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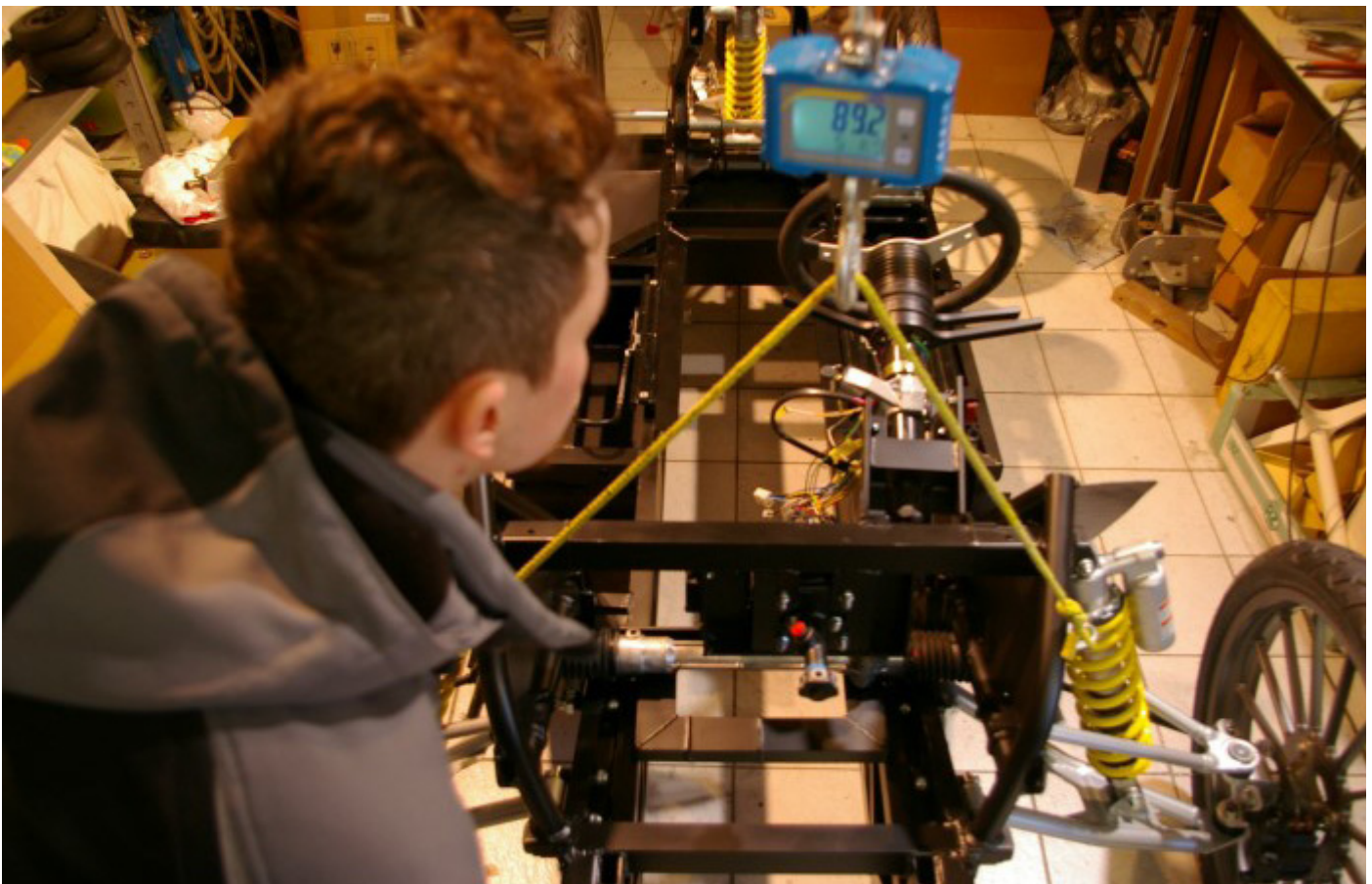
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Crane Scales

Application Report

In the area of vehicle construction, lightweight construction has become very well-known and extremely popular and is frequently discussed. Nevertheless, when looking at the car producers' pamphlets, customers will still find empty vehicle weights significantly exceeding 1000 kg, rarely around and even more rarely below 1000 kg. A considerable reduction in vehicle weight can be achieved by rigorously reducing accessories or by adopting a completely different approach when producing a vehicle.



During planning and construction, all components are weighed and solutions for further weight reductions are worked out by the staff in charge. Crane scales are the ideal tool to determine the actual mass of a sample as they can indicate the weight of the components at any time as well as the development of the vehicle weight.

This can help to find out quickly and without too much effort that some components are simply too heavy, which means that they have to be excluded from the vehicle production process either with or without replacement, whereas the replacement to be found must, of course, be much lighter than the original component. The PCE-CS 10000N crane scales turned out to be the right choice for the purpose of monitoring all stages during the long process of assembling a vehicle.

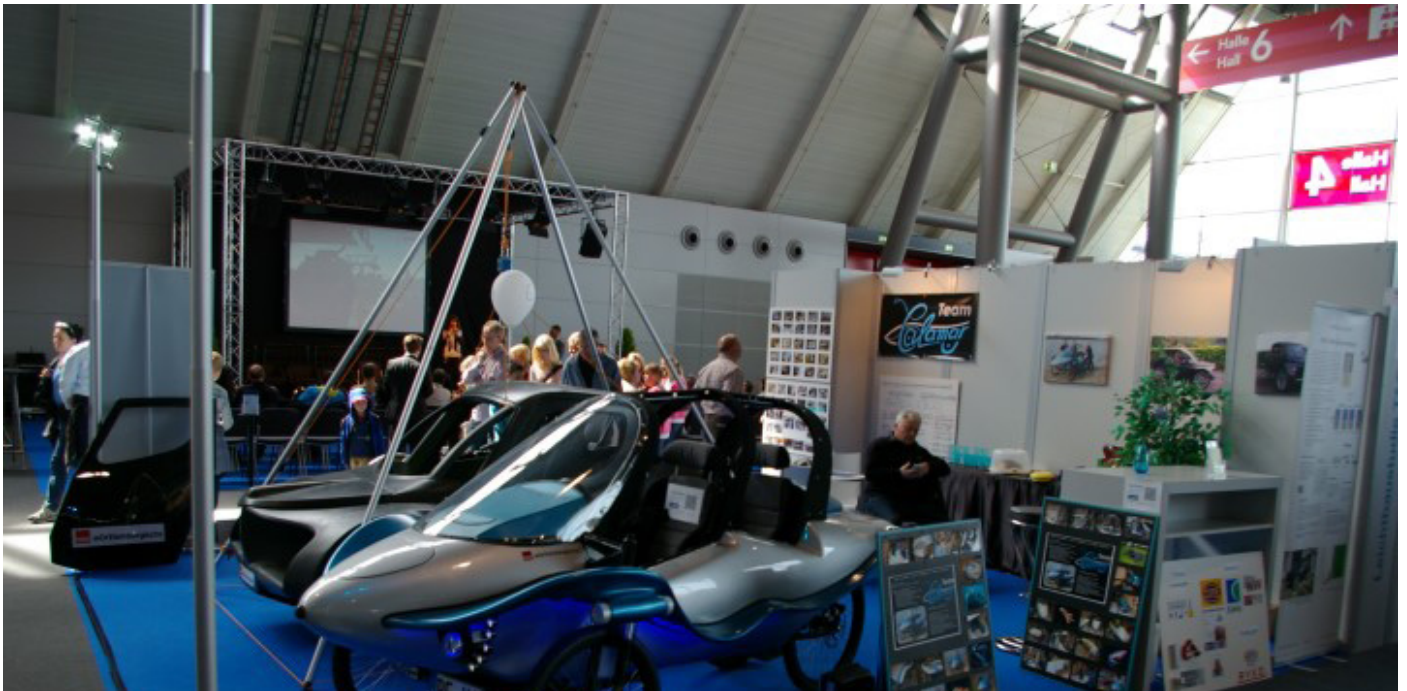


Our target is to design a vehicle which is a true lightweight, with a weight of approximately 350 kg and a small rechargeable battery pack. An additional rechargeable battery will increase its reach considerably. This type of rechargeable batteries which will add an additional weight of 100 kg to the vehicle, can be integrated optionally, which means that they do not necessarily have to be included.



Trade fair in Stuttgart, Germany

To draw some more attention to lightweight construction, we put a freely hanging car body made of carbon in the limelight at the i-mobility trade fair in Stuttgart, Germany, where we represented our company at our own fair stand from 9th to 12th April 2015.



The vast number of visitors at the fair got the chance to take a look at the above-mentioned PCE-CS 10000N crane scales and were thus able to convince themselves that we are absolutely serious about what we say and that every statement we make can be substantiated with the respective evidence.



The visitors were allowed to touch and move the freely hanging car body and some could not believe their eyes when they looked at the crane scales which testified that the car body indeed only has a weight of as little as 65 kg. However, the good readability of the display finally eliminated all doubts, even of the most sceptical visitors.

