

Solid body gondola car model 12-1592

[Comparison of cars of model 12-1592 of various modifications.](#)

Specifications of the wagon

Model:	12-1592
Model number:	78
Name:	Gondola car with solid body
Wagon type:	4-axle gondola car with solid body without brake pad
Additional feature:	Characteristics does not contain
Model feature:	PV deaf-bottom with a deaf body
Accounting specialization of the model:	universal gondola car
Manufacturer:	Open joint-stock company "Mariupol plant of heavy engineering" (stamp 143)
Project number:	1592.00.000
Specifications:	TU24.00.807-82
Body material:	09G2S, 09G2D, 09G2, 09G2SD-12
Cart:	18-100
Wagon axle:	four
Track width:	1520 mm
The presence of a transitional platform:	Not
Parking brake available:	There is
Possibility to install buffers:	Not
Design speed:	120 km/h
Wagon tare (minimum):	20.1 t
Wagon tare (maximum):	22.0 t
Load capacity:	71.0 t
Volume:	83.0 ^m 3
Maximum calculated static load from the wheelset on the rails:	225.4 kN
Maximum calculated linear load:	65.0 kN/m
Wagon base:	8650 mm
Floor area	36.55 ^m 2
Car interior dimensions	
Height:	2240 mm
Width:	2878 mm
Length:	12700 mm
External dimensions of the wagon	
Height from rail head level:	3474 mm
Maximum Width:	3134 mm
Dimensions according to GOST 9238-2013:	0-VM

Length along the axes of automatic couplers:	13920 mm
Frame length:	12700 mm
Automatic coupler height from the level of the rail head:	1040..1080 mm
Starting year of series production:	1986
Year of the end of serial production:	1997
Normative service life:	22

Overhaul runs and timing of scheduled repairs for the car mod. 12-1592

Depot repair (DR) after	The buildings	3 years
	Depot repair (DR) to the first overhaul (CR)	1 year
	Depot repair (DR) after the first overhaul (CR)	1 year
	Capital repairs (KR)	2 years
	Overhaul with service life extension (KRP)	3 years
Overhaul (KR) after	The buildings	11 years
Mileage after	The buildings	210 thousand km
		3 years
	Depovsky repair (DR)	110 thousand km
		2 years
	Capital repairs (KR)	160 thousand km
		2 years
	Overhaul with service life extension (KRP)	210 thousand km
		3 years

Photos of the car



Detailed description of car model 12-1592

OKP code 31 8224 1246

A four-axle specialized gondola car with a carrying capacity of 71 tons with a solid body is designed to transport mainly bulk, lumpy cargo that does not require protection from atmospheric precipitation, with unloading on car dumpers.

The gondola car is manufactured in U version according to GOST 15150-69*.

The gondola car is all-metal, has a welded load-bearing body, running gear, a brake and an automatic coupler.

The body frame consists of a center beam welded from two standard Z-sections No. 31, two box-section pivot beams, two end beams, four transverse intermediate beams of an I-type and two longitudinal supporting beams.

The side wall is a frame frame, which includes an upper trim made of a 6 mm thick bent profile, a lower trim made of a hot-rolled corner 160x100x9 mm, six vertical posts of a special omega-shaped profile and two corner posts of a welded structure made of a sheet 8 mm thick. The wall frame is covered with sheathing made of a bent profile with periodic corrugations, consisting of two profiles welded together, the upper one 3.6 mm thick and the lower one 4.5 mm thick.

The end wall of the gondola car has an upper trim made of a bent profile, two side channels No. 14 in accordance with GOST 8240-72 *, two horizontal 3 stiffening belts made of an omega-shaped profile 110x135x55x6 mm and sheathing made of sheet steel 5 mm thick. The lower stiffening belt is connected to the end beam by three short posts.

Supporting structure material: steel grades 09G2D and 10HNDP (GOST 19281-73*).

The car is equipped with a pneumatic automatic brake with an air distributor 483M with a cargo auto mode. The lever brake transmission, which allows the use of composite and cast iron brake pads, is equipped with an auto-adjuster for the output of the piston rod of the brake cylinder. There is also a manual parking brake with a drive according to OST 24.290.01-78.

The car is equipped with typical SA-3 automatic couplers with spring-friction dampers, steps and handrails for couplers, as well as brackets for signal lights (OST 24.159.106-76).

The running gear of the car is two two-axle freight bogies model 18-100 (GOST 9246-79*) with cast side and bolster beams made of low-alloy steel with central spring suspension and wheel sets with axle boxes equipped with roller bearings.

Manufacturer - Production Association "Azovmash", Mariupol.

Other modifications of the car model 12-1592

- [Solid-body gondola car model 12-1592, OAO MZTM, production since 2001](#)
- [Solid-body gondola car model 12-1592, JSC "AZTM", production since 2005](#)

The characteristics of various modifications are generally similar, manufacturers, load capacity, bogie models may differ. You can use the wagon comparison service to see the differences (the button under the heading of the wagon model at the top of the page).