick up an extra job on the way back. That is a fundamental difference with conventional cranes that are converted into an electric variant. Because they cannot do that."

Top-class crane

Boerema is equally enthusiastic: "I consider myself to be pretty conservative when it comes to machine building, but I have been amazed by what this crane can do. Our starting point was that we would not convert ourselves or instruct anybody else to do so. We wanted a crane that can be built in series, so that we can respond quickly when the market demand for these cranes increases. And only XCMG could meet that requirement. The cranes comply with all the requirements of the West-European market. They have been EN13000 approved for the superstructure, the top part of the crane. And they are RDW approved for the lower part, the undercarriage."

'"Thanks to this collaboration with XCMG, we now have a top-class crane that meets all legislative requirements, as well as our own wishes.'

Jan-Ebe Boerema, Regional Manager Wagenborg Nedlift North



CHAPTER 5

Sustainable customer relationships

5.1 Customer satisfaction

We want to know whether our customers are satisfied with our services. It is important to keep our finger on the pulse to see whether our work is in line with the customer's wishes and expectations. We continuously register compliments and any complaints and follow them up if necessary. Every 2 years, a digital customer satisfaction survey was drawn up and sent to our top 100 customers. The latest survey dates from 2022. From 2024, we will conduct an annual survey and investigate how we can collect the most valuable information from our customers.

5.2 Times

Want to be and stay informed of news and background information about Wagenborg activities and projects? Our Times company magazine is published once a year (in both English and Dutch) and is packed with high-profile interviews, reports and interesting facts. The latest innovations and developments are highlighted. It truly is an interesting magazine for customers, clients and employees.

Times is not only about Wagenborg projects and developments in the world, but also about our customers and collaborative projects. We like to offer our customers a platform in our magazine.

To receive our 'Times' company magazine periodically, please email nedlift.communication@wagenborg.com.

5.3 Customer events

Session for customers

Sustainability: opportunity or crisis? That was the theme of our first session for customers in the Energy Barn in Groningen. During this session, we talked about how we can take (faster) steps on the journey to a green(er) future. Guest speakers Jan Rotmans and Theo Klimp took us through their well-defined, inspiring and, above all, motivating visions.

Military Boekelo

Each year, we offer our hospitality at the largest equestrian event in the Netherlands: the military in Boekelo. The weather conditions were great, the sport fantastic and our hospitality was very well attended by our customers.

ARTICLE

Exceptional transport of two bullet tanks

There are more pieces of the jigsaw. There are more choices. It's much more fun.

Wagenborg Nedlift is based at the Chemelot industrial park. They received a request to transport two enormous storage tanks that had to be transported right through Urmond to the industrial park for an infrastructure project. The colossal bullet tanks of 53 x 8 x 8.5 metres (lxwxh) weigh 460 tonnes apiece. Regional manager South, Pedro Gonzalez Serrano, engaged the assistance of colleague Arjan Bossers, project leader at Nedlift. A nice little challenge. Not just because of the combination of techniques and materiel, but also in view of Arjan's passion for transport, axle lines, and SPMTs. Rob Reefman, who works at the Engineering department of Wagenborg Nedlift, was closely involved with all the studies and plans in the preliminary process. During the weekend of 7 July, roads were closed, roundabouts cleared, signs moved, and curious bystanders were kept at a safe distance behind red-and-white tape for this transport.

Wagenborg engineers' advice determines format of bullet tanks

"Our studies had to determine the maximum sizes of the bullet tanks that still had to be manufactured. Put simply: longer and smaller or shorter and wider", says Rob Reefman, engineer at Wagenborg Nedlift. No bend, roundabout, tree, kerb, traffic light, or lamp post en route was missing when he went to work in AutoCAD. "By simulating bends and checking how much the materiel protrudes, we could calculate the maximum dimensions of the storage tanks. The manufacturer developed the bullet tanks on the basis of our information. With that information, we determined the correct transport configuration: a dolly combination of 2 x 20 axle lines SPMT."

In 2050, Chemelot Industrial Park in Geleen will be the leading 'circular chemical site' of Europe and will be completely climate-neutral. Over the past decades, the chemical park has been transformed to achieve that target. In 2050, semi-finished products and products will be produced at Chemelot for every-day household objects, such as innovative synthetic materials for cars, carpets, food, or wind turbines. The main difference is that it will be based on reusable raw materials and sustainable processes. Major innovations, efforts, and investments are the foundations. It also requires modifications of the infrastructure and the factories.

Prepare and coordinate

Arjan then started a period of meeting and coordinating with the authorities involved, including the Provincial Executive, Rijkswaterstaat, and the local authority. “Although the route was only 4 kilometres long, it went straight through a built-up area and the convoy had to cross the A2 motorway. To get on and off the slip roads of this busy motorway, it was essential to organise a brief closure of the road with the Provincial Executive of Limburg”, explains Arjan. Traffic furniture and lamp posts were removed on other parts of the route. The entire plan was focused on limiting (traffic) nuisance and to prevent damage to the public infrastructure. Traffic controllers guaranteed smooth progress, emergency services were informed, and the police kept an eye out.

Unloading from the vessel

For the first part of the route, from Genk to Urmond in Limburg, the tanks were transported by vessel. On arrival in Limburg, the Wagenborg project started with unloading the tanks. “First we had to see whether there were ports and quays we could use. A few years ago, everything was changed in the place where the vessel was to moor. That meant a RoRo operation (Roll-on-Roll-off) was no longer possible”, says Arjan. As a result, quite a chunk of land at the intended unloading site had to be dug out and reinforced with rubble. According to Rob’s (ground-pressure) calculations, it was now safe to position two large 600-tonne caterpillar cranes to unload the tanks and to put them on the SPMTs.

Right through the village

Around 8 in the evening, the transport of the first bullet through Urmond got under way. As expected, it was mighty busy en route. Whilst the operators manoeuvred the SPMTs through the village at walking pace, hundreds of residents were at the side of the road. Around midnight, the A2 was crossed. After a problem-free transport, the first bullet tank arrived at the Chemelot industrial park. The second tank would complete the same route a day later.

Ground-protection plates

A bullet tank of this size and weight cannot be taken on existing roads just like that. The risk of damage to the road surface has to be prevented. Nedlift’s ground protection mats department played an important role in this. On the basis of the engineers’ calculations it becomes clear where steel ground protection mats, isotrack plates, dragline mats or combinations of all 3 have to be placed. As soon as the transport had passed, the plates were collected. A day later, they were put down again, only to be removed again immediately after the transport of the second bullet tank.

An obstacle on the route

Before the bullet tanks could be laid in their sand bed in their final destination, they needed to pass one of many pipe bridges on site. “The height of this one pipe bridge meant it was not possible to drive the tanks on SPMTs under the bridge”, recounts Rob. “You want to get the bullet tanks in the sand bed as efficiently as possible. We used to go for a crane, but these days we have several options. In addition, hoisting over it was not an option either in this case, so we used guide rail and jacking techniques. This phase took up an enormous amount of time. The client provided us with information about the maximum soil pressure for our calculations. We also needed to include weather conditions, the slope, any emergency stops, the stability of the bullet tanks, and the quality of the road surface in our calculations. On the basis of these calculations, the top layer of the road surface was ground away and there was just enough room to get the bullets under the pipe bridge.”

Completely according to the Engineering department’s plan, the bullet tank was first jacked downwards, and then manoeuvred under the pipe bridge using a guide rail operation. Then it was jacked up again and loaded on the SPMT. To place the bullet tank on the sand bed, the SPMT wheels turned 90 degrees, after which it was positioned in exactly the correct position on the sand bed using a jacking operation in combination with rotating rollers.

There are more pieces of the jigsaw. It’s much more fun.

“This project was special because of the size of bullet tanks and the combination of all the different techniques. Add the conditions that had to be taken into account and the number of parties involved, and you have a sizeable project. It was special how everything came together to perfection. This really was one for the book”, concluded Arjan.

Photography: Peter van der Geest and ‘own’ photos.

WAGENBORG NEDLIFT

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