

## **Different medium motors or gearboxes can be mounted on a frame**

As in the bicycle/e-Bike industry, the automotive industry has brought more and more models onto the market in the last few years and has been converted to flexible platforms - in the bicycle industry this is the framework - also in order to meet the wishes of the consumers better.

Thus, even smaller piece numbers and niche models can be produced profitably. Until now the e-Bike industry has to build a separate frame for each medium e-Motor model - per frame model and in various sizes - and keep it in Stock, which is not an easy game. Frameworks often have lead times of more than half a year, which makes planning very difficult, but it is almost impossible to make more accurate forecasts for each frame model so far in advance.

Who additionally has bikes with medium-gear system (PINION, etc.) in the program, needs for this again another framework, which is intended for this.

OEMs, with the solution developed by the Swiss Developer and Designer Andy Muff, can optionally mount different e-motors or gearboxes on a frame. This is made possible by an adapter which is mounted as a connecting piece between the frame plate and the engine/gearbox housing. Andy's solution simplifies storage and increases the level of delivery. Especially medium-sized and smaller assembly companies can benefit enormously from this possibility because they do not have to plan more than half a year in advance for each frame and each motor model in the different frame sizes. Instead, depending on the request, the e-bikes and bicycles with mid-Motor and Gearbox can be assembled - thanks the high flexibility of the frame with adapter.

In order to be able to integrate different battery case shapes into the frame, Andy Muff has developed a solution using covers. These are placed on the down tube - the upper cover between the steer tube and the battery housing and the lower one between the battery housing and the frame plate - and are easy to replace. This results in a homogeneous and tidy design and protects the cable and plug.

You can see these two solutions at the EUROBIKE show at Andy Muff GmbH in Hall B5 - Booth 501.