

Innovative bogie

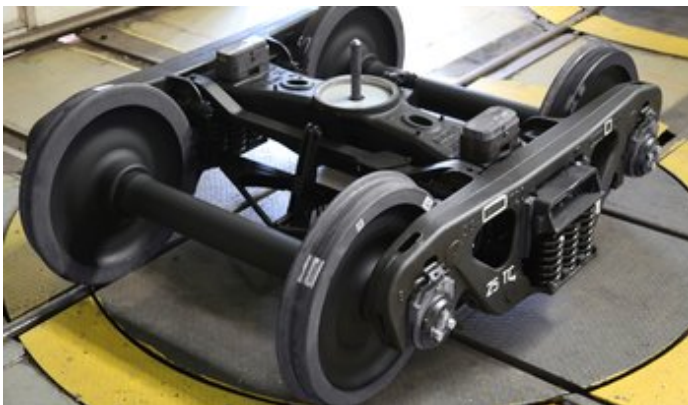


Description

The 18-9855 and 18-6863 bogies, developed by All-Union Research and Development Centre for Transportation Technology, are used to equip new generation freight cars in the territory of "1520 gauge". Designed in line with state-of-the-art global technologies, these bogies are revolutionary in terms of safety, operation reliability and life cycle costs, and have no analogues in the CIS.

While its axle load is higher, the new generation car produces a lower impact on the track (3% smaller than that of standard freight cars). Wear protecting elements installed in model 18-9855 bogie increase its overhaul period up to 1 000 000 km or 8 years. With improved dynamics, high-hardness wheels and special brake shoes, these bogies are better protected from wear, less susceptible to chips, and, therefore, have a longer service life of up to 12 years.

The operation of new generation freight cars generates extra profits for the operator, while reducing the cost of transportation per ton of freight for the consignor. The economic effect results from a smaller number of freight cars required for shipment and lower shipment costs.



Specifications

| Technical specification | Model 18-9855 | Model 18-6863 |
|---|--------------------|--------------------|
| Estimated static load from the wheel set on rails, kN (tf) | 25 (245.2) | 27 (26.5) |
| Regulatory overhaul period, up to million km (years) / thousand km (years) | 1 (8) | 800 (8) |
| Service life, years | 32 | 40 |
| Bogie weight, kg | 5,000 | 5,500 |
| Bogie base (standard), mm | 1,850 | 1,870 |
| Car design speed, km/h | 120 | 100 |
| Distance between the load application lines to the necks of wheelset axles and the longitudinal axis of spring kits, mm | 2,036 | 2,036 |
| Distance between the longitudinal axes of the side Slides mm | 1,524 | 1,524 |
| Diameter of the wheel rolling circle, mm | 957 | 957 |
| Height from rail top level to a thrust bearing surface, mm, in a free state / under empty wagons (wagon tare 21 tons) | 830/795 | 815/794 |
| Difference between the deflections unladen and laden carriage, mm | 55 | 71 |
| Estimate the static deflection of the suspension, mm, under empty wagons (wagon tare 21 t) / under laden wagon (wagon 100 gross tons) | 17/49 | 18/70 |
| Side slides | tension springs | tension springs |