

KURT meets Tesla:

Nov 2017

a new look on urban electro-mobility



Belgian SME develops innovative and unique electric vehicle concept

E-mobility breakthrough

Electric driving is the future. The concept is far from novel, but due to cheap oil and deficient batteries it was too early. Nowadays the traditional engine is reaching its limits. Batteries are becoming more powerful and affordable, an opportunity to reduce pollution, noise and traffic jams.

The ideal setting for electric driving is the city. Distances are shorter, the driving speed is limited and the call for a sustainable, quiet, clean and spacious city, is gaining momentum.

Electric mobility makes this possible. The use of compact and silent vehicles opens up space for the pedestrian and cyclist. The only issue is its affordability, as electric vehicles are not yet produced in large numbers.

Altreonic, a technological SME from Flanders, has developed the solution, offering a large variety of electric vehicles, the KURT. Based on a patented design for a modular and scalable vehicle, it is able to meet the needs of many applications without a costly redesign.

Much attention was paid to the production cost as well as the life-cycle cost. The result is a patented structure using high-strength aluminum that is 100% recyclable providing a low empty weight. As a result the energy consumption is lower than with traditional designs, resulting in better range, performance and load capability.



The City-KURT for personal mobility



The City-KURT for transporting mail and small parcels

The key to success

Electric propulsions are compact by definition. Therefore, it does not make sense to integrate electric engines in traditional designs without changing the design itself. That is why Altreonic's KURT vehicle was reinvented from scratch. The KURT vehicle is equipped with wheels that all have their own engine. As a result, there is more space for the batteries and propulsion that are compactly stored in the supporting structure. Most of the weight is situated in the vehicle's body, a low and flat platform. Each wheel can be controlled separately, which creates much more possibilities than currently exist with traditional internal combustion engines. The structure of KURT is not only modular but also scalable. The superstructure can be specifically adapted to a wide array of applications.

Flexibility

By restructuring the different modules, KURT can be adapted to be a very small vehicle or a large vehicle, regardless whether we are talking about transport of passengers or goods. The propulsion modules are standardised, which keeps production costs low. Meanwhile, the robust superstructure provides robustness and functionality. The low total weight of the aluminum vehicle enables it to carry heavy cargo and to reach a long driving range. The sensors of each vehicle can be remotely monitored while each KURT can be remotely controlled using a smartphone or tablet.



The City-KURT for City-Logistics

Mobility as a Service

Electric driving in the city with compact vehicles increases urban mobility without increasing the burden upon the city. With City-KURT Altreonic has completed the puzzle of urban electro-mobility. A City-KURT station is not only a charging station but also a meeting and waiting area and with wifi, it acts as a social hub. Another model acts as a microdepot for city-logistics. The result is that Altreonic's KURT is a real enabler to make it happen.

The technology is also available under an open technology license.



The multi-functional City-KURT Station as a micro-depot in the City-KURT City-grid

