

The NTI SPbPU Competence Center of New Production Technologies designed the first in Russia serial electric car



The first electric car, which is ready for mass production and can be available to an ordinary customer as early as 2021, was designed in the Center of competence of STI SPbPU "New production technologies". All tests of the prototype will be completed in early December.

"Kama-1" is a compact urban smart crossover of economy class, capable of driving more than 250 km without recharging, speeding up to 150 km / h and withstanding frost up to -50°C . The car is designed for four passengers, and its price will be about one million rubles with the planned volume of sales of about 20 thousand cars per year.

"We have developed a complete passenger car, a compact crossover length of 3.4 meters and width of 1.7 meters. The car has four seats for passengers and a luggage compartment," Oleg KLYAVIN, Deputy Head of STI Center of SPbPU, Chief Designer of CompMechLab Engineering Center of SPbPU, spoke about the features of the electric car. "Kama-1' is focused on the mass market, from individual consumers to cartridge services and delivery services. The car can be equipped with various batteries. The basic equipment includes a battery for 33 kW/ h, which on full charge in the driving mode on the road will overcome up to 300 kilometers." In everyday urban mode, which requires constant braking and acceleration, energy consumption for heating and cooling, the power reserve will be about 250 km," the expert added.

An important feature of “Kama-1” distinguishing it from other electric cars is that, despite its compact size, it is, in fact, a crossover, pointed out the head of the NTI Competence Center and Engineering Center CompMechLab ® SPbPU Alexei Borovkov. According to him, the electric car has a high enough ground clearance, short front and rear overhangs - at the level of an average soft roader. By the way, in terms of speed characteristics this electric car is not inferior to the petrol ones: up to 60 km/h electric car accelerates in just three seconds, and its maximum speed will be 150 km/h. *“We already have a great experience in the creation of both universal platform for electric transport and platform for development of digital twins,”* explained Alexey Borovkov. *“This, as well as the experience and competence of our engineers and predetermined the successful completion of the project.”*

In “Kama-1” are partially used components of the leading European and Asian automakers already available in the world market. However, the vast majority of the new electric car parts are of domestic production. The NTI SPbPU Competence Center plans to continue development of electric transport components, such as batteries and electric motors, together with Russian high-tech companies. Besides, they can be safely disposed and recycled, giving them a second life.

All prototype tests will be completed in early December. The presentation of the “Kama-1” electric car will be held on December 10-11 in Moscow at the site of the 7th annual national exhibition VUZPROMEXPO-2020. It is planned that within the framework of the forum, an official handover of the pre-production model of the “Kama-1” electric vehicle to the industrial partner of the project, PAO KAMAZ, will take place.