Wagon Eamos-z

4-axled toppling-over wagon is destined for transport of loose goods, which don't change slide properties essentially under atmospheric agents influence, such as gravel, broken stones and similar materials, with capacity rating not over 1,7 t/m^3 and friction angle not over 42°.

Wagon loading can be achieved by free drop of goods from tanks, by wheel loader or from mobile band. Loading means volume cannot be higher than 6 m^3, height from wheel loader to wagon floor can't be over 2 m. Wagon discharging is accomplished with toppling over of wagon basket, by air cylinders, on either side of railway track.

Wagon is built according to UIC 505-1 standard. Wagon parts comply to UIC, RIV and Croatian Railways standards. Wagon parts production is conducted with auxiliary devices to achieve parts replacement possibility.

Materials used for wagon construction match quality standards for wagon production. Materials are delivered to manufacturer with atests for every kind of material, by shape and sort.

Wagon is capable for travelling in S regime.

Technical data

Track gauge: ..... 1435 mm
Number of axles: 4
Length over buffers: ..... 13040 mm
Length over chest beams: ..... 11800 mm
Bogies distance: ..... 8000 mm
Wagon width: ..... 3060 mm
Axle pressure of fully loaded wagon: ..... 200 kN (250 kN)
Wagon basket volume: ..... 32 m^3
Height above top of rail: ..... 2890 mm
Tare weight: ..... 31 t
Max. payload: ..... 49 t (59 t)
Curvature radius: ..... 60 m

Underframe

Wagon underframe consists of two end walls and intermediate part.
End wall part has space for automatic clutch installing, according to UIC 530-5, appendix 3. End wall part has chest beam for buffer reception. It ends with main transversal support.
Intermediate part of underframe has closed box construction with side consoles for wagon basket bearings and air cylinder bearings for wagon basket toppling over.

Bogie

Two Y 25 Lsd1 bogies are used for this type of wagon. Bogies can be used for axle pressure of 22.5 tons.

Coupling gear

Coupling gear is frontal-type, according to UIC 520 and UIC 521 standard, with elastomer-type spring type RG 15 (TS-2), tensile hook is type B, suspension force 1000 kN and clutch 850 kN suspension force.

Buffers

Buffers are in A class (30 kJ), with 4 rectangular 450 x 340 mm buffer plates. Buffer spring is made of Tesc Pak elastomer material.

Braking equipment

It consists of middle leverage, hand brake with leverage and air braking device.
Middle leverage consists of 16" brake cylinder, piston and cylinder levers, coupling levers and middle tensile levers. Mechanical switch 'empty - loaded' type and levering regulator DRV-2A-H1-600 are also installed.
Hand brake is parking-type i.e. wagon is braked-on by pressing to wheels on ground.
Air braking device consists of O-GP-16" distributor, Est 3f / S3 HBG 300 type, gear box device 'passenger - goods', 125 l auxiliary tank and air brake pipeline.
Braking equipment functionally complies to UIC-541-1 standard.

Stairs, holders, signal supports, leaflet frames and dragging hooks

Stairs and holders are made according to UIC 535-1, signal supports according to UIC 532, leaflet frames according to UIC 575, dragging hooks according to UIC 536 standard.

Wagon case

It consists of floor base, side walls (wagon doors), end walls, side walls opening and closing mechanism and auxiliary devices: locking door mechanism and air installation for wagon toppling over

Painting and inscriptions

Wagon is painted and marked with RAL 8012 paint, according to UIC, RIV and Croatian Railways standards. Paint is epoxi-chloride bitominous type, with shade according to buyer's request.