

CHOICE OF CARGO ROLLING STOCK

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Rolling stock is the main element of transport logistics. It is part of the transport system designed for the movement of goods and passengers.

The rolling stock consists of a variety of vehicles. Vehicles are technical devices used for carrying goods and passengers, they are motor vehicles such as tractors, self-propelled road-building machines, aircraft, ships, railway rolling stock. There can be road and off-road vehicles.

The rolling stocks of road transport are cars, articulated lorries, trailers and semi-trailers. The rolling stock is used for transport and non-transport functions: transportation of goods, passengers and special equipment for various operations [1].

The choice of rolling stock depends on the weight of the cargo to be transported. The carrying capacity of the rolling stock is divided into different categories:

- rolling stock of especially small capacity. It includes cars with a capacity of 0.5 tons;

- rolling stock of light capacity. It includes cars with a capacity of 0.5 to 2 tons;

- rolling stock of medium carrying capacity. It includes cars with a capacity of 2.1 to 5 tons;

- rolling stock of high carrying capacity. It includes cars with a capacity of 5.1 to 15 tons;

- rolling stock of particularly large carrying capacity. It includes cars with a capacity of more than 15 tons [2].

There is another classification of the rolling stock depending on the type of cargo transported. The first one is a general-purpose truck. These are on-board trucks carrying all types of goods in pack-ages.

To carry liquid goods, a tank-vehicle or a tractor with a tank-trailer are used. If bulk cargo is required to transport, dump trucks are used. A dump truck is a car with a special body for bulk cargo, intended for side and rear unloading.

Refrigeration vehicles or road trains with a refrier trailer are used for the transport of heat-sensitive goods. The refrigerant maintains the desired temperature for the products throughout the transport time [3].

There are separate vehicles for the transport of logs, such cars are called logging trucks. They are often equipped with manipulators for loading logs onto the trailer.

There is also a specialized transport required for transporting a certain type of cargo, e.g. a garbage truck. The category «off-road mobile machinery» is a vehicle with or without bodywork, which is not designed to carry goods on the road.

Freight in rail transport is carried by freight trains. The locomotive can pull cars, for different types of cargo. There are different types of wagons: tanks for liquid goods, bulk wagons for semi-wagons, platforms for very large and heavy loads. In maritime transport, different types of cargo are carried by different vessels. Tankers are used for liquid cargo. Container ships or barges are used for goods in packaging [4].

Thus, the main parameters for the choice of rolling stock are the volume and mass of the cargo, the type of cargo, as well as the conditions of carriage. Depending on the task, road, rail and sea transport is used.

References

1. Подвижной состав автомобильного транспорта [Electronic resource] – Mode of access: https://трансавтоцистерна.рф/press-centr/stati/harakteristiki_gruza_i_transporta/podvignoi_sostav_avtotransporta/. – Date of access: 13.03.2024.

2. Критерии выбора подвижного состава [Electronic resource] – Mode of access: <https://spravochnick.ru/logistika>. – Date of access: 13.03.2024.

3. Factors influencing the choice of rolling stock [Electronic resource] – Mode of access: <https://7universum.com/ru/tech/archive/item/15056>. – Date of access: 13.03.2024.

4. How to Find Rolling Stocks [Electronic resource] – Mode of access: www.ehow.com. – Date of access: 13.03.2024.