Electric cars and their batteries

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The new battery-powered Tesla P85D with 700 hp can be recharged free of charge in various Swiss and international charging stations within 20 – 30 minutes. Here at one of the charging stations at the restaurant Mövenpick in Egerkingen. But if there are countless electric vehicles in the future, there will be long waiting times at the charging stations.

Some time ago, hardly any battery-powered electric vehicles were seen on the road. This is now changing gradually. What are the chances/risks of this drive technology? Are the E-vehicles, except in the driving operation, as a whole really so clean? What about the overnight power supply for people who have their E-Car park in the evening at a remote parking lot?

The drive technology for cars has been on the test for a long time. What kind of drive is finally implemented? Combustion engines, hybrid drive, battery drive, fuel cell? All have their- and disadvantages. The gasoline-in the next years, automobiles will probably still retain the main part in the drive technology sector. Currently, battery-powered E-vehicles for many people still too expensive and with the real range still lacking.

Suitable for further routes: the new battery-powered Tesla P85D with 700 hp explicitly covers the luxury car segment and runs up to almost 500 km, depending on the mode of operation, but is hardly in question for the average citizen (around 105 000 CHF). The author of this line was able to test P85D the new Tesla PDress and was especially enthusiastic about insane acceleration: If you touch display the driving variant on the extra large cockpit "Insanely" (insane), one is within incredible 3.3 s (!) at Tempo 100 and this practically without noise. No riot-like upturning, because the car has only a single gear and the full power of 700 PS is already available in the first second. Pleasing: a quiet noise instead of the infernal noise of a starting Ferraris and no smoke in the rear-view mirror. In the Tesla, you are brutally pushed into the seats from the first metre. Hardly any other supercar conveys a feeling "Rocket launch".

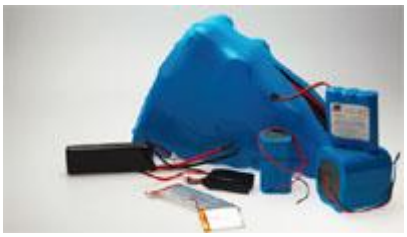
What's in the E-Car?

Who looks at the actual undercarriage without Chassis? Could notes how surprisingly few items of Tesla-E-Car. Two perfectly tuned electric motors, a transformer and some electrical/electronics are enough. In vain one looks for a gearbox, a tank and many other components necessary in gasoline. Instead of the tanks, one finds in the underfloor about 7000 Li-ions batteries that are specially packaged and expandable. Tesla researches heavily in battery sector-packs (Powerwall as a new product, etc.) and strives to vehicles soon reach up to 800 km.

Anyone looking at market opportunities finds that, for example, China, with its huge smog problems, is fully on electric vehicles and is making the purchase of gasoline engines massively difficult. There is now a state-controlled allotment in favour of the E-vehicles. As we know, the Chinese market is an extremely important market for worldwide vehicle manufacturers. There are also several disadvantages in the E-vehicles: The manufacture of the vehicle and the disposal of batteries for the E-vehicles are not exactly environmentally friendly in the overall view. Also, not every E-drivers owns a house with an easily accessible power plug on the outside wall. How do you, for example, easily

bring the long electrical cable to a car parked away? What is the general situation regarding the innumerable electric charging stations, when everyone is talking about saving electricity? Are there really everywhere enough charging stations? For instance, the extremely numerous charging cycles with super-Chargern within a short time, the batteries do not necessarily have to be spared in terms of service life. Questions about questions. Many of them are still unanswered.

Specific battery packs on customer request



The Swiss suppliers of Li-Ion packs will have little chance against foreign car manufacturers having their own Li-Ion packs. Their target audience is mainly the local manufacturers of industrial and mobile systems, which are increasingly in demand. The Accutron AG has for many years offered such professional Li-Ion-Battery-packs that are manufactured and delivered exactly to the customer's requirements. The following aspects have to be taken into accownt: in industry, telecom, IT, medicine and transport, etc. They are used more and more as main power supply or as secondary protection. For example, for financial institutions and telecom-Company in the event of a power failure, batteries that do not function as a backup cost millions of dollars – even human lives in hospitals. Prevention is always better than cure! Important: In the planning of battery systems the contact with really experienced and well-trained consultants is crucial in advance. Accutron AG is a real expert in battery-packs.

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