

PRESS RELEASE – QUANTRON AG**THURSDAY, 14.07.2020****Quantron implements hydrogen propulsion in the van segment**

Quantron AG uses technology from AE Driven Solutions GmbH (AEDS), to implement hydrogen driven solutions for vans from 3.45 tons. The range includes flatbed vehicles and panel vans based on the IVECO Daily at the outset, such as the Quantron Q-LIH2. Efforts are being made to expand the product range for vans with fuel cells in order to be able to offer hydrogen vehicles with different bodies as well as other types from other manufacturers in the future.



The international climate targets which needs to be realised until 2030 in the first step and until 2050 in the final one are big challenges. The transport sector, especially the commercial vehicle one has to make a strong contribution to make it a reality. There is a lot of discussion whether battery-powered electromobility or fuel cells are the better solution. But in this case there must be no „either-or“-question.

A hydrogen-powered vehicle is an electric vehicle, too that draws its electricity from the chemical reaction between hydrogen and oxygen taking place in the fuel cell. These two variants of e-mobility are not mutually exclusive, but rather complement each other – to a wide range of solutions for short and long distances in accordance with the vehicle's profile. This also offers many opportunities for companies to reduce their CO₂-footprint. By the combination of both technologies, vehicles powered by alternative drive technology with a range of up to 400km and a maximum load up to 1,200 kg can be realised.

Cooperation with AE Driven Solutions GmbH (AEDS)

Quantron AG has been working on hydrogen propulsion for commercial vehicles since it was founded and has bundled many competencies in this sector ever since. Due to the cooperation with AE Driven Solutions GmbH the segment of vans from 3.49 tons will be decisively strengthened. AEDS specializes in sustainable mobility and logistics concepts based on hydrogen as energy source and has long-time experience and know-how in this area.

Ms. Stefanie Peters (via NEUMANN & ESSER GROUP shareholder at AEDS) and Prof. Dr. Achim Kampker – also shareholder at AEDS – underpin this statement. Ms. Peters is also appointed to the Federal Government's Hydrogen Council. On June 10th, the federal government passed its national hydrogen strategy, that regards hydrogen as a key raw material and a future-oriented energy source to achieve the German and global climate targets. The Hydrogen Council endorses the consistent further development of this strategy.

Advantages of the fuel cell and product range

The electrochemical reaction of hydrogen and oxygen in the fuel cell of a hydrogen-powered vehicle generates electric current which is then used as a range extender to charge the drive battery. Compared to conventional combustion engines there are decisive advantages: local zero emissions of CO₂, nitrogen oxides and particulate matter. This is because the only thing produced by the reaction taking place in the fuel cell is water vapor, which is then released into the environment while driving. There are general advantages of an e-vehicle in addition: hydrogen vehicles also enjoy tax and toll exemption as well as lower maintenance and operating costs than vehicles with conventional engines run by diesel.

This enables Quantron AG to establish hydrogen propulsion to the 3.45 tons van segment. There will be solutions for all types of bodies (including those with additional consumption, such as refrigerated boxes) and a large number of models from most varied manufacturers. The focus then is again on already existing vehicles which can be converted by means of the AEDS fuel cell range extender. And this is the decisive factor. Thus already existing resources will be used which underpins the savings of CO₂.

The product range of Quantron will also include vehicles with 4.2tonnes and 100 kW output as well as vehicles with 7.2 tonnes and 147 kW output. Depending on the chosen size of the tank those vans will have a range of 300 km up to 500km. Those vehicles will be based on the IVECO Daily, for example.

About Quantron AG

Quantron AG represents the sectors of e-mobility, e-engineering, e-battery. In addition to the range of new electrified commercial vehicles and buses, it offers its customers the electrification of their used and existing vehicles, which will then run quietly and emission-free in the future. Quantron also has fuel cells for commercial vehicles in its portfolio, which are also being steadily expanded in this area. From the design of the appropriate drive concept, the infrastructure, financing, rental and leasing concepts, to driver training, end users benefit from e-mobility in passenger, transport and freight traffic, as well as from a network of 700 service partners and the comprehensive knowledge of qualified experts in the fields of power electronics and battery technology – among others through cooperation with CATL, the world's largest Chinese battery manufacturer. Quantron AG was founded in 2019 with the vision of paving the way for e-mobility in the commercial vehicle business. With the Haller Group, Quantron looks back on around 140 years of commercial vehicle experience and researches its e-vehicles and zero-emission drive technologies every day to make them even more efficient. For more information, visit www.quantron.net

About AE Driven Solution GmbH

AE Driven Solutions GmbH (AEDS) is a new start-up from the RWTH Aachen environment, but one with a lot of experience and expertise. The AEDS team has decades of experience and proven expertise in the areas of vehicle construction, compressor technology, project management, mobility and logistics. Furthermore, the NEUMAN & ESSER GROUP, a mechanical and plant engineering company founded in Aachen in 1830, as a shareholder of AEDS, brings decades of experience in global project business, in particular 100 years of experience in the development and production of solutions for hydrogen compression, to the AEDS competence mix. The aim of AEDS, based in the AVANTIS development park in Aachen, is to develop sustainable mobility and logistics concepts based on hydrogen as an energy source. The concepts include, on the one hand, the development and construction of a fuel cell range extender as well as the design and tendering of the necessary hydrogen infrastructure. AEDS products are based on existing infrastructure and existing technical systems, which are newly combined with one another and expediently expanded. With innovative solutions for hydrogen generation, hydrogen refueling and fuel cell systems, AE Driven Solutions GmbH can actively support cities, municipalities, public transport and fleet operators in the implementation of sustainable mobility concepts.

Further information can be found at <https://alternative-energy.solutions/>