



## **ORGANIZATION OF CARGO TRANSPORTATION**

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**Abstract:** In this article, the organization of cargo transportation in road transport, loading and unloading equipment, characteristics of cargo, in turn, the requirements of specific cargo transport and loading and unloading equipment are discussed.

**Key words:** Cargo, automobile, road, material cost, carrying capacity, delivery, road junctions, safety, dangerous goods, gas, flammable solids, oxidizing agents, corrosive agents, radioactive substance, explosive substance, flammable cargo

Organization of cargo transportation means a system of transport operations related to the delivery of cargo to the designated place on time and without effort with minimal money and material costs. The basics of truck transportation and its planning are as follows:

- drawing up current (year, quarter, month) and operational (day, shift) cargo transportation plans based on the national economy plan;
- conclusion of contracts between customers (cargo owners) and motor transport company;
- organization of on-site work of the vehicle and its management;
- control, calculation and organization of the work to be performed.

Objects of cargo transportation include products of mining and processing industries, construction, trade and other organizations, as well as household goods. Objects that are accepted and transported for the purpose of delivery to the owner are called cargo. Cargo can consist of the same item (goods) and packages. All transported cargo must be measured in tons. Other sizes (liters, units, cubes, meters) are converted to tons. Most of the cargo is transported without weighing and is called unweighted transportation. The net weight of the cargo (goods) is called net, the weight of the cargo with tare is gross, and the weight of the tare is called tare. When organizing the transportation, the cargo is calculated by gross weight, measured in tons. Transport and loading-unloading





means are required to meet the characteristics of the goods, and the goods, in turn, must meet the requirements of certain transport and loading-unloading means. Most cargoes are susceptible to environmental influences. Some cargoes are exposed to corrosion (rust) due to humidity, some cargoes (perishable food items) are affected by high temperature, vegetables and wet fruits and some cargoes are affected by cold weather. . In the process of transportation, all cargoes are grouped according to various characteristics: for example, the type of vehicle required, the nature of placement (packaging), conditions of storage in warehouses, cargo class, etc. Depending on the type, there can be industrial, agricultural, construction, trade and utility loads. According to loading and unloading operations, cargoes are divided into bulk, bulk, and bulk cargoes. Bulk cargo is usually included in bulk cargo. Bulk cargoes include loose cargo (sand, gravel, coal, firewood, etc.). Spreadable cargo includes grain and similar products. When transporting grain cargo, they are calculated by the amount of space. According to their weight, cargoes are divided into normal weight and heavy cargoes. Permissible standard weight of bulk and grain cargo is 250 kg, for rolled cargo - 400 kg. Loads heavier than the specified amount are included as heavy loads. If the cargo weighs more than 4-5 tons, a special vehicle is required for its transportation. According to their size, cargo is divided into oversized cargo, that is, cargo that can be transported in a standard body of a car, and oversized cargo. Oversized cargo includes cargo with dimensions exceeding 2.5 m in height, 2.0 m in width and 3.5 m in length (except for long-dimension cargo). Oversize cargo includes cargo that is one-third of the body length and longer. Oversized cargo can be transported only with the permission of the state vehicle control (DAN) and with a red light (sign). Cargo is divided into 7 groups in the CIS countries according to the level of safety in transportation:

Group 1 - low risk (sand, gravel, soil, brick, etc.);

Group 2 - flammable goods (gasoline, acetone, film, etc.);

Group 3 - hot and dusty (cement, asphalt, lime, etc.);

Group 4 - caustic (acids and alkalis);

Group 5 - compressed and liquefied gases transported in cylinders;

Group 6 - oversize (dangerous goods due to their size);

Group 7 - explosive, toxic and radioactive substances.

According to the rules of international cargo transportation, European countries have adopted an international convention for the transportation of goods and goods under the name of the ADR agreement for the transportation of cargo





according to the recommendation of the expert committee of the United Nations according to the level of danger, in which the cargo is divided into the following 9 classes according to the level of danger:

1st class - explosive substance and goods;

Class 2 - gases: compressed or liquefied under high pressure;

Class 3 - liquid fuels;

Class 4.1 - flammable solids;

Class 4.2 - self-igniting substances;

4.3.-class - substances that emit gases as a result of contact with water;

Class 5.1 - oxidizing agents;

Class 5.2 - organic peroxides (extreme oxides);

Class 6.1 - toxic substances:

Class 6.2 - infectious (infectious) substances;

Class 7 - radioactive substances;

Class 8 - corrosive substances;

Class 9 - various dangerous substances and goods (not included in the above classes). Use of vehicle carrying capacity. This indicator is related to the volumetric weight of the cargo (relative weight) and preparation for transportation (placement, tying, pressing, etc.), and the cargo is divided into 4 classes:

1st class - the level of use of the car's carrying capacity is 1;

2nd class - the level of utilization of the car's carrying capacity - 0.9-0.71 (0.8);

Class 3 - the level of utilization of the car's carrying capacity - 0.70-0.51 (0.6);

Class 4 - the degree of utilization of the car's load carrying capacity - 0.5 and less.

Yuklarni bu xilda tasniflash 1 tonna yuk tashish tarifi (haqi)ni belgilash uchun kerak. A special classification has been developed to include goods in different classes. Some cargoes may belong to different classes depending on their readiness for transportation. For example, pressed hay (straw) belongs to class 2, and unpressed to class 4. Cargo is also classified according to safety equipment and labor protection requirements. According to the conditions of transportation, cargo can be classified as follows:

- simple, that is, does not require any special equipment;

- perishable (food products), special sanitary and temperature conditions are necessary for their transportation;

- sharp and unpleasant smell;

- living creatures (cattle and birds). For the transportation of such goods, vehicles must be adapted to feed the transported goods on the road and clean





their garbage, etc. According to storage conditions, cargoes are divided into 4 groups:

- not damaged by precipitation and temperature changes (sand, gravel, crushed stone, coal, etc.). Such loads can be stored in open areas.
- damaged by precipitation (metal and metal products, brick, etc.). Such cargoes must be stored in closed sheds.
- loads that break due to precipitation and temperature changes. It is necessary to store such goods in closed and insulated hot (cold) and moderate temperature rooms (perishable goods in refrigerators, non-freezing liquids in heated warehouses, etc.);
- cargo stored in special tanks (containers) (liquid fuel, oils, etc.). According to the nature of arrangement (packaging), cargo is divided into bundled and unbundled types. Cargo classification is necessary for the better use of the vehicle, transportation methods, and the use of mechanization in loading and unloading operations.

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