ОБЪЕДИНЕННАЯ ВАГОННАЯ КОМПАНИЯ

Hopper car for transportation of grain, model 19-6978 (articulated)

Description

The 19-6978 six-axle articulated-type hopper car is designed for transportation of grains and other grain mill products. This car is unrivaled at the CIS market.

The car body volume increased up to 160 m³ allows efficient transportation of the entire range of bulk goods using the 113.5 t payload in full. These specifications were attained owing to the articulated design of the car: its two sections are joined with the SAC-1 articulated connector, which ensures flawless passing through track curves including those with small radii as well as gravity humps.

The design of the car takes account of infrastructural peculiarities, which allows operation at most handling terminals.

Eight loading hatches are located as close as possible to one another ensuring that the entire car body is filled evenly. The mechanisms of the locking and sealing devices allow faster car processing and lower costs of the locking and sealing devices. The tilt angles of the hopper box and end walls are selected so as to ensure complete unloading (hopper boxes located in the lower end parts of the car body eliminate blind spots) and enhance unloading convenience and speed.

The increased load per meter of track of 7.74 t/m allows a considerable rise in railway throughput capacities and provides savings on transportation costs for consignors and operators.

The car is fitted with model 18-9855 bogies with the increased 25 tf axle load and integrated brake actuation and has a system of individual braking at each bogie. This boosts reliability and operating efficiency of the car compared with conventional solutions in this field. Longer intervals between repairs allows lower life-cycle costs.

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

Producer: Tikhvin Freight Car Building Plant, JSC.

Specifications

Technical specification	Model 19-6978
Payload capacity, t	113.5
Body space, m^3	160
Length over coupler pulling faces, mm	19,380±25
Wheel base, mm	13,600
Gabarit	1-T
Load per meter of track, t/m	7.74
Hopper box and end wall tilt angles	50˚
Number of loading/unloading hatches (in each body section), pcs	4/6
Bogie model	18-9855
Estimated static load from the wheel set on rails, kN (tf)	245 (25)
Regulatory overhaul period, thousand km (years)	500 (6)*
Service life, years	40

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