

## Tank car for transportation of light oil products, model 15-629 (articulated)



### Description

The model 15-629 tank car is designed for the transportation of light oil products along main railroads in the 1520 mm gauge area.

The model 15-629 tank car consists of two sections connected by a spherical articulated connector. The design features of the tank car allow for the most efficient possible use of the car's loading capacity when transporting light oil products with a density of up to  $0.84 \text{ t/m}^3$ , thus solving the problem of underloading when standard four-axle cars are used. The total volume of the two tanks stands at  $160 \text{ m}^3$ , and the loading capacity of the car is 108 t. Together, these specifications ensure the transportation of a quantity of cargo similar to that transported by two standard tanks with 100% axle load usage.

Existing restrictions attributable to the infrastructure of the consignors and consignees were taken into account in the design of the car. The 15-629 tank car's length over coupler pulling faces is 24,040 mm, while the length of one section is 12,020 mm, which is comparable to the length of a standard four-axle tank. The tank car's loading and unloading valves and fittings and their placement are coordinated with the spacing of the loading and unloading rack. Thus, the 15-629 tank car can be serviced at standard terminals, including alongside four-axle tank cars. The Tikhvin-produced tank car has a service life of 40 years.

Designed by: All-Union Research and Development Centre for Transportation Technology, LLC.

Producer: TikhvinChemMash, JSC.

## Specifications

Technical specification	Model 15-629
Payload capacity, t	
car	108
section	54
Boilers space, m <sup>3</sup>	160
Tare weight (min-max), t	38,8-42
Length over coupler pulling faces, mm	24,040
Base, mm:	
car	17,770
section	8,850
Height above rail top, mm	4,671
Maximum width, mm	3,254
Gabarit as per GOST 9238-2013	1-T
Bogie model	18-9855
Estimated static load from the wheel set on rails, kN (tf)	245 (25)
Regulatory overhaul period, thousand km (years)	500 (8)*
Service life, years	40

\*According to the results of controlled operation, the period can be extended.