

## Flat car for the transportation of large-capacity containers, Sgmmns 40'



### Description

Sgmmns 40' flat car is designed to transport all container types, including tank containers made according to ISO 830-99 with increased gross weight: two 20-foot containers with 37.25 t gross weight each, one 40' standard container with 40 t gross weight, or a specialized 40-foot container with a gross weight of 74.5 t. The car is equipped with bogies with an axle load of 22.5 t for operation on a gauge of 1435 mm.

The flat car is characterised by the improved characteristics among analogues on the European market. In particular, the tare weight is reduced to 15.5 t (mass widespread model weight starts from 16 t). The car load capacity is 74.5 t, and the loading length is 40 ft. The flat car is equipped with high-strength movable locator pins to place containers in various combinations. The loading height from the level of rail top is 1,155 mm, which allows transporting containers over the whole network of European railways with a track gauge of 1435 mm.

Production processes and components employed to manufacture the Sgmmns 40' type flat car conform to European standards EN 10025-2:2004, EN 10204:2004, and EN 15085-4:2008. The car has a vehicle type approval from the European Union Agency for Railways with approval for operation on European Union railways in accordance with Directive (EU) 2016/797.

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

## Specifications

Technical specification	Model Sgmmns 40'
Load capacity, t	74,5
Tare weight, t	15,5
Loading length, ft	40
Length by buffers, mm	13,600
Flat car base, mm	8,000
Flat car width, mm	3,050
Loading height from rail top, mm	1,155
Container size types	40 ft (1AAA, 1AA, 1A, 1AX), 20 ft (1CC, 1C, 1CX) ISO 830-99, 40 ft specialized containers with a gross weight of 74.5 t
Number of movable container pins, pcs.	4
Number of stationary container pins, pcs.	4
Bogie model	Y25
Estimated static load from the wheel set on rails, kN (tf)	220,5 (22,5)
Maximum speed, km/h:	
- empty flat car	120
- with an axle load of 22.5 t	100
Service life, years	24
Regulatory overhaul period, years	6