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'On our way to a brighter tomorrow' Batenburg Techniek can look back on a year of innovation, collaboration and growth. It was a year in which we once again took great strides in developing smart solutions for today's often complex energy and automation issues.

Energy management and simulations are increasingly important pillars in our services. Energy supply plays a significant role in almost all projects these days. Substantial investments will have to be made in converting the energy system if we are to be competitive and remain so while achieving the climate transition. Also, a tight labour market and high energy costs are accompanied by a growing need for efficiency. We can see that, as a result, the combination of automation and energy solutions are increasingly becoming an integral part of our customers' issues. This development confirms our course. We will therefore continue to expand and strengthen our positioning as the specialist for industrial automation and complex energy issues in the coming years. We look forward to continuing that development with our customers and partners.

Our results are the direct result of our staff's efforts, enthusiasm and adaptability. Their knowledge, expertise and commitment make the difference. We would therefore like to thank them very much for their valuable contribution.

We would also like to extend our thanks to our customers, collaboration partners, shareholders and supervisory directors. By working together, we are not only building the future of Batenburg Techniek; we are also achieving our ultimate goal: a healthy, safe and clean society.

With confidence and ambition, we are looking ahead to what is to come. Together, we will continue to work on innovative solutions, ones that contribute to a better future. *On our way to a brighter tomorrow*.

Ralph van den Broek, CEO





# **Batenburg Techniek Report**

Result EBITA* in € million			<b>Revenue*</b> in € million			
2024			2024			
€29.0 million			€337.2 million			
2023 – <b>€28.8 million</b>			2023 – <b>€323.2 million</b>			
Male/female ratio	Total number of employees in service			Number of years in service		
86% 14%	end of 2024			$\mathbf{k}$		
	1253					
	end of 2023 – <b>1281</b>			10.2	e years	
Impact projects expressed in re	venue in €		Our share of o	ositive impact	oroiects	
million			in %		projects	
2024	+ 2.4% 20		2024	2030	2050	
€247 million			71%	75%	100%	
2023 – <b>€242 million</b>			2023 – <b>68%</b>			
* Numbers in € millions – Continuing and normalised operations						

Batenburg Techniek is a technology company with impact. Together with our customers, we are working towards a future in which technology goes hand in hand with healthy, safe and clean growth. We research, design, advise on and engineer solutions for (complex) industrial automation and energy issues. Our projects include creating software-based solutions as well as supplying hardware and installation, maintenance and service work.

We have five divisions, which work based on two themes:

#### **Batenburg Energy Solutions**

We help customers use energy more efficiently and to manage it smartly. We do this with our expertise in energy solutions, ranging from energy management systems to innovative renewable energy technology.

#### Batenburg Energy Technology

We have been specializing in energy technology solutions for more than a century, From power generation and storage to local grid connections. We supply and develop components and systems used in the electricity distribution grid and in the power generation, E-mobility and E-infrastructure markets.

#### Batenburg Installation Technology

We design and install ready-to-use energy solutions, ranging from the sustainability of real estate to the electrification of heavy transport, and we do so at our customers' premises. We combine proven technologies with new developments: from battery storage and hydrogen to dynamic load and power management systems.

#### **Batenburg Industrial Automation**

We help our customers to optimise and electrify their industrial processes, from design to creation and maintenance, based on our knowledge of process automation. In sectors such as industry, water and infrastructure, marine and offshore, we make processes more efficient, safer and cleaner. Among other things, we create customised solutions for data intelligence, give advice on cybersecurity in operating technology and develop software for robotics and vision technology.

#### **Batenburg Horticulture**

By combining data intelligence with cutting-edge automation, we help growers worldwide using our integrated solutions for sustainable food production. This is how we improve opportunities to grow vegetables worldwide, even in the most challenging places.

#### **Batenburg Industrial Components**

With a focus on designing and developing smart devices and solutions, Batenburg Industrial Components helps customers in the manufacturing industry. We bring engineering, product development and logistics support together, and by doing so we are driving innovation.



#### Technology company

We put our knowledge and technology to work for a clean, safe and healthy future for the generations to come. Batenburg Techniek has been around for more than 100 years. We will invest in our staff and the continuity of the company for the next 100 years.

#### We keep an eye on two global trends

• The energy and materials transition

The transition from fossil to renewable energy requires rebuilding the global energy system (i.e. electrification) while encouraging energy conservation. Reducing the consumption of fossil-based materials also affects the use of material in industry.

• Automation

This concerns automation in industry, infrastructure and the energy system. It involves improving labour productivity using automation and robotisation. Making the best use of data intelligence means that processes are increasingly being driven by data and algorithms.

#### Organisation

In the wake of the growing demand for consultancy and solutions to complex energy issues, we have set up another unit: Batenburg Energy Solutions. This unit is where Batenburg Energy Technology and Batenburg Installation Technology operations are carried out.



#### Positive impact projects

We achieve the greatest impact with the projects we create at our customers' premises. We do this by building charging plazas, installing renewable energy sources, storage and monitoring solutions and developing automation solutions that contribute to more efficient, safer and more sustainable processes in industry, water and infrastructure. We classify our projects according to the United Nations Sustainable Development Goals. If a project contributes positively to one or more of these SDGs, we classify its turnover as a project with a positive (sustainable) impact. The ratio of turnover from these projects to the total revenue gives the positive impact score.

In 2019, 46% of our projects had a positive impact. In 2023, that share rose to 68% and continued rising to 71% over 2024. The aim is for at least 75% of our projects to have a positive impact by 2030.

Going forward, we will base our vision on three spearheads within Batenburg Techniek's strategy and positioning:

# Further developing in-depth knowledge, engineering and innovation

- Joining customers at the table earlier and for longer;
- Leading the way in technology and technological developments.

# Increasing the positive impact of products and services.

- 'On our way to a Brighter Tomorrow'.
- Facilitating the energy transition through electrification and automation.
- Expanding energy infrastructure and making real estate more sustainable.

#### Next Generation

- Our staff carry the company. With an ageing population and labour shortages, it is even more important to take good care of them, train them and give them room to develop.
- We work together with colleges, universities and knowledge institutes to form ties with smart young people and to boost innovative developments.

#### Long-term value creation

Batenburg Techniek's strategy focuses on long-term value creation. The goal is to cement our position as a sustainable, profitable company at the heart of the smart industry That way, we can help our customers to create business operations that are suited to a sustainable economy.

# Developing our internal business operations

- We apply new technology in-house, and know how it works in practice;
- Attracting, developing and encouraging the next generation of talent.

### Industrial automation

#### Industrial cybersecurity

We provide customers with cybersecurity services for their operational technology (OT). We rely on our expertise in industrial automation and standards, such as IEC 62443, to identify security risks and implement mitigating measures. We also support customers by responding quickly and effectively to security incidents, with solutions such as network monitoring.

#### Software implementation

We design and implement DCS, PLC, SCADA and MES/MOMs systems in industry and infrastructure. For example, we take care of the automation and computerisation of processes and machines.

#### Intelligent algorithms

We help customers to gain greater insight into the operation of their processes by using data. by storing production data efficiently and securely with historian systems. We create insights into predictive maintenance using advanced data analytics, for example.

#### **Robotics and vision**

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We incorporate robotics and vision in customers' processes and machines. We use AI to interpret images from vision systems, and automatically translate these insights into actions.

#### Simulation and digital twins

We apply simulation solutions for various purposes. We work with virtual simulation of processes to further specify design requirements or test designs together with the engineers. In addition, we realise simulators to train operators safely and efficiently.

#### Modular data platform

We have created a modular data platform that collects accurate process and measurement data, presents it and then controls processes. This makes it possible for customers to use smarter methods to produce their products and optimise the production process.

# **Energy solutions**



#### Energy storage and power management

We provide energy storage in the form of battery, heat, and hydrogen systems. With energy management systems, we create insight into sustainable generation and optimise energy consumption. This ensures more can be generated and consumed locally even with limited network capacity.



#### **Energy distribution**

We design and realise LV and HV power supplies for power grids, manufacturing, and non-residential buildings. We use smart solutions here to optimize the generation and consumption of electricity.



#### Renewable energy

We ensure that renewable energy, for example from solar farms, can be fed into the grid. We design and install the connections, from inverters to mobile solutions, and the connection to the local electricity grid. In addition, we arrange solutions for connections, cable fixtures, and the certification of installers and installation.



#### Making real estate and industry more sustainable

We assist customers with the sustainabilization of their real estate and industrial processes. We identify improvements through energy monitoring, then put them into practice by installing sustainable systems and applying smart automation.



#### Electric vehicle charging infrastructure

We engineer, install and maintain EV charging infrastructure. For this, we specialise in DC charging infrastructure, which is used to rapidly charge high-capacity lorries and buses.

#### **Energy simulation**



We use a digital twin to fully simulate the energy infrastructure at companies. We then accurately simulate the impact of energy alternatives for a production process or premises, and gain insights on all the options.

### Smarter focus. Brighter tomorrow.



#### **Reflection 2024**

In 2024, we have further reduced carbon emissions from our premises and vehicle fleet. We are seeing clear results from the actions initiated in previous years, which aim to make our buildings more sustainable. The impact of the tightened mobility policy introduced in 2023, which stipulates that all new leased passenger vehicles must be electric or, by exception, hybrid, is also clear. This is in line with our commitment to the Science-Based Target initiative (SBTi), and the European Union's 'Fit for 55' plan to reduce greenhouse gas emissions by 55% by 2030.

In particular, making our premises more sustainable has resulted in a significant reduction in our gas consumption, which in turn has reduced carbon emissions. The table below shows our carbon emissions per FTE. These results are normalised for Batenburg Industrial Electronics' sales.



\* Normalised for Batenburg Industrial Electronics' sales.

Batenburg Techniek has set approved carbon emission reduction targets based on the Science-Based Targets initiative.

- These targets are:
- Absolute emissions reduction in Scope 1 by 55% from 2019 as the base year.
- Annual procurement of renewable electricity from 0% (2019) to 100% (2030).
- Absolute emissions reduction in Scope 3 by 25% from 2022 as the base year.

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Batenburg Techniek is committed to the principles of the United Nations Global Compact. Batenburg Techniek is keen to play a role in the transition to a climate-neutral society. We believe technology can make an important contribution to the challenges associated with this transition.

Our sustainability vision on the road to 2030 reads as follows: 'By improving existing technologies, facilitating new technologies, and pursuing sustainable business operations, we create a positive impact together with our clients, cementing the foundation for a sustainable future.'

We are doing this by:

#### **1. Improving existing technologies**

Using new technology to achieve improvements to existing processes, infrastructure and buildings. As an early adopter of the latest technology, our focus lies in facilitating improvements in an accessible manner.

#### 2. Enabling new technologies

Technology is constantly evolving. Our ambition is to facilitate technology and consequently make a valuable contribution to the advancement of industry and energy infrastructure.

#### 3. Getting our own house in order

We are also helping build a sustainable future in our own business operations. We limit our emissions, and reinforce our positive impact. We lead by example, take responsibility and are therefore familiar with what happens in practice. This goes beyond environmental aspects; it applies equally to social and community themes. Our sustainability strategy focuses on four themes, each with their underlying priorities:

#### 1. Climate change

Together with our customers and suppliers, our focus is on sustainable solutions and innovation. In addition to our approved carbon emission reduction targets (according to the Science-Based Targets initiative), we aim to ensure that at least 75% of our projects are positive impact projects by 2030 as classified according to selected SDGs from the UN Global Compact initiative. We also promote permanent nature restoration and encourage biodiversity through the Batenburg Forest, in collaboration with the Society for the Preservation of Nature in the Netherlands (Vereniging Natuurmonumenten).

#### 2. Circular economy

By being aware of how we handle raw materials, products and waste, our aim is to minimise waste in the coming years and, by doing so, reduce our footprint in the value chain. Supply chain collaboration is essential to achieving these goals.

#### 3. Own staff

Our employees make the difference. We invest in the long-term employability of our personnel, so that they can go to work safely, healthily and with pleasure, both now and in the future. We implement this in practice using our Batenburg concepts. These concepts are: B | Smart, B | Safe, B | Fit, B | Happy and, from 2025, B | Welcome.

#### 4. Social impact

By sharing knowledge and pursuing socially responsible (external) policies, we are contributing to a just transition to a climate-neutral society. We do this by cooperating with educational institutions and by increasing awareness when purchasing goods and services while at the same time paying attention to the impact our actions have on the natural and living environment.



Profitable and sustainable growth depends, above all, on talented people. We work hard on the essential task of finding, retaining and training talent and continually invest in their wellbeing, knowledge and skills. We do this by creating a pleasant, safe and healthy working environment with a focus on personal development and by paying continuous attention to the match between the strategic objectives and the individual needs of employees. We translate the results of our annual employee satisfaction survey into concrete actions.

Our commitment to industrial automation and energy solutions requires an organisation that learns from past experience. Technological developments and the changing needs of customers and end users keep us on our toes: our aim is to be on top of market developments. A knowledge-intensive organisation requires investment in staff training and development.

This is based on four themes: training and development, safety and wellbeing, diversity and inclusion, and attracting and retaining Talent. Several programmes and initiatives have been developed and will continue to be implemented in 2025.

#### Total number of employees in service



Number of years in service



Male/female ratio 86% 14%

#### Training and development

Our Batenburg Academy has developed an internal training programme B | Smart, which will be expanded in 2025 to include in-company training courses for various levels of management. With the creation of a comprehensive online knowledge base consisting of e-learning and learning modules, training and education are accessible and readily available to all our employees.

Our training policy offers everyone room to develop and encourages our employees to stay up to date and to develop. By doing so, we invest in the sustainable employability of our employees so that they go to work safely, healthily and with pleasure, now and in the future.

#### Safety and welfare

At Batenburg Techniek, we pay attention to physical and social safety, as well as cybersecurity. Clear agreements on safe behaviour are in place. We have also been successfully deploying the B | Safe app since



2022. It raises safety awareness, reports unsafe situations and trains staff. Toolbox meetings are held for workshops or regional B | Safe days.

We value long-term collaboration in a respectful, warm and welcoming atmosphere, with consideration for each other's interests and views. We work on social safety by offering workshops and training sessions. Our managers take training programmes in collaboration with the Netherlands Compliance Institute to enhance their ability to ensure a safe and inclusive working environment.

In 2023, Batenburg Techniek introduced a fitness programme: B | Fit. This programme focuses on the overall health and wellbeing of employees. Both the physical and mental aspects of health are addressed holistically by organising sports events or workshops with a nutrition coach, for instance.



#### **Diversity and inclusion**

We believe that diversity and inclusion contribute to a future-proof organisation. By having several different perspectives, our divisions and teams can respond even better to developments and the changing needs in the market. At Batenburg Techniek, everyone gets fair opportunities and equal treatment, and mutual respect is actively promoted. When it comes to increasing the diversity of our staff, we focus in particular on having more women in the workforce. We are also working actively on entering the technical sector in a general sense.

The 'Exploring Boundaries' workshop, for instance, teaches employees how to recognise their own biases and habits, and they are given tools to raise their awareness. This is how we try to ensure that staff hold one another to account about inappropriate behaviour, so that everyone feels safe, respected and welcome.



#### Attract and retain talent

Given the tight labour market and technological developments, Batenburg Techniek is investing in attracting, retaining and developing talent. Referred to as the 'Next Generation', we ensure that employees of all ages find a suitable place at our organisation, contribute to continuity and are ready for future challenges. Strategic workforce planning and mentoring are the basis. Using targeted programmes, we offer prospects and challenges, we strengthen bonds between employees and the organisation in the long term and we focus on knowledge as well as competences.

We have the Young Batenburg network for our younger employees (up to the age of 35), where they can meet each other and undertake inspiring activities. We also organise networking meetings for various groups of employees, where knowledge sharing and innovation are discussed.

#### Innovation in the energy sector



During last year, we worked hard on innovations in the energy sector, such as the bending tool and dispenser earthing system, developed for Stedin and Enexis. The energy transition, and with that grid reinforcement, demand smart solutions. Our tools reduce installation time, and by doings so they make it possible to adjust the power grid more efficiently to match the growing demand for energy.

#### **Energy simulation for HEMA**



Batenburg helped HEMA to perfect its solar energy system at its distribution centre in Utrecht. Using simulations and analysis, a solar system was designed to meet up to 29.2% of the total energy requirement. We also determined that night charging of electric lorries is feasible and that battery storage does not add value.

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#### Charging infrastructure project at Albert Heijn

2024 saw the successful completion of the third phase of a charging infrastructure project at Albert Heijn's distribution centre in Pijnacker. This project supports Albert Heijn's goal of making all their transport between distribution centres and shops emission free by 2030. As part of this project, we designed, built and engineered the entire charging infrastructure. One of the challenges was the extension of the grid connection, for which an additional transformer substation was installed. All those involved are proud of the result, which proves that large-scale electricity transport solutions are already feasible right now.



Batenburg Energy Solutions focuses on smart solutions for complex energy issues: both 'before the meter' at grid companies and 'after the meter' in industry, logistics and utilities.

#### Results

The growing demand for solutions resulted in an increase in revenue (+10.9%) and EBITA (13.0%).

Electrification of the energy supply has increased tremendously in recent years. Electricity is growing in importance as an energy carrier, including in industry and infrastructure. At the same time, energy issues are becoming more complex and grid congestion is a growing challenge. Ensuring a stable, efficient energy supply requires innovative solutions and extensive expertise.

To approach these challenges holistically, we have combined our knowledge in 'Batenburg Energy Solutions', a new unit consisting of Batenburg Energy Technology and Batenburg Installation Technology. We have invested in expanding our knowledge and services in recent years. By advising our customers on the right energy technology choices, we help them to make progress in the energy transition. From increasing the capacity of electrical infrastructure and decentralised power generation to battery storage and hydrogen solutions: Batenburg provides innovative solutions aimed at reducing carbon emissions and optimising energy efficiency.

#### In-house operational practices in good order



We apply all the energy solutions at our location in Twello, and so we are well versed in operational practices. This extends across heat recovery and energy generation, having a solar carport and energy storage, to managing our energy consumption. This way, we have all our energy flows in our own hands and so controlling it according to our requirements is simple.

#### Liander DR transformers for grid reinforcement



For grid management company Liander, we installed more than 50 so-called DR transformers in 2024, making a significant contribution to increasing the capacity of the energy grid. These distribution stations are used to increase electricity voltage from 10kV to 20kV at the beginning of the line and lower it again at the end. They are connected to power stations in the suburbs, where the energy is converted to low voltage. From there, electricity cables run to homes and businesses.

DR transformers contribute to increasing capacity on the grid. This meets the growing demand for electricity from consumers and entrepreneurs, which is a crucial prerequisite for sustainability and the phasing out of fossil fuels.

This project is our contribution to Sustainable Development Goal (SDG) 9 for Industry, Innovation and Infrastructure.

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#### MOG2 Princess Elisabeth energy island: safely earthed by Batenburg Energy Technology

Batenburg Energy Technology is making an essential contribution to the world's first artificial energy island: the Princess Elisabeth Energy Island. TM Edison (Jan De Nul and Deme) are building this revolutionary project, which has been commissioned by Elia and is located 45 km off the Belgian coast. The island is a crucial hub in the energy transition, capturing energy from offshore wind farms and providing a stable power supply to Belgium, England and Denmark. Our earthing solutions

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We supply the following for safe grid earthing:

- Kilometres of earth cables, thousands of C clamps and custom-made earth plates for concrete caissons.
- CAD welding technology to ensure that the parts are reliably connected.

• Cable clips from Ellis Patents and suspension brackets via Batenburg Fastening Technology. Thanks to close collaboration with TM Edison, manufacturers and partners, this project is progressing well. When completed in 2027, it will mark a milestone in offshore energy.



As part of Batenburg Energy Solutions, Batenburg Energy Technology develops and supplies components and systems used in the electricity distribution grid. This includes transformer substations and innovative solutions alongside standard items such as cable accessories, connections and tools.

Transformer substations are an essential part of the electricity grid. As the capacity of the electricity grid expands, the need for transformer substations increases, both for establishing new grid connections and for increasing the capacity of existing connections. Since 2020, the transformer substation assembly work we have carried out at our Rotterdam site has increased dramatically.

For innovative solutions, we have in mind tooling to speed up the expansion of the power distribution grid and make it more efficient. For instance, together with Intercable we have developed a bending tool that can bend the increasing number of power cables precisely and, by doing so, ensure that connections in the transformer substations are safe.

The demand for solutions involving local energy generation, storage and consumption is growing due to grid congestion. This demand exists at the level of the individual company as well as at business parks and/or in residential areas. This will reduce the load on the electricity grid connection and create new opportunities for growth and development within the existing grid. There is also a demand for local storage at solar farms. In 2024, another major investment was made to expand the number of solar farms, both on rooftops and on land and water. The share of renewable energy has risen sharply in the wake of the increase in power generated from solar and wind. The supply of electricity exceeds demand in the middle of the day, particularly if the weather is sunny and windy. More and more solar farms are therefore investing in storage facilities, using batteries to regulate supply and demand. In collaboration with partners in some cases, we make these solutions possible, thanks to our specialised knowledge.

#### Energy storage for grid stabilisation and congestion services



For Emmett Green, we installed a 1.2 MWh liquid-cooled battery energy storage system (BESS) with five RCT power units at the Kloosterburen project. After successfully completing the site acceptance tests, we integrated energy management systems for optimal grid stability and congestion resolution. The battery, powered by wind and solar energy, supports grid operators and provides congestion management services through the GOPACS platform. This is how we solve local and regional grid congestion issues.

#### NX Filtration energy supplies



In 2024, we completed the construction of a new highperformance production site for NX Filtration: an innovative manufacturer of water-purification equipment based on nanofiltration. This project was carried out in collaboration with construction company Aan de Stegge. Batenburg Techniek made the optimisation of the energy supply with the neighbouring data centre technically possible. Heat and cold are exchanged, producing energy efficiency for both companies. The new building is certified according to Breeam, a method used all over the world. This project is our contribution to Sustainable Development Goal (SDG) 9 for Industry, Innovation and Infrastructure.



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#### Zero emissions for HTM

With the completion of the new charging depot for electric buses, HTM has taken an important step towards fully zero-emission public transport. Batenburg Techniek, in collaboration with Daimler Buses Solutions and ABB E-mobility, has built an innovative charging infrastructure that will make HTM the first urban transport company in the Netherlands with a fully carbon-free bus depot by 2025. The new depot, located where space is limited, is equipped with a transformer substation and 28 charging points, which together serve 109 chargers. This ensures that their electric buses are always fully charged and deployable. For Daimler Buses Solutions, this is the first creation of a large-scale depot outside Germany, supplying not only the buses but also the chargers, civil engineering work, software solutions and digital services.

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As part of Batenburg Energy Solutions, Batenburg Installation Technology operates in the fields of energy technology, industry, logistics and non-residential construction.

#### Charging plazas and energy solutions

The ongoing electrification of buses and lorries is increasing the demand for charging facilities. Major public transport, bus and retail companies are leading the way in the electrification of heavy transport.

At retail companies, transport includes home deliveries as well as restocking shops. Many transport companies are experimenting with electric lorries. Batenburg Techniek helps them with phasing the growth in energy supply and charging infrastructure. Besides installing the charging infrastructure, we also supply these companies with a power management system, which we developed in house, to optimise their energy management.

We install total solutions at public transport companies. For example, together with our partners Daimler Bus and ABB, we designed and delivered a charging station for electric buses for HTM. And several projects have also been implemented at Qbuzz, Arriva and other public transport companies.

#### Sustainable real estate

In recent years, the demand for new construction has been high. Batenburg Techniek has gained a position in this market by building power supply facilities and air treatment for distribution centres and industrial real estate in particular. In the coming years, the focus will be on revitalising older properties. Many towns have power supply problems and there is limited capacity on the electricity grid. This often makes solutions complex. For example, there is high demand for optimising grid connections and a demand for (thermal) storage, energy management and self-generation of power. Solutions to such situations are first perfected in our in-house simulation programmes, and then worked out in detail in various scenarios and assessed together with the customer.

#### The Shimano Project



In collaboration with Shimano, we analysed energy requirements by identifying consumers and anticipated usage patterns. Using energy simulation, we identified energy surpluses and shortages, based on which the best BESS solution was selected.

The installations are designed for maximum efficiency and minimum energy consumption, including a ground-source heat pump, dynamic load balancing for charging points and an advanced energy management system to prevent excessive reverse supply. For this project, the Batenburg Data Platform, which Batenburg Industrial Automation developed, was used for the first time in our sustainable real estate market. Since commissioning, the plant has been continuously monitored and adjusted where necessary.

#### Vitens Water Expertise Centre



Our colleagues created an important automation project to ensure the quality of drinking water for Vitens' WEC (WaterExpertiseCentrum) in Leeuwarden. After twenty years of intensive use, the technology no longer complied with current standards, so Vitens asked us to modernise and expand their automated sample analysis system.

#### The Flowbot



In collaboration with TU Delft, Batenburg Techniek developed an innovative gantry called 'the Flowbot'. It is designed for hydrodynamic research on 'impulsive flows'. The idea is to use the robot to trawl various models through water to take measurements of forces and currents.

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#### Kemira

Kemira produces agents and technical solutions for water treatment. This allows water to be recycled more efficiently, saving a lot of energy, water and raw materials. This is how Kenitra is contributing to the development of sustainable industry and makes clean water accessible to more people. For this, Batenburg Digit, in collaboration with Batenburg Bellt, replaced the existing I/O system with a Novatech 8000 series. In addition, Batenburg Magion migrated the AVEVA PI System so that making data available to users can be done securely in an office environment.



The Batenburg Industrial Automation division focuses on designing and managing control systems for applications in industry, infrastructure and the marine sector as well as offshore.

After a somewhat cautious start, activities picked up during the year. We were able to end the year with a result similar to the previous year.

Infrastructure projects saw a rise in demand for renovations and maintenance. Working with our partners, we renovated several water treatment plants, bridges and sluices. We also did the work required for renovating the Afsluitdijk. Our work focused on control systems, cybersecurity and grid facilities, and electrical engineering. This market is growing and Batenburg Techniek is being asked more and more frequently for its expertise in controlling complex infrastructure projects.

The demand for our expertise in the water treatment market is also growing. The demand for clean drinking water is on the rise in the Netherlands. Drinking water companies are responding by increasing volumes and improving treatment techniques. Batenburg Techniek develops the required (automation) modifications to treatment plants. The dairy, food and beverage sectors are investing in energy-saving projects. Here we have in mind energy-efficient filters and dryers, etc. The trend is to use data intelligence to optimise processes. As specialists in process automation, we support our customers with customised solutions based on software developed in house or software packages developed by Aveva or AspenTech.

Energy-intensive industries in Europe are having to contend with energy prices that are significantly higher than in other parts of the world. This compromises their competitiveness, making these sectors reticent about investing in our continent.

Companies that recycle chemical and other products are also being hit hard by high energy prices. As a result, we have had fewer contracts from these sectors. However, we are involved in the chemicals industry through investments in the production of specialty chemicals. Moreover, the demand from customers in the marine and offshore market for our specialist work for wind energy is considerable, especially when it comes to operating large cranes. We are also witnessing a growing demand for data intelligence, complemented by artificial intelligence or machine learning techniques. A modular Batenburg data intelligence platform has recently been developed for this purpose. This allows process optimisations to be identified and implemented more efficiently at our customers.

The European Network and Information Security Directive (NIS2) sets cybersecurity requirements for customers in the critical infrastructure sector, among others. Our cybersecurity experts analyse, monitor and professionalise our customers' existing operational technology (OT) networks.

Finally, last year once again saw assignments involving robotics issues, often in combination with complex vision issues. The Batenburg Vision Framework is used to enable the efficient control of these operations.

#### Innovation in data-driven cultivation



Twin Creeks Greenhouse in Watford, Ontario in Canada is a greenhouse covering 40 hectares of red pepper crops. Landfill gas delivers environmentally friendly heating. To optimise the cultivation process, Twin Creeks Greenhouse uses Hoogendoorn's IIVO system, which uses intelligent algorithms. Among other things, this data-driven solution produces real-time predictions of temperatures and climate settings. One year of using this system has already produced a more uniform crop. This project is our contribution to Sustainable Development Goals 2 and 6. The focus is on SDG 2: ensuring sustainable food production systems and implementing resilient horticultural practices, ones that increase productivity and production.



# Batenburg Horticulture

#### **TrueHarvest Farms: Sustainable cultivation using smart technology** TrueHarvest Farms in Belton, Texas is a 180,000 m<sup>2</sup> hydroponic greenhouse specialising in leafy

vegetables. With technology as its driving force, the company has been committed to sustainability and resource efficiency since 2017. 'We are demonstrating that agriculture can be done differently,' says Jason Maks, a managing member of the company. Conserving water and delivering it quickly are key to their approach. Thanks to Hoogendoorn Growth Management's IIVO system, TrueHarvest accurately controls the greenhouse climate, which saves on labour costs and increases productivity. 'IIVO gives us a clear advantage,' Jason tells us. Chief crop manager, Dominick, adds: 'The system controls the greenhouse as effectively as possible, allowing me to concentrate fully on cultivation.' TrueHarvest Farms will carry on innovating and plans to expand IIVO to several locations, with the emphasis on sustainability, efficiency and healthy food.



Using integrated automation solutions and data intelligence, Batenburg Horticulture ensures crop optimisation at horticultural companies worldwide. Batenburg Horticulture operates in the market under the brand names Hoogendoorn Growth Management and LetsGrow.com.

#### Results

Growing revenues contributed to higher EBITA, despite relatively heavy investment in innovation.

Population growth and a greater demand for locally grown fresh and safe food are driving the rising demand for horticultural greenhouse cultivation and associated automation across the world. Complete control of the growing climate and crop nutrition is essential for optimal crop yields in greenhouse horticulture,

At the same time, new construction projects in the international horticultural market are still hampered by high interest rates, geopolitical tensions and permit procedures. In response to this, crop companies worldwide are consolidating at an ever-increasing speed. Family businesses are merging in the interests of continuity, while investment firms are buying up companies.

Technology is playing an increasingly prominent role in greenhouses, rendering its management more complex. We are catering for this with our greenhouse control system, IIVO, and our data-driven growing concepts. This technology makes it possible to autonomise the control of greenhouses further and, by doing so, relieving customers of the burden of managing day-to-day business operations.

For Hoogendoorn Growth Management, 2024 was dominated by the global rollout of intelligent algorithms. This software combines expert intelligence and artificial intelligence to automate climate control, enabling growers to cultivate more efficiently and sustainably and improve their return on investment.

Energy efficiency is a key issue in the horticultural sector. We support growers with advanced technology that reduces energy consumption and optimises cultivation processes. For instance, Hoogendoorn launched a solution for smart energy management ranging from geothermal and residual heat to solar energy and energy sharing between companies.

In addition, Batenburg Horticulture participates in '100% Groen Geteeld' (i.e. '100% Green Cultivation'). This initiative by Dutch growers' associations aims at sustainable crop protection by combining biological and technological innovations with green crop protection products. The aim is to reduce dependence on chemical agents.

Thanks to these joint efforts, Batenburg Horticulture is working towards future-proof cultivation, focusing on maximum yields with the smallest possible ecological footprint.

#### Update for 100 radio telescopes



Batenburg Applied Technologies is collaborating on updating 100 radio telescopes in Chile. They are situated at an altitude of 5,000 metres, where we have to deal with severe weather conditions. We supply powerful process boards for better signal processing. The Alma project is supported by a consortium of several countries in Europe.

#### Advanced 3D configurator



Batenburg Fastening Technology has developed an advanced 3D configurator that allows customers to design the perfect solution, be it independently or with supervision. Engineers can use this portal to modify the properties of standard products and integrate them directly into their design. It is compatible with all common CAD programmes and, if required, can be printed as a 3D sample to test the application before mass production.

# D ndustr 5 L **N** e E D

#### Joint contribution to Holland Hydrogen I

Shell is building Holland Hydrogen I on the Second Maasvlakte. It will be Europe's largest green hydrogen plant. With a 200 MW electrolyser, the plant produces up to 60,000 kilograms of renewable hydrogen daily, powered by Hollandse Kust Noord wind farm. This hydrogen will be transported via pipelines to Shell Energy and Chemicals Park Rotterdam, where it will replace some of the grey hydrogen.

Shell engaged our expertise to help it to carry out its servicing and maintenance itself. Batenburg Energy Technology and Batenburg Applied Technologies together have produced a comprehensive range of products, including earthing accessories, cable measuring equipment, tools and measuring instruments such as thermal imaging cameras, data loggers and magnetic field testers. This project demonstrates how Batenburg companies are contributing jointly to sustainable energy solutions, including for maintenance after commissioning.



The companies in the Batenburg Industrial Components division focus on the manufacturing industry. The division consists of Batenburg Applied Technologies and Batenburg Fastening Technology.

With effect from 27 June 2024, the shares of Batenburg Industrial Electronics in Neede were transferred to the Mach Technology Group. We expect we have found a good partner in Mach, for the future of the company and its employees.

#### Results

Due to stagnating economic development in the Dutch manufacturing sector and destocking in the chain, the revenue and EBITA of the companies fell in 2024.

Market conditions for Batenburg Industrial Components' businesses were difficult last year. Consumer demand fell, while there were ample stocks in the supply chain in the wake of the Covid pandemic. This put considerable pressure on revenue at Batenburg Applied Technologies and Batenburg Fastening Technology alike. Batenburg Fastening Technology also suffered from the sharply declining demand for energy transition products. Government measures slowed sales of heat pumps and solar panels, among others.

However, we note that many customers have used this period to develop and improve their product portfolio. Many developments are now in the testing phase. This is expected to lead to additional demand when the market picks up.

At Batenburg Fastening Technology, the product portfolio is increasingly shifting to specialist products that comply with strict quality requirements. Batenburg Techniek has developed an engineering tool to help designers and engineers working for our customers. It allows customers to design their own specialised (customised) products, for which prototypes can be delivered immediately. This is how we are speeding up and simplifying the customer's design process.

Customers are relying more and more on Batenburg Applied Technologies for product development, up to and including the initial mass production. The increase in automation and artificial intelligence solutions is creating more demand for edge computing, faster processors, high-performance displays, human-machine interfaces and connectivity.



# Batenburg Techniek key figures

	continuing and normal. (*1)							
	2024	2023	2024	2023	2022	2021	2020	2019
(€ million)								
Revenue	337.2	323.2	349.1	344.8	303.1	262.1	236.0	222.5
EBITA (*2)	29.0	28.8	28.9	30.2	27.8	21.1	17.5	16.4
EBITDA (*3)	36.0	35.6	36.1	37.2	34.3	27.0	22.9	20.8
Net result	19.2	19.1	16.2	20.1	19.0	13.6	11.2	11.0
Balance sheet total			166.8	184.8	163.6	149.5	136.9	115.3
Equity capital			53.6	58.9	52.6	45.6	58.6	52.0
Working capital (*4)			7.2	23.4	19.5	10.2	8.8	13.6
Net debt (*5)			-3.1	9.4	9.0	4.1	-11.9	-6.3
Employees								
Average number of employees	1,231	1,184	1,267	1,254	1,222	1,190	1,110	986
Ratios								
EBITA on revenues (%)	8.6	8.9	8.3	8.8	9.2	8.0	7.4	6.1
EBITDA on revenues (%)	10.7	11.0	10.3	10.8	11.3	10.3	9.7	8.7
Net debt to EBITDA			0.0	0.3	0.3	0.2	-0.5	-0.3
Net income on revenues (%)	5.7	5.9	4.7	5.8	6.3	5.2	4.8	5.0
Solvency (%) (*6)			32.2	31.9	32.1	30.5	42.8	48.2

\*1) This refers to results from continuing operations, normalised for the sale of Batenburg Industrial Electronics in June 2024 (EBITA €0.8 m in 2024 and €1.4 m in 2023), preliminary sales result (minus €0.7 m) and cost of sales (minus €0.2 m). EBIT was also normalised for the impairment of goodwill relating

to Batenburg Industrial Electronics (minus €2.8 m).

\*2) EBITA concerns the operating result before taxes, financing income and expenses and amortisation of intangible assets.

\*3) EBITDA concerns the operating result before tax, funding income and expenses, depreciation of property, plant and equipment and amortisation of intangible assets.

\*4) Working capital is shown exclusive of cash and cash equivalents, loans and other funding liabilities.

\*5) Net debt = long-term loans plus current loans, less cash and cash equivalents.

\*6) Solvency = equity capital / balance sheet total.

#### Batenburg Energy Solutions revenue and result

(€ million)	2024	2023
Batenburg Energy Technology revenue	70.3	59.3
Batenburg Installation Technology revenue	83.9	79.8
Batenburg Energy Solutions revenue	154.2	139.1
Batenburg Energy Technology EBITA	7.8	7.1
Batenburg Installation Technology EBITA	6.2	4.4
Batenburg Energy Solutions EBITA	14.0	11.5
EBITA as a % of revenue*	9.1%	8.3%

#### **Batenburg Industrial Components revenue and result\***

(€ million)	2024	2023
Revenue	44.3	53.9
EBITA	1.9	5.6
EBITA as a % of revenue**	4.4%	10.5%

\* This refers to operations normalised for the sale of Batenburg Industrial Electronics

(Batenburg Industrial Electronics participation result (€0.8 m positive)), preliminary sales result

(minus €0.7 m) and cost of sales (minus €0.2 m).

\*\* EBITDA and EBITA as % of revenue is based on unrounded figures.

#### **Batenburg Industrial Automation revenue and result**

(€ million)	2024	2023
Revenue	110.9	105.9
EBITA	11.9	11.8
EBITA as a % of revenue*	10.7%	11.2%

#### Batenburg Horticulture revenue and result

(€ million)	2024	2023
Revenue	27.5	24.3
EBITA	1.2	0.9
EBITA as a % of revenue*	4.5%	3.5%

\* EBITA as % of revenue is based on unrounded figures.



# **Consolidated income statement**

(€ million)	2024	2023
Total operating income	349.1	344.8
Cost of raw materials, consumables and trade goods	134.7	137.3
Subcontracted work and other external costs	41.9	42,1
Wages and salaries	85.1	81.1
Social insurance and other employee expenses	19.2	17.9
Depreciation of tangible fixed assets	7.2	7.0
Amortisation of intangible assets	4.6	2.0
Other operating costs	31.5	28.6
Other operating costs	0.6	0.6
Total operating expenses	324.8	316.6
EBIT (operating result)	24.3	28.2
Total financing income and expenses	-1.2	-1.1
Result before tax	23.1	27.1
Tax on the result	6.9	7.0
Result after tax	16.2	20.1

### **Consolidated balance sheet**

	31 December 2024 31 Dece		mber 2023	
Assets				
Property, plant and equipment	23.9	23.5		
Intangible assets and goodwill	25.4	30.1		
Financial fixed assets	4.6	-		
Total non-current assets		53.9	53.6	
Inventories/Stocks	16.7	32.3		
Receivables and accruals	80.0	92.1		
Cash and Cash Equivalents	16.2	6.8		
Total current assets		112.9	131.2	

Total assets		166.8	184.8	
	31 December 2024 31		December 2023	
Equity capital		53.6	58.9	
Loans and other funding liabilities	9.8	21.0		
Provisions	0.8	0.9		
Deferred tax liabilities	-	0.7		
Non-current liabilities		10.6	22.6	
Loans and other funding liabilities	17.7	6.4		
Provisions	5.6	3.4		
Corporate income tax	1.9	2.9		
Other current liabilities	77.4	90.6		
Current liabilities		102.6	103.3	
Total equity capital and liabilities		166.8	184.8	



#### Look ahead with Batenburg Bright Nights!

The first edition of Batenburg Bright Nights took place in Heerenveen on 14 November. Eighty colleagues worked together on the subject of 'innovation'. Keynote speaker, Mats Dekker, inspired us with insights on AI, after which teams came up with some amazing ideas during brainstorming sessions. The winning idea will now be developed further. Apart from expanding our understanding of the subject matter, there was plenty of room for meeting and collaborating. Innovation really came alive! The Bright Nights series continues – inspiring trends and new opportunities. **Together we are building the future!** 

## Innovative security solution successfully implemented for Steinweg Handelsveem

Security and efficiency are crucial for C. Steinweg – Handelsveem B.V. Batenburg Vision ISP carried out a major migration project with a view to modernising their security infrastructure. Fourteen sites have been transferred to a centrally managed security management platform in the cloud. Steinweg used to work using a combination of analogue and IP cameras on an outdated platform, which made central monitoring and fast image feedback difficult. A scalable, user-friendly solution with more efficient control room operations was called for.

Our solution: a central and future-proof security platform. We implemented an integrated security management platform in a private cloud, which manages all sites centrally.

#### Key benefits:

- Central monitoring Easy real-time observation and rapid incident response.
- Smart storage Local storage with advanced search functions.
- Remote access control Remote control of booms and gates.
- Scalability Easily expandable for future security needs.

Steinweg now has a flexible, robust and future-proof security system, thanks to this migration. Operators can act faster and security is managed optimally. At Batenburg Vision ISP, we are proud of this partnership and the additional benefits that smart technology brings to the logistics and industrial sector.



# Energetic and innovative

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to baterburg

#### **Batenburg Techniek**

Rotterdam

#### **Batenburg Industrial Automation**

The Hague Heerenveen Nijkerk Vlaardingen Zeist Zundert Zwaag Zwolle Madrid (Spain) Schilde (Belgium)

#### **Batenburg Horticulture**

Vlaardingen Alexandria (America) Beijing (China) Vineland Station (Canada) Querétaro (Mexico)

Batenburg Energy Technology

Capelle aan den IJssel

#### Batenburg Installation Technology

Monster Nijkerk Nijmegen Rotterdam Twello Waalwijk

smarter **focus**.

brighter tomorrow.

#### Batenburg Industrial Components

Rotterdəm Veenendaal Zaventem (Belgium)

Stolwijkstraat 33 3079 DN Rotterdam T +31 (0)10 - 292 80 80 E info@batenburg.nl W batenburg.nl

