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## **ZAMONAVIY ILM-FAN VA** INNOVATSIYALAR NAZARIYASI ILMIY-AMALIY KONFERENSIYA



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### PERMITTED DIMENSIONS OF VEHICLE DIMENSIONS AND MASS INDICATORS

ZAMONAVIY ILM-FAN VA INNOVATSIYALAR

#### **USMONOV AZIZBEK XXX**

Andijan Machine-building Institute, Faculty of Transport and Logistics, 3rd-year student +998999937328

**Abstract:** The article provides a summary of the permissible dimensions of vehicle dimensions and mass indicators, the main operational requirements for vehicles. Information about the movement of vehicles in the country is presented.

**Key words:** mass, transport weight, dimensions, length of the base, impact force on the surface.

**Annotatsiya:** Maqolada avtomobil o'lchamlari va massa ko'rsatkichlarining ruxsat etilgan o'lchamlari, transport vositalariga qo'yiladigan asosiy operatsion talablar haqida qisqacha ma'lumot berilgan. Mamlakatlat kesimida transport vositalar xarakatlanish jarayoni to'g'risida fukrlar keltirilgan.

Kalit so'zlar: massa, transport vazni, o'lchamlar, asosining uzunligi, sirtga ta'sir kuchi.

Аннотация: В статье даны краткие сведения о допустимых размерах, габаритах и массовых показателях транспортных средств, основных эксплуатационных требованиях к транспортным средствам. Представлена информация о движении транспортных средств по стране.

Ключевые слова: масса, транспортный вес, габариты, длина основания, сила удара по поверхности.

All cars and road trains used on public highways must meet the requirements of size and mass limitations. Such requirements are established by law in all countries. For example, in the CIS countries, according to the state standard, the weight and dimensions are limited. The height of loaded cars should not exceed 3.8 m, and the width should not exceed 2.5 m.

The length of trucks with a saddle and one semi-trailer should not exceed 20 m, for trucks with two or more trailers, it should not exceed 24 m. Above is the limit of forces exerted on the road surface by the axis of trucks. Even for Samasval cars, the weight of the axle falling on the roads of group "B" should not exceed 65 kN (6.5 tk). In all countries of the world, taking into account the growing trends of cargo transportation by cars and road trains, efforts are being made to improve some border indicators. For example, in the USA, it is planned to increase the length of cars from 2.44 m to 2.59 m, and the

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mass weight from 32.2 t to 56.7 t. 1989 of the Council of Ministers of the European Union.

According to the new standard for international transportation on March 14, the width of cars is 2.55 m, and for an auto-refrigerator with 45 mm side walls, it is 2.6 m. was established in 1993. It has been implemented since January 1.

New parameters of the mass and other dimensions of cars and motor trains have been developed. According to the design of this regulation, the mass weight of the single axle is 115 kN (11.5 tk), and the weight of the double axle is 180 kN (18 tk). Trains have a gross mass of 40 t, 180 kN (18 tk) for a single-axle vehicle and 250 kN (25 tk) for a three-axle vehicle, etc.

The main operational characteristics of cars include: dynamics, fuel economy, handling, stability, agility, smoothness of movement, capacity, strength, durability, suitability for maintenance and repair, increase - suitability for unloading operations.

The dynamics of the car is understood as the ability to move cargo and passengers at the maximum average speed possible under certain road conditions. The better the car's dynamics, the less time it takes to transport, and therefore the car's productivity is high, that is, it can transport a large amount of cargo or passengers over a certain distance in a given time unit. The dynamics of the car depends on its traction and braking characteristics. When the fuel economy of a car is called, it is understood the rational use of the fuel power that is burned for its movement.

Fuel economy is an extremely important operating characteristic, since fuel costs are the largest part of the total cost of ownership. The lower the fuel consumption, the lower the operating costs of the car. The carrying capacity of a car means the amount of cargo or the number of passengers it can carry at the same time. The capacity of trucks is related to its carrying capacity and internal dimensions of the body.

The capacity of passenger cars means the number of passengers moving at the same time. When the feature of the vehicle is suitable for loading and unloading (or getting off and getting off passengers), it means less labor and time spent on performing such operations. The controllability feature of the car is that it can change the direction of movement according to the position of its steering wheels. The controllability of the car has a significant impact on its level of traffic safety.

A vehicle's stability is its ability to resist buckling, skidding, and rolling. Vehicle stability is important in slippery road conditions and high-speed driving. The durability of the car is its ability to move in difficult road conditions and off-road (snowy or sandy banks, muddy areas). Smoothness of movement of the car is the fact that its body does not vibrate when moving at high speed on uneven roads. Durability is the ability of a vehicle to function



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without breaks and breakdowns that require time to repair. Durability of a vehicle is the ability of its parts to function without rapid wear and tear.

The ultimate goal of the theoretical analysis of the operational characteristics of the car is to increase the productivity of the TV and reduce the cost of transportation, which together are the basis of the science of cargo and passenger transportation in cars. Cars with special designs that take into account different natural and climatic conditions, for example, can be adapted to northern (cold climate), southern (hot climate), tropical climate and other conditions. The load-carrying capacity is defined by the car's volumetric load-carrying capacity, the load-carrying capacity corresponding to 1m2 of the surface of the underbody, the car's mass utilization coefficient and other parameters.

**Conclusions:** The permissible size and weight of a vehicle varies depending on the complete product or design of the vehicle, the manufacturer's specifications, the state's traffic laws and other factors. But, in general, the permissible size of the car (in imp ortant different forms) and mass indicators are as follows:

**Dimensional Specifications:** Length: The right rear side of the car (bumper to bumper) or the length of the rectangle is measured.

**Width:** The distance between neighbors, neighbors, or sides starting from the largest point of the vehicle.

**Height:** The distance between the top and bottom of the vehicle.

**Weight Specifications:** Gross: The total weight of the vehicle, full or empty. Axle weight: What percentage of the vehicle's total is for each axle (right and left). Tank Weight: How much weight a car can take in its tank. These figures are intended to provide general information about the vehicles, but the specifications of each vehicle may vary depending on the information released by the company. If you want to get information about a specific car, the official website of the car or other institutions that provide indicators will give you the information you need.

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