

Appendix 3/1

TECHNICAL DESCRIPTION OF Eas WAGON TYPE WITH THE PERFORMED MAJOR OVERHAUL

Subotica, January 2006.

Technical description No: 01 - 04 - 038
Dispositional drawing No: 01 - 13 - 038
01 - 13 - 008

Basic dispositional drawing No:
42 - 00 - 000/R (VMC Sarajevo)

1. ASSIGNMENT OF THE WAGON

The wagon is destined for the transportation of all kind of mealy and bulk goods.

Wagon's construction, made and the equipment of the wagon are in everything in accordance to the valid UIC, RIV and JŽ regulations.

Construction of the wagon assures the complete replacement of standard and unified parts and assemblies, in accordance to the UIC 570.

The wagon is capable for the international traffic on all standard tracks, except the tracks in Great Britain.

2. BASIC TECHNICAL CHARACTERISTICS

-	Track width	1.435 mm
-	Gauge	UIC 505-1
-	Wagon length over buffers	14.040 mm
-	Wagon wheel base	9.000 mm
-	Underframe length	12.800 mm
-	Useful width of the floor	2.720 mm
-	Loading surface	35 m ²
-	Loading volume	71 m ³
-	Dead weight of the wagon	cca 21,5 t
-	Loading capacity	cca 58,5 t
-	Maximum axle load	20 t
-	Bogie	Y25 Cst
-	Max. speed:	
-	Empty wagon	120 km/h
-	Loaded wagon (S regime)	100 km/h
-	Air brake	O-GP - 16"
-	Minimum radius of the curve	35 m
-	Loading limits:	

	A	B1	B2	C
S	42,5	48,7	50,5	58,5
120		00,0		

3. MAIN ASSEMBLIES

3.1 Underframe

The underframe is made of steel plates and rolled and/or bent steel profiles.

The underframe completely fulfills the requests of UIC 530-1 and UIC 530-5 for the future mounting of the automatic coupling.

The underframe endures all loads that appear during the normal exploitation of the wagon, without exceeding the permitted tensions and without the permanent deformities.

3.2 Bogie

The bogie is standard, Y 25 Cst type.

The major overhaul of the bogie is done in accordance to the Rule Book of JŽ N° 250 with the reconstruction of the Lenoar's system, in accordance to the provision of TK JŽ from February 12th, 1990. (The elements of the Lenoar's system are taken from the bogie Y25Rs2a type.)

The wheels sets are equipped with:

Option 1

Used monoblock wheels, quality R7T, whose diameter of a rolling circle is minimum φ860 mm (after machining treatment),

Option 2

New monoblock wheels quality R7T, whose diameter of a rolling circle is φ920 mm.

3.3 Drawing gear

The drawing gear is in accordance to the UIC 520 and UIC 521.

It's equipped with the elastic elements with the ring spring.

The screw coupling has the strength of 850 kN, draw-hook is of 1.000 kN, in everything in accordance to the UIC 520.

The major overhaul of the drawing gear is done in accordance to the Rule Book of JŽ N° 242/5.

3.4 Buffing gear

The wagon is equipped with the buffers of 590 kN, with the stroke of 105 mm (the elastic elements are with the ring spring). The major overhaul is done in accordance to the Rule Book of JŽ N° 242/5.

3.5 Stop brake

If the wagon is equipped with the stop brake, it is with the performed major overhaul.

3.6 Air brake

The wagon is equipped with the air brake, type O-GP - 16", which fulfills all the requests of UIC and RIV 2000. The major overhaul of the air brake is done in accordance to the Rule Book of JŽ N° 245.

3.7 Steps, handles and signal holders

Steps, handles and signal holders correspond to the UIC 535-2 and UIC 536.

3.8 Painting and inscriptions

The whole wagon is cleaned and protected with basic, intermediate and final coat (according to the Technology of anti-corrosion protection).

Inscriptions on the wagon are done in accordance to the regulations of UIC and RIV and according to the instruction of the end user (Buyer).



3.9 Wagon box

The wagon box is made of steel plates and rolled and/or bent steel profiles.
There are two major subassemblies on the wagon box:

- Side walls
- Frontal walls

On each side wall, there are two (Dispositional drawing :01 -13 - 038) i.e. three (Dispositional drawing 01 - 13 – 008) two-wing doors.

Locking of the side and the frontal doors is solved with the standard lockers.
Damaged and deeply rusted plates of the wagon body are replaced with new ones.

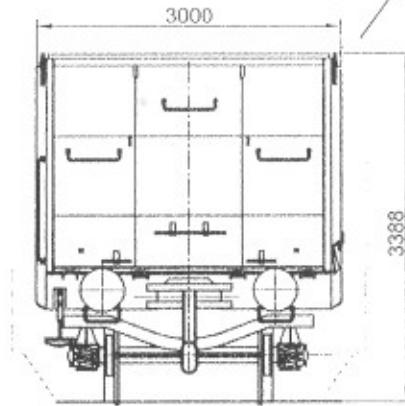
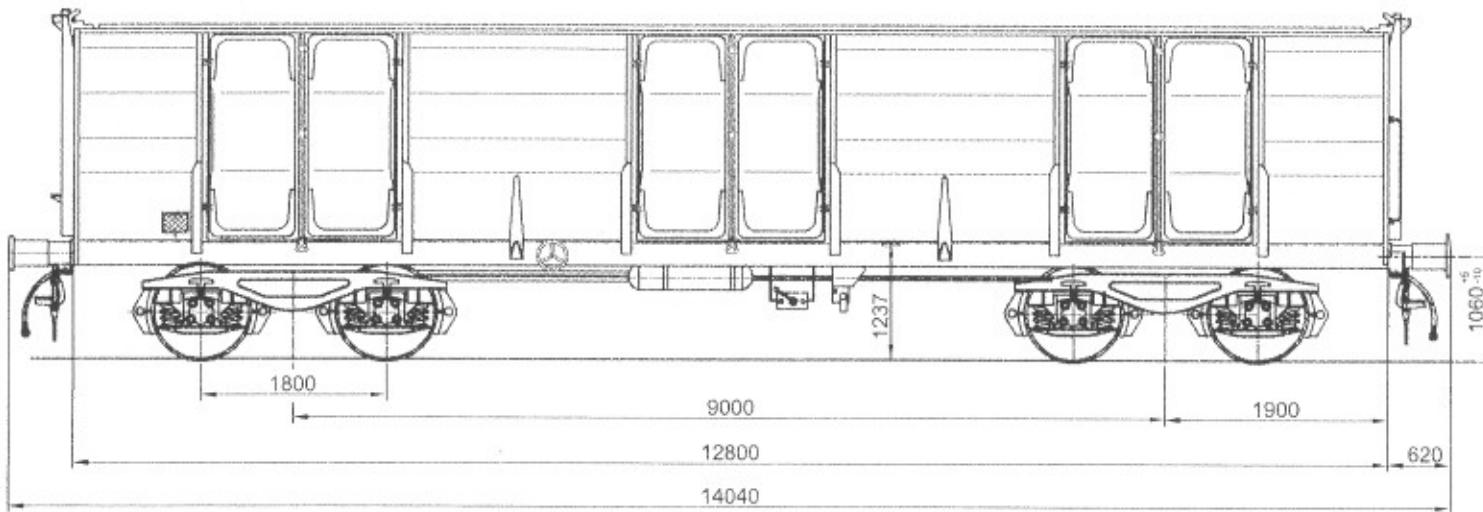
3.10 Wagon floor

The wagon floor has been made of pine boards (in accordance to the UIC 844-1).

3.11 Earthing

The earthing of the wagon corresponds to UIC 533.

Written by: L. Mačković
Director of Design and Development Department



Tehnički podaci :
Technical data :

- Sopstvena masa cca 21,5 t
- Dead weight

- Nosivost kola cca 58,5 t
- Loading weight

- Ukupna masa kola 80 t
- Total car weight

- Opterećenje po osovini 20 t
- Axle load

- Tovarna površina cca 35 m²
- Loading surface

- Tovarna zapremina cca 71 m³
- Loading volume

- Granica lovarenja :
- Limit loadings :

S	A	B1	B2	C
120	42,5	48,7	50,5	58,5

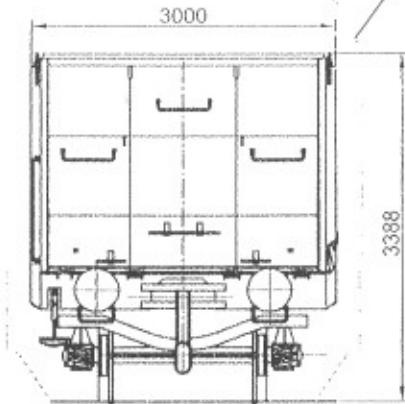
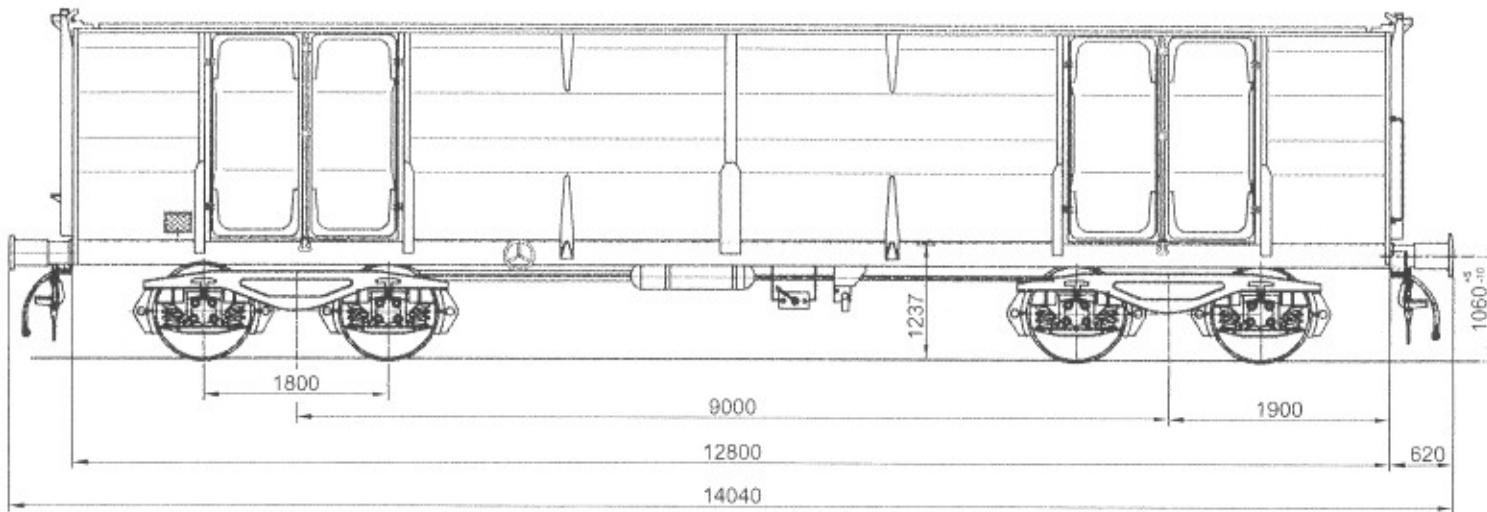
100,0

- Pojedinačni tereti
- Isolated loads

m	1
a - a	3 - 23 - 26
b - b	5 - 27 - 30
c - c	9 - 39 - 58

- Tehnički opis: 01-04-008
Technical description:

JUS ISO 27600m			
06.2005	06.2005	06.2005	06.2005
Alteksat U	Alteksat U	Alteksat U	Alteksat U
Avic B	Avic B	Avic B	Avic B
Pepav M	Pepav M	Pepav M	Pepav M
BAČKAINVEST			
01-13-008		01-13-008	
VMC 42-00-0003R			



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- Isolated loads

m	l
a - a 3	23 26
b - b 5	27 30
c - c 9	39 58

SOPSTVENA OTVORENA TERETNA KOLA EAS		JUS ISO 2768m	
01-13-038	01-13-038	01-2006	01-2006
Milivojević M	Pavlović Z	Vuković S	Vuković S
4 - OSOVNA OTVORENA TERETNA KOLA TIPO Eas	4 - AXLE OPEN FREIGHT CAR OF Eas TYPE	VMC 42-00-000	VMC 42-00-000