



Zero Emission Transportation Solutions for People and Goods





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The QUANTRON journey

The only constant is change itself. We are living in a time of upheaval but also an era of rethinking. And we look into the future with optimism.

Progress is unstoppable and brings with it significant change. The energy transition in the transport sector also cannot wait any longer. Much has happened during the past few decades. Megatrends trigger changes and thus affect our entire lives. They shape the changes in our society and have a decisive influence on world politics, economy, society and the environment. Therefore, this is why QUANTRON invests all of its energies into creating a better world.

QUANTRON wants to actively counteract the negative developments. Governments around the world are also leading the way, introducing increasingly stringent regulations, laws and emission limits in order to combat climate change. We want to lead the energy transition process towards a new mobility model for goods and people on the basis

of electricity and hydrogen. We believe in a better world: cleaner, greener, more sustainable and energy efficient.

Zero emissions is just the beginning.

At QUANTRON, we have the belief, drive and ability to create positive change. Through the QUANTRON 360° ecosystem, we provide zero-emission transport solutions via Quantron-as-a-Service (QaaS) together with our world-class platform partners. Every day, QUANTRON works closely with its partners to make the transportation of people and goods sustainable as well as resource-saving.

This runs through the entire value-creation chain. From the distribution and infrastructure of green energy and hydrogen, and our commercial vehicles through to physical and digital solutions for distribution, after sales and second life.

Sustainability is at the core of what we do. The United Nations sustainable development goals are part of a global plan for promoting long-term peace and prosperity along with protecting our planet. These goals are very important to us and therefore we base all of our decisions and actions on these accordingly. The future begins now, and we will use it to make a leap in efficiency that will ultimately benefit the entire planet.



Mission statement



Our vision is to provide the world's leading platform for zero-emission solutions for commercial.

MISSION & -

Our mission is to develop clean and responsible mobility solutions through the use of leading technologies that have a positive impact on the entire value-creation chain and the future of our planet.

CULTURE

QUANTRON maintains a corporate culture which is based on sustainability, innovation, quality, cooperation, openness and continuous further development.

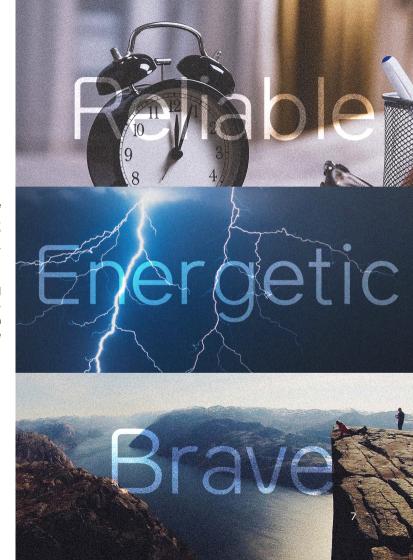
Philosophy & Values

Reliable - Energetic - Brave!

These values accompany QUANTRON into a sustainable future. We are not another commercial vehicle manufacturer. QUANTRON sees itself as a partner to OEMs with a 360° platform for emission-free solution concepts for the transport and logistics industry.

We build on over 140 years of experience in the commercial vehicle industry and are confident in developing comprehensive service solutions that achieve zero emissions with real positive environmental impacts and make a sustainable contribution to the decarbonisation of road transportation.

Together we shape the future!



Manifesto

Our promise for a green future aims to implement sustainable and eco-friendly solutions in order to address the challenges presented by climate change and pollution.

1. Only together can we change the world.

We have to change ourselves in order to change the world. Working as a team, we drive each other on thereby joining forces to create a better future. No company can do it alone, but together we can change the world with the help of our combined forces.

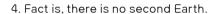
2. We will be your co-pilot of change.

We know that change requires a lot of effort. Especially when it affects your work and the way it has been done for years. Whether it is a delivery vehicle, a truck or a bus.

Regardless what vehicle you drive, we will always be by your side, as your advisor and co-driver in order to make the journey of change easier and far more enjoyable. Trust us. You can rely on QUANTRON.

3. Everything starts with a small change.

Small changes should not be underestimated because they can have a really strong impact. Every step forward counts. Since our founding in 2019, we at QUANTRON have consistently pursued our goals.



We simply cannot let the people and creatures with whom we share the Earth down and who suffer from the consequences of the transport industry's C02 emissions. There is only this one planet. This is why we want a more sustainable and liveable new world for everyone. Thanks to the help of millions of road users, we will make it - TOGETHER!







Andreas Haller

Executive Chairman of the board & Founder

A visionary when it comes to zero-emission solutions for people and goods. As an expert in electrically-powered commercial vehicles, he sold Germany's first electric bus in 2011

With over 20 years of experience in the commercial vehicle industry, he is head of the Haller Group, a fifthgeneration family business that focuses on sales and service. In addition, he was a managing partner at Hama Holding GmbH for more than five years. In 2019, Haller founded Quantron AG.





Herbert Robel
Executive Board Member. CHRO & Founder

An expert in the fields of logistics and finance. Furthermore, Robel has ten years of in-depth expertise as Chief Financial Officer. He worked for Andreas Schmid Logistik AG for over 20 years, including eight years as a member of the Management Board.

As part of his responsibilities, Robel has been working intensively on developments and future mobility alternatives for commercial vehicles for a number of years now. He found the answer at QUANTRON.



Michael Perschke

Executive Board Member & CEO

A pioneer in the field of sustainability as a matter of conviction and a passionate investor in sustainability ventures. He has experience in areas such as finance, investor relations, business planning, capital market viability (particularly in the US) and compliance management.

Perschke has over 20 years of automotive experience having held a number of C-Level and management positions. His in-depth knowledge of the OEM industry and five years of experience in the electromobility sector as well as start-ups (as CEO of Automobili Pininfarina) complete his profile.

René Wollmann

Executive Board Member & CTO

A seasoned electric vehicle enthusiast and has more than ten years of R&D experience with various vehicle manufacturers as an engineer, project manager or director.

Wollmann attaches great importance to the efficient and smart development of electric vehicles. He leads international "high-performance teams" while encouraging and fostering them through a "freedom to think" mentality.

The QUANTRON Top Management team

The QUANTRON team has had centuries of experience in setting up and scaling transport companies



Q-team

We are very proud of our Q-team. Each and every one of them contributes to the overall picture and success of QUANTRON.

At QUANTRON, we believe in the power of uniqueness, equal opportunities and the affiliation of people together with all their differences - in our society and in the work-place. Our more than 120 employees from around 14 nations are a diverse group. Their backgrounds, experiences, perspectives and individual differences form the basis for the success of QUANTRON.

We benefit from the cultural and social diversity as well as from the internationality of our Q-team. In spite of our growing globality and size, it is important for us to strengthen the solidarity and team spirit, and to respond to the individual needs of our employees.

We are convinced that a corporate culture geared towards diversity, equality and inclusion is crucial for realising creativity, innovation and inventiveness.

This is why the skills and potential of our employees are fundamental to us. This attitude is also reflected in our values:

Reliable - Energetic - Brave!



"Personal and entrepreneurial further developments has ensured the success of the family business of the Haller Group during times of economic crisis by thinking outside the box, market analysis and innovations. Our vision at QUANTRON is to strengthen the future of mobility through the provision of a leading platform for zero-emission commercial vehicles."

- Andreas Haller, Executive Chairman of the board & Founder





Establishment of a horse-drawn carriage business by Gottfried Haller in Augsburg

1882

Awarded IVECO Premium Workshop status



1997

ORIGINS



1954

Motorised taxis, agricultural machines and commercial vehicles



1962



Relocation from Augsburg to the current site in Gersthofen Further locations are added: Ulm, Dillingen, Munich





INNOVATION

2010

RETROFIT LAUNCH

2001



Andreas Haller runs Haller Commercial Vehicles now in the 5th generation

2011



Sale of Germany's first electric bus to the Stadtwerke Osnabrück

2019



Founding of Quantron AG & construction of the new headquarters

Michael Perschke becomes CEO



2021

PIVOT IN OEM LIGHT



QUANTRON supplies IKEA Austria with a fleet of environmentally-friendly e-commercial vehicles



Over 120 employees and 350 colleagues in the QUANTRON ecosystem



2022



Rebranding of brand name, Cl and CD

QUANTRON QARGO 4 EV & QUANTRON CIZARIS 12 EV: Foundations laid for QUANTRON's own product portfolio



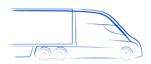


IAA Transportation 2022 world premiere of the QUANTRON QHM FCEV Heavy Truck



QUANTRON wins the European Transport Award for Sustainability





Entry into new markets such as USA, Saudi Arabia Italy, Switzerland and Spain

GROW AS A PLATFORM

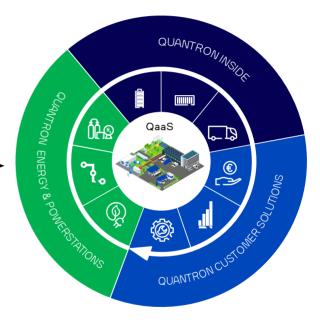


Quantron-as-a-Service was named as the official lead project of the KUMAS Environmental Network 2022





QUANTRON CIZARIS 12 EV wins the German Sustainability Award Design 2023



QUANTRON 360° platform - with first-class platform partners

Over 140 years of corporate history

Quantron AG was founded in 2019 as a high-tech spinoff of the renowned Haller GmbH & Co. KG with the vision of paving the way for e-mobility in inner-city and regional passenger and freight transport.

The Haller family business from Gersthofen has existed since 1882 and was founded as a horse-drawn carriage business. In the course of modernisation, the company later specialised in the production of motorised taxis, agricultural machinery and commercial vehicles.

Haller GmbH & Co. KG is now in its fifth generation and is managed by Andreas Haller; with its own workshop network, it specialises in the service, maintenance and repair of commercial vehicles.

QUANTRON thus combines e-mobility know-how together with over 140 years of commercial vehicle experience. There is hardly any other company in the world which combines such comprehensive know-how in the field of sustainable mobility with service expertise that has been built up over many decades.









Founder Gottfried Haller †1935



Peter Haller †1958



Ing. Gotfried Haller † 1996



Peter Haller



Andreas Haller





QUANTRON 360° platform solution

Our Quantron-as-a-Service platform allows access to QUANTRON itself and bundles its services for emission-free transport in one single package.

QUANTRON is a provider of an "asset-light" solution that includes all facets of the mobility value-creation chain.

The result: emission-free transport solutions on a kilometre basis.

The 360° platform offers a perfect balance between globally scalable solutions and locally adapted options that are individually tailored to suit the needs of the customer.

The goal: to provide our customers with the best possible solution from a single source.

ECOSYSTEM

The Quantron-as-a-Service ecosystem covers the areas of QUANTRON ENERGY & POWER STATION, QUANTRON INSIDE and QUANTRON CUSTOMER SOLUTIONS

Our open-brand ecosystem is based on strategic partnerships. Each player contributes their own expertise and technology for the benefit of the customer.

PLATFORM

Through our Quantron-as-a-Service platform, we offer customers the services and technologies of the ecosystem in one package.

The platform acts as an orchestrator and follows an integrated approach instead of just focusing on the hardware.

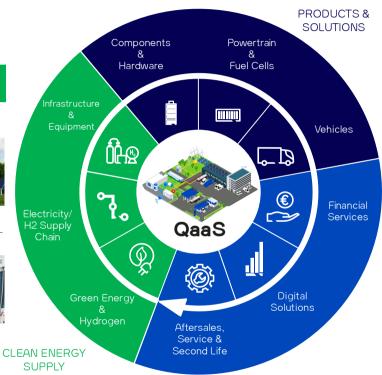


Production and distribution of green energy and hydrogen



H2 refilling & electricity charging infrastructure network and equipment





QUANTRON INSIDE

Fuel cell and battery electric commercial vehicles and components



QUANTRON CUSTOMER SOLUTIONS

Physical and digital solutions for sales, aftersales, financing and 2nd life





QUANTRON ENERGY & POWER STATION

As a central player in a rapidly developing ecosystem, QUANTRON coordinates resources and partners regarding the sourcing and sales of green energy / green hydrogen.

Thanks to the strong partnerships, we are able to offer our customers turnkey solutions in the area of fuelling and charging infrastructure.

Everything from planning through to implementation is coordinated by QUANTRON whereby the required equipment is also made available. Furthermore, QUANTRON offers hydrogen infrastructure consulting in order to answer all customer questions and requests.

The following strong partners support us in the field of ENERGY & POWER STATION:













Green energy & hydrogen

The first step of the 360° solution is to ensure the availability of energy and hydrogen from renewable sources.





Infrastructure & equipment

The QUANTRON refuelling and charging infrastructure will be set up at customer depots as well as along motorway routes at important traffic intersections.



Electricity & H₂ supply chain

We provide our customers with sufficient green energy and green hydrogen via our distribution network. In this way, we maintain control over the costs and logistics.



QUANTRON INSIDE

QUANTRON offers a broad portfolio of practical, zero-emission commercial vehicles complete with battery and hydrogen-electric drive systems. This includes the conversion of existing vehicles as well as the manufacture of high-quality new vehicles. The product range includes light commercial vehicles, city buses and heavy-duty tractor units which are tailored to match individual requirements and customer requests.

We develop our vehicles in close cooperation with strong partners to ensure smooth practical use - whether it is 3.5 t in the city centre or a 44 t total combination weight on long distance runs.

For the launch of the QUANTRON QHM FCEV truck, we were world premiere partners with companies such as Ballard Power Systems, Allision Transmission and NPROXX. As a technology-neutral platform company, we therefore rely on strong partners in the QUANTRON INSIDE area:

















^{*} EU electrification partner
** US electrification partner





Components & Hardware

We develop, purchase and produce the very best components for our vehicles. In this way, we can ensure the first-class quality of our vehicles and are always in a position to provide our customers with the best technical solution.





Drive train & fuel cells

Together with our partners, we develop premium class fuel cells and complete drive train solutions for powering our vehicles. We provide modular and scalable systems for fuel cells, e-motors & axles as well as energy management.





Vehicles

Quantron AG's product portfolio is constantly being expanded in order to offer our customers targeted and practical solutions along with the capability of opening up new markets, for example, with our Class 8 FCEV US truck.

Vehicle portfolio

At Quantron AG, we enable our customers to get started with e-mobility in two ways using a range of options.



New life through electrification

QUANTRON electrifies used and existing vehicles in a fleet through a resource-saving manner so that they can continue to be used.

Thanks to our numerous cooperation partners, we offer solutions for a large number of vehicles and manufacturers.

New e-commercial vehicles

QUANTRON also has its own new vehicles in its portfolio. The range of emission-free commercial vehicles for our customers has thus been significantly expanded in order to meet their requirements and satisfy their requests.

The spectrum ranges from electric transporters and e-buses through to hydrogen-powered heavy-duty tractor units.



Q-Light 📖

From 3.5 to 7.2 tonnes - our vehicles in the Light segment are available with environmentally-friendly drive systems: battery-electric or with fuel cells. Whether it is for passenger transportation or inner-city deliveries, we offer you the right version for meeting your requirements.

Q-Heavy 📖 🕽

18 to 44 t total combination weight: Our heavy e-trucks are used as electrically powered solo vehicles, towing vehicles with trailers or as articulated trucks as well as tipping semi-trailers - with maximum efficiency, low noise levels and no emissions. In addition, we have the QUANTRON QHM hydrogen-electric truck in our portfolio which has set standards in heavy long-haul transports with a range of up to 1,500 km.

Q-Bus

A future-oriented, strong partner also in the field of electric buses: the CIZARIS 12 EV is a reliable and environmentally-friendly solution for inner-city passenger transport. At QUANTRON, the decision in favour of an e-bus is no longer a question of price but, in particular, a decision in favour of a sustainable and low-noise alternative.

Have you heard about the new normal?

Zero Emission. Full Power. Better Future.

"QUANTRON sets standards in the future of vehicle drive systems. With our aerodynamic kit, we can optimise the range and get to the heart of the advantages of fuel cell electric vehicles. Our commitment focuses on real customer benefits."

- René Wollmann Executive Board Member & CTO

New standards in heavy long-haul transport: QUANTRON QHM FCEV





QUANTRON CUSTOMER SOLUTIONS

QUANTRON's digital platform covers all areas and aspects that are required for operating your climate-neutral fleet - starting with the offer of customised financing possibilities as well as the most suitable insurance. In addition, the platform acts as a support for Quantronas-a-Service (QaaS).

Furthermore, we offer our customers a comprehensive aftersales service network with over 700 locations throughout the vehicle's entire service life together with end-of-life management.

The following partners support us in our customer service operations:



















Financing options

We offer individual solutions, depending on needs and requirements, along with suitably developed long-term rental, financing or leasing options. Likewise, we provide support when applying for state subsidies that simplify the transition to electromobility





Digital solutions

In the area of digital solutions, the data for the implementation of QaaS is gathered, processed and made available to our customers. This includes the fields of real-time fleet management, route planning, predictive maintenance and much more.





Aftersales, service & second life

Thanks to a service network of over 700 locations and our so-called flying doctors, we can react quickly in an emergency and get the vehicles back on the road.

After 6-8 years, the batteries used have their second life as stationary energy storage devices and the vehicles are equipped with new battery modules.

A hydrogen and battery future

Emission-free transport: the complementary role of battery and hydrogen-electric commercial vehicles.

Global trade and the traffic resulting from this are, on the one hand, the backbone of our society while, on the other, a major driver of climate change as it is responsible for 20% of global greenhouse gas emissions.

The trend towards urbanisation of the population leads to more and more transportation needs of people in urban and suburban areas. Towns, cities and municipalities are not only pioneers in zero-emission drive technology, they are also driving this issue further with self-imposed targets for the use of zero-emission vehicles in local public transport.

The changeover from burning fossil fuels to zero-emission propulsion solutions is key to combating climate change. In the commercial vehicle sector, research into drive technologies is still very much ongoing which leads to having discussions about the advantages and use of battery-powered electric trucks and fuel cell trucks.

Here at QUANTRON, we believe that it is not an either/or decision as the choice of drive train clearly depends on the specific application. At QUANTRON, we are technologyneutral in order to offer our customers the best possible solution - 100% emission-free.

BEV IIII

Advantages of battery-powered commercial vehicle:

- Overall energy efficiency > 70% (Compared to 35% for FCEV)
- Relative degree of maturity of drive train technology
- Number of models available
- Investments in the charging infrastructure for smaller fleets

FCEV (4)

Advantages of fuel cell-electric commercial vehicles:

- Lighter drive train components result in higher payloads
- Greater range with less refuelling time
- Stability of the H_a supply chain through better transport possibilities (tankers, pipelines)
- Investment in hydrogen refuelling infrastructure for larger fleets

Energy curtailment: 👀



- Hydrogen is easier to transport over longer distances and can be produced on site (excess renewable energy without loss of KTT efficiency)
- Green hydrogen has a lower carbon intensity than the current European energy mix
- The power grid is not suitable for re-charging multiple trucks at the same time with high charging capacities → Investments in the power grid are expensive and take a long time

The most important findings:



BEV/FCEV is not an either/or question in the commercial vehicle sector as both are required depending on the specific uses of the customer.



At QUANTRON, we are technology-neutral and endeavour to work with existing OEMs in order to offer our customers the best solution - 100% emission-free.

Challenges in electricity transmission and the role of green hydrogen in future mobility.

A major difference between green electricity and green hydrogen is the time and effort required to transport it from the point of generation to the point of consumption (i.e. to the charging station or to the hydrogen storage facility). It is difficult to conduct electricity over long distances because there can be significant transmission losses. Therefore, the electricity used to charge BEVs has to be generated relatively close to the point of consumption.

In comparison, transporting hydrogen molecules over long distances is much easier than electricity transmission process (i.e., transporting electrons). Large amounts of hydrogen can be easily transported over significantly greater distances in the form of gaseous and liquefied hydrogen, or as derivatives such as ammonia, using new pipelines, by converting existing pipelines or on seagoing vessels or tankers

Green Energy

Energy sources: electrons



Electricity grid: electrons are more difficult to transport over long distances.

Green hydrogen

Energy sources: hydrogen molecules









Tanker, pipelines: $\rm H_2$ -molecules are easier to transport as the only carbon-free option for green energy transportation.



"QUANTRON strives to help shape the future of energy sources and storage. By using hydrogen and batteries in our commercial vehicles, we want to make our contribution to ensure sustainable and efficient mobility. With Quantronas-a-Service, we provide a 360° zero-emissions product solution ecosystem that encompasses all facets of the mobility value-creation chain.

Zero Emissions. Full Power. Better Future."

- Michael Perschke, Executive Board Member & CEO

Investors & partners

For QUANTRON, an active and transparent exchange with investors and partners is essential. Thanks to our own engineering and targeted partnerships, we have been able to put efficient and practical e-commercial vehicles on the road right from the start.

The entire change in the commercial vehicle industry only makes sense in the long term if we ensure that vehicles are supplied with green electricity and green hydrogen. All of these aspects were integrated into the planning and implementation of Quantron-as-a-Service. For this purpose, targeted partnerships were established with well-known national and international companies from the energy, infrastructure, mobility and finance sectors among others.

For example, with NEUMAN & ESSER, the German specialist for the decarbonisation of energy and industrial

systems as well as decentralised applications and for the generation and use of climate-neutral hydrogen. We are also supported by Ballard Power Systems Inc. from Canada, one of the world's leading fuel cell experts.

Another important partner is the service station operator, Tamoil. Together with QUANTRON, Tamoil will check the availability of $\rm H_2$ refuelling facilities at its more than 400 filling stations in Germany and over 2,000 filling stations across Europe.

FUND4SE "After the due diligence process had been completed, we could see that QUANTRON

has a very unique and specific vision for building a very

complicated, if you will, but nevertheless very simple solution which provides the vehicle as well as the refuelling or charging infrastructure. The fact that QUANTRON already had its vehicles on the road even before the first capital had been raised was a very compelling moment for us and we saw the tremendous perspective in building the ecosystem."

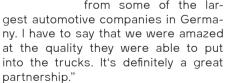


- Denis Muratov, Managing Partner of Funding for Sustainability and Energy



"QUANTRON has a vision. They want to get ahead quickly; they now want to put fuel cell electric trucks on the road. The com-

pany has a great engineering team whereby the personnel come from some of the lar-



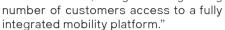
- Nicolas Pocard, VP Marketing and Strategic Partnerships of Ballard Power Systems





"In order to meet the increasing demand for hydrogen in this sector, our strategic partnership

allows us to combine infrastructure know-how with fuel cell vehicle technology to create an ecosystem. As a result, this gives the growing



- Stefanie and Alexander Peters, Managing Partners at NEUMAN & ESSER Group





"We only invest in companies where we see a strategic opportunity to promote our own product together with other partners. We've seen a lot of good substance here. We have seen that there really are products available which are now

saleable. Therefore, we wanted to invest and we see enormous growth potential not only throughout Europe but also on other continents because we already have a very suitable global presence."

- Jens Wulff, Managing Partner at NEUMAN & ESSER Germany



"We at IKEA Austria are very happy that we have found a partner in QUANTRON who can provide vehicles that meet our requirements in terms of range, payload as well as quick charging options."

- Nico Lauer, Manager Multichannel Network at IKEA Distribution Services Austria GmbH & Co. KG

IKEA Austria



The international furniture store, IKEA, has set itself the goal of becoming climate-friendly by 2030. We have been supporting IKEA Austria in its mission since August 2021 and have equipped a logistics centre near Vienna with 55 environmentally-friendly electric vehicles.

Thanks to this change, at least 15 deliveries per vehicle are sustainably realised every day. This corresponded to 117,000 emission-free deliveries in the first year whereby ${\rm CO_2}$ emissions were reduced by more than 300 tonnes.

The first all-electric QLI BEV from QUANTRON was previously used for carrying out an extensive range of tests at the IKEA logistics centre in June 2021. The e-transporters are ideally equipped for handling the routes between IKEA locations and customers' delivery addresses in Vienna and Salzburg respectively. Electricity for the vehicles comes 100 per cent from renewable sources. The green electricity is mainly generated by the company's own photovoltaic systems. At the beginning of 2023, the first hydrogen-powered QLI FCEV was also delivered to IKEA.



Rhenus Logistics



The Rhenus Group is one of the leading global logistics service providers and value-adding partners for its customers. Together with B. Göbel & Sohn GmbH, QUANTRON has delivered a QLIBEV complete with a lifting construction to Rhenus.



Together with vehicle and body manufacturer, B. Göbel & Sohn GmbH, Quantron AG has developed a fully electric transporter complete with a lift superstructure on behalf of Rhenus Logistics.

The vehicle concept was specially planned and manufactured for meeting the needs of Rhenus Logistics Last-Delivery-Mile in the micro-depot system. This is intended primarily to serve end customers in the city centre. The Rhenus Group has ordered a total of seven of these special vehicles to supply their micro-depots and to optimise their delivery processes.

The QUANTRON QLI BEV 7.2 t is quiet and emission-free, and can be loaded and unloaded quickly and safely by means of a electro-hydraulic scissor lift table from B. Göbel & Sohn GmbH.



Global availability through a strong network of QUANTRON branch offices and 700 service locations

Quantron AG Headquarter

Augsburg-Gersthofen, Germany

Standorte und Partnernetzwerk

- Zaragoza, Spain
- Barcelona, Spain
- Milan, Italy
- Oslo, Norway
- Schaffhausen, Switzerland

- Delaware, USA
- Detroit, USA
- Hongkong, HK
- Jeddah, Saudi Arabia
- Hyderabad, India







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