

Rinspeed's modular vehicle "CitySnap" shows the way to series production in the fourth generation

Traffic gridlock in the city: Mobile parcel stations as a sustainable solution

Car visionary Frank M. Rinderknecht: According to a recent study, every other delivery vehicle is superfluous

"CitySnap" reduces traffic, emissions and costs - Focus on customer convenience and efficiency

Global online retail - predicted to grow by around four percent a year before Covid-19 - has exploded in the past eight months. The volume of goods and parcels from eCommerce has increased dramatically. An end to the exponential growth is not in sight. This unusual situation calls for new and innovative delivery solutions – preferably contactless, hygienic, and therefore extremely customer-friendly. With modular delivery vehicles that independently distribute, set down and pick up mobile parcel stations, the Swiss concept powerhouse Rinspeed presents an exciting logistics concept.

Against the background of the fast growing logistics demand from consumers and the development of urban living, one of the leading accounting and consulting firms conducted a case study on Rinspeed's "CitySnap" concept vehicle. The different scenarios - based on the fifty largest cities in Germany - show an impressive savings potential. Not only could the modular delivery vehicle drastically reduce the last mile costs but the number of delivery vehicles could also be reduced by up to 50 percent. This would be a boon for the congested city centers.

Automated driving, according to the takeaways from the 2020 CES in Las Vegas, will be a long time in coming. That is why the electrically powered "CitySnap" is initially designed for a human driver. However, his activity is limited to driving. Eventually, computers and sensors will take the driver's place in the self-driving vehicle. Loading and the "CitySnap" with the mobile parcel stations and unloading them is already automated today. The picking and packing of the parcel stations offers further automation potential.

Today's delivery mechanisms on the last mile are unsatisfactory and inefficient. Drones or intelligent robots also will not be able to do it cost-effectively in the medium term. Just-in-time meetings of recipient and delivery vehicle on the streets are unsuitable because it is exceedingly difficult to predict traffic and human behavior. However, if the vehicle waits until the parcel recipient can get there, the delivery rate falls and the delivery costs rise accordingly.

A new system that eliminates the weaknesses of today's delivery logistics is thus needed – the "CitySnap." The heart of the vehicle is an aviation-inspired quick-swap system that has been tried and tested there around the world under all weather conditions (PCT Patent Pending). In the "CitySnap," it makes completely new applications possible. Among other things, the desired service can now come to the customer quickly and easily, regardless of where the customer may be - at home or at work. These can be mobile parcel stations set down for a certain period in an easily accessible area in the customer's neighborhood. Even mobile points of sale such as "mom-and-pop health food stores" are conceivable.

The advantages of the innovative "CitySnap" are obvious. The use of the ingenious Rinspeed solution reduces the number of required delivery vehicles by up to 50 percent. In addition, this system saves 6 percent in carbon emissions - per parcel! The "CitySnap" also offers considerable savings potentials

in terms of costs. Compared to the conventional parcel delivery, the delivery costs drop by 17 percent per parcel, a cost advantage that can benefit the consumers. Moreover, to top it all off - the greater productivity of the employees thanks to the now eliminated delivery steps more than makes up for the costs for the mobile quick-swap parcel stations and the infrastructure.

Limited opening times, long approach routes and the endless and unpleasant courier caravans with the associated burden on the environment and traffic are thus a thing of the past. And quite as an aside: no more unattended shipments and no more thefts. And the really nice thing about it is: This innovative way of delivering parcels to customers faster and easier can already begin today - with a human driver. Parcel stations on wheels, right around the corner. Set up in easily accessible and well-lit places that allow the end customers to get to their parcels in a safe environment.

The "CitySnap" proof-of-concept vehicle, which will be presented to the world public in spring 2021, shows a solution for innovative, sustainable and efficient deliveries that can be implemented quickly. "Customer Focus" is the Rinspeed motto. The customer - and thus the human - is at the heart. Because Rinspeed boss Frank M. Rinderknecht is certain: "People want more and more convenience and simplicity in their lives." This innovative delivery solution offers both.

Talks with potential pilot partners are ongoing. As always when Rinderknecht is at work, the electric vehicle is brimming with technical and optical treats contributed by a notable network of global companies.