

Železničná spoločnosť Cargo Slovakia, a.s.

FREIGHT ROLLING STOCK CATALOGUE

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ABBREVIATIONS

AVV General Contract of Use for (Freight) Wagons

EPP European Pallet Pool

FO Natural Person

IČO Company Identification Number

IRIS-N Integrated Railway Information System of Freight Transport

ISP Information System for Operation Support

OSŽD Organization for Railways Cooperation

PGV Agreement on the Use of Freight Wagons in International Traffic

PO Legal Person

PTV Transport and Tariff Bulletin

RID Regulation concerning the International Carriage of Dangerous Goods by Rail,

Appendix C of Convention concerning International Carriage by Rail

RIV Convention on Mutual Utilization of Cargo Carriages

SNAS Slovak National Accreditation Service

TR 1 Freight Tariff – 1111.00

UIC International Union of Railways

ZSSK CARGO Železničná spoločnosť Cargo Slovakia, a.s.

Ž PP/N Transport Rules of Železničná spoločnosť Cargo Slovakia, a.s.

ŽSR Železnice Slovenskej republiky

1. INTERNATIONAL FREIGHT WAGONS MARKING

Numerical and letter freight wagons marking is unified for all railway undertakings that are UIC (International Union of Railway) and OSJD (Organization for railways cooperation) members. The marking has been set to meet the transport needs.

Wagon keepers are also obliged to use the numerical and letter marking.

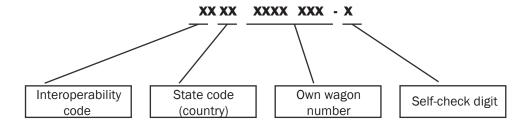
Freight wagons are marked with necessary signs to facilitate their exact identification. These signs provide the users with the information on wagon characteristics and their way of use.

1.1. NUMERICAL FREIGHT WAGONS MARKING

Freight wagon numerical marking consists of 12 digits sorted in 5 groups:

- 1st and 2nd digit indicate wagon interoperability code, i.e. wagon capability to be used in international transport,
- 3rd and 4th digit indicate state code (country) of wagon registration,
- 5th 8th digit indicate wagon operation characteristic basic and secondary marking,
- 9th 11th digit marks serial number in terms of production series.
- 12th digit self-check digit.

Numerical marking is therefore as follows:



Own wagon number consists of 4 digits expressing its operation characteristic and 3 digits serial number.

The marking shall be inscribed on the wagon bodywork in the following manner:

31	RIV	or	31	TEN - RIV
56	<u>sk</u> – zsskc		56	<u>sk</u> – zsskc
3538 048-0			6633 014-9	
Rils			Fains	

Wagons not offering enough space for marking (particularly flat wagons) are marked as follows:

31 56 3946 001 - 5 RIV SK- ZSSKC Res

The way of freight wagon numerical marking: registration, wagon keeper, type and meaning is described in Annex 11 of the General Contract of Use for Freight Wagons (GCU).

1.2. INTEROPERABILITY IDENTIFICATION

Identification of interoperability in international transport is represented by the first two digits of the wagon numerical marking, which categorically define:

- wagon qualification for international transport
- gauge changeability
- independence of axles or bogies

More detailed information is available at www.uic.org.

Numerical marking is supplemented by graphic abbreviation describing the wagon certification for use in international transport.

CERTIFICATION CODES FOR INTEROPERABLE TRANSPORT USED FOR FREIGHT WAGONS

Chart nr 1

	(PGV)	√or PPV	TIF and,	and/or CO	not COTIF (D)	bns ^(s) I2T fon 9 fon bns							
1 st d		0	-	2	ო	4	œ		$1^{\rm st}$ d				
2 nd digit	gauge	with axles	with bogies	with axles	with axles		with bogies	Transport	1 st digit 2 nd digit				
0	fixed or variable	spare	wagons used by industry	spare		with axles ^(c)		domestic transport or international transport following special agreement	0				
1	fixed	wagons TSI a	undertak in the A	wagons TSI a [which operato undertak	in the A PPW (PG)	other [which operat	undertak in the A	international transport following special agreement	1				
2	variable	wagons TSI and/or COTIF (b) Which operator is the railway	undertaking stated in the Annex P.4]	wagons TSI and/or COTIF [which operator is the railway undertaking stated	in the Annex P.4] PPW (PGV) wagons	other wagons (which operator is the railway	undertaking stated in the Annex P.4]	domestic transport	2				
က	fixed							international transport following special agreement	က				
4	variable	9	OUS	wagons TSI and/or COTIF ^(b) wagons PPW (PGV)		wagons TSI ar wagons PP		othe		domestic transport	4		
ប	fixed	3	should not be used until next decision SI and/or COTIF ^(b) S PPW (PGV)		other wagons		international transport following special agreement	5					
9	variable	I next decision other wagons TSI and/or COTIF (⁽¹⁾ wagons PPW (PGV)		il next decision				l next decision				domestic transport	9
7	fixed			other wagon: COTIF ^(b) wago	other wagon COTIF ^(b) wag(international transport following special agreement	7				
œ	variable				oncore	oulet wagons	domestic transport	ø					
6	fixed or variable	gange) Suc (PGV)	wagons (V9GV) (Y9GV) (PGV) (PGV)			umerical ng for nical	enogew n leicege nikiem techt charact	domestic transport or international transport following special agreement	6				

($^{\rm a}$) in compliance at least with TSI for railway vehicles

⁽b) including vehicles, which are, according to existing regulations, provided with these digits in the time of coming into effect of these new regulations (c) fixed or variable gauge

1.2.1. SELF-CHECK DIGIT

The self-check digit shall apply to all the eleven digits which form, with it, the wagon identification number. It is separated from the actual wagon number by a hyphen.

The self-check digit serves to check the accuracy of the actual wagon numerical marking and it can be determined as shown below:

Wagon numerical marking	3	1	5	6	5	9	6	3	2	1	2	Σ
Digits placed in odd position are multiplied by 2	6		10		10		12		4		4	-
Digits placed in even position are multiplied by 1		1		6		9		3		1		-
Sum of the digits of the individual resulted number	6	+1	+1+0	+6	+1+0	+9	+1+2	+3	+4	+1	+4	39

Result of the sum (39) is deducted from the closest superior multiple of ten (40) and the result (1) is the self-check digit. The actual wagon numerical marking is as follows:

31 56 5963 212 - 1

1.3. FREIGHT WAGON LETTER MARKING

Unified wagon letter marking shall comprise:

 A capital letter known as "category letter" denoting the wagon category and the type of wagon. The 5th digit of the 12 digits wagon number corresponds to this letter numerically:

5 th digit	Letter	Meaning
1	G	covered wagon of regular construction
2	Н	covered wagon of specific construction
3	К	four-wheel flat wagon of regular construction with low sliding walls and short stanchions
3	0	flat open wagon of regular construction with four or six wheels with low sliding walls and stanchions
3	R	flat bogie wagon of regular construction with sliding front walls and stanchions
4	L	flat wagon with independent axles of specific construction
4	S	flat bogie wagon of specific construction
5	E	open (high-sided) wagon of regular construction fitted with flat platform with front or side gravity discharge
6	F	open wagon of specific construction
7	Z	tank wagon
8	I	temperature-controlled wagons
9	U	wagon of specific construction not classified in group F, H, L, S and Z
0	Т	wagon with opening roof

• small letters, known as "index letters", which enable the basic operating features of the wagon to be ascertained from the point of view of its use.

Unified marking applies to all basic series:

- s qualified to operate with maximum speed of 100 km/h
- ss qualified to operate with maximum speed of 120 km/h

The meaning of wagon letter marking for individual wagon series is stated in the fold of individual wagon series.

2. MARKING OF PERMISSIBLE WAGON LOADING WEIGHT

Maximum permissible loading weight is marked in the loading chart of the wagon showing the maximum weight for the given track class. Consigner is not allowed to load up a wagon above this weight.

Example of Loading Chart:

(More examples are stated in appendix 4)

	Α	В	С	D
s	39,60 t	47,60 t	57,60 t	65,60 t
120		00	,0	

The loading chart situated on the box or on the frame of the wagon shows letters A, B1, B2, C2, C3, C4, D2, D3, D4, E4, E5 that correspond to the track classes. The tracks are sorted out by respective track classes according to the maximum loading capacity to the axle and to the meter of the wagon.

Track classes according to the maximum loading capacity to the axle and to the meter of the wagon:

Track class	maximum loading capacity to the axle (= sum of the wagon weight and load weight/number of axles)	maximum loading capacity to the meter of the wagon (=sum of the wagon weight and load weight /wagon length over uncompressed buffers)
Α	16,0 t	5,0 t/m
B1	18,0 t	5,0 t/m
B 2	18,0 t	6,4 t/m
C 2	20,0 t	6,4 t/m
С3	20,0 t	7,2 t/m
C 4	20,0 t	8,0 t/m
D 2	22,5 t	6,4 t/m
D 3	22,5 t	7,2 t/m
D 4	22,5 t	8,0 t/m
E 4	25,0 t	8,0 t/m
E 5	25,0 t	8,8 t/m

Specifications under letter B refer to track class B1 and B2, specifications under letter C refer to track class C2, C3, C4 and specifications under letter D refer to track class D2, D3, D4 and the data under the letter E is valid for track class E4 and E5.

Specifications related to track class D are affixed on the wagon if only allowing higher maximum loading capacity to the axle of the track class D than of the track class C.

Letter "S" placed in front of the loading chart marks the maximum loading capacity for trains operating with maximum speed of 100 km/h.

Letters "SS" placed in front of the loading chart marks the maximum loading capacity for trains operating with maximum speed of 120 km/h.

Some wagons have the maximum speed of 90, 100 or 120 km/h directly marked in front of the loading chart.

3. FREIGHT WAGONS USE

3.1. ORDER OF WAGONS

According to article 7 of ZSSK CARGO Transport regulation, the customers can claim their request to transport in freight wagons by submitting the **transport order**.

The customer orders transport services by submitting the order in writing. Each time the customer submits the order to the freight operator in an occupied forwarding station. If the forwarding station is not occupied, the customer submits the written order in the respective occupied station disclosed by the freight operator by call sheet.

The order "Objednávka prepravy" is available at www.zscargo.sk.

The order form shall comprise:

- · customer identification
 - entrepreneur (LP or NP): name of the company, address, VAT no., identification and number in register
 - not entrepreneur: name and surname, exact permanent address, type and number of ID (identification card or passport), citizenship,
- forwarding station,
- date and time of the required marshalling within the operating hours of the freight operator,
- · sort and weight of goods.
- required wagon (amount, series, eventually substitute wagon),
- destination station and country, border crossing station,
- demand to borrow sheets (required amount of sheets).
- customer confirmation and his approval of conditions of ZSSK CARGO Transport regulation.

3.2. TANK WAGONS USE

Tank wagons are used to carry liquid and gaseous commodities. The article 32 of ZSSK CARGO Transport regulation lays down the conditions of transport in tank wagons.

Beside the required marking and signs on both sides of the wagon walls or on specific board, tank wagons must contain the specifications of commodity being carried. The following commodities are only allowed to be carried in tank wagons (except wagons provided by customer):

- petrol and petrol mixtures
- spirits
- methanol
- diesel
- vegetable oils and grease
- petroleum tar for heating
- spent oil
- animal and fish grease

The carrier wishing to transport a commodity not stated above in tank wagon must apply for permission from ZSSK CARGO. The permission is issued by tank wagons dispatcher.

The request to transport in tank wagons is claimed by Transport order in forwarding station that submits the order to tank wagons dispatcher.

Transport order must specify the exact name of commodity. If the commodity is classified as **dangerous** according to RID, the classification (class, number) must be indicated in compliance with these conditions.

3.3. EXTRAORDINARY SHIPMENTS ORDER

The shipment is considered to be extraordinary if its external measures, weight or character, taking into account the railway devices or wagons to be used for its transport, create specific operation obstacles to the freight operator, and therefore can be only accepted to transport under particular technical and operational conditions.

The customer is obliged to consult the conditions of extraordinary shipment with the person entrusted by the freight operator before transportation according to article 33 of ZSSK CARGO Transport regulation. The order must be submitted in writing on duly completed form **Request for approval of extraordinary shipment** (ŽIADOSŤ O SÚHLAS k preprave mimoriadnej zásielky) to the following address 3 weeks before the expected date of shipment at the latest:

Železničná spoločnosť Cargo Slovakia, a.s.

Úsek obchodu / Trade division Sekcia služieb zákazníkom / Customer Services Section Železničná 1 041 79 Košice

2 00421 55 229 <u>5371</u>

a 00421 55 623 3126

Note:

Connection with railway telephone network is possible by marking the respective area code (Košice - 910), plus the underlined number of person to whom you wish to speak.

3.4. WAGON SELECTION FOR LOAD

Wagons selection for load is executed by the employee entrusted by freight operator. The wagons on siding can be selected by siding operator according to the agreement concluded with ZSSK CARGO.

Wagons prepared for loading shall meet the safety and efficiency requirements for operation, they must be suitable to transport the intended commodities to avoid their lost or damage.

ZSSK CARGO is for operation reasons entitled, with the previous agreement with the customer, to replace the required wagon by the wagon of different series if the circumstances allow so. If the customer does not refuse the wagon and loads the latter, it is considered as he agrees with the replaced wagon.

During the time of increased requirements from side of customers, ZSSK CARGO is entitled to declare cover of some requirements as high priority or to determine order of the cover according to substrates or customers.

3.5. USE OF SELECTED WAGON SERIES

Use of selected wagon series fee is charged according to § 14 of TR1:

- Habbins (2770), Habbillns (2780), Heirrs (2918)
- Shimmns (4668 4676), Shimm(n)s (4768 4777)
- Hbbillns (2457), Hbbins (2469), Habis (2752), Hirrs (2920), Roos (3526, 3528),
 Rils (3536 3538, 3540, 3542), Rilns (3552), Laas (4305), Sps (4717 4720),
 Snps (4723 4725)
- Uaaikk (9931), Uaaik (9932), Uaai (9940, 9950), Uaais (9945), Uaaikks (9946)

Wagon cancellation fee and **use of selected wagon series fee** is charged in case of withdrawal from the use of selected wagon series request according to TR1.

3.6. MANAGEMENT OF WAGONS NOT INTEGRATED IN ZSSK CARGO ROLLING STOCK FLEET

In case of inquiry for wagon series that are not part of ZSSK CARGO rolling stock fleet or that are not sufficient, ZSSK CARGO might procure these wagons from external keepers in terms of **wagon aid.**

The wagons used in terms of wagon aid must meet the conditions of AVV and PVV agreement.

Wagon aid from external keepers is administrated by Operation Division by submitting transport order claimed by the customer in forwarding station.

The conditions of providing wagon aid must be set ahead between the customer and Operation Division.

ZSSK CARGO charges the fee for providing wagons in terms of wagon aid **for shunting of contractual keeper wagon** according to TR1.

Wagon cancellation fee and **shunting of contractual keeper wagon fee** is charged in case of withdrawal from the use of wagons in terms of wagon aid according to TR1.

4. ROLLING STOCK RENTAL

If interested, ZSSK CARGO rents the freight wagons to the customer. The customer submits its request in writing to the following address:

Železničná spoločnosť Cargo Slovakia, a.s.

Úsek prevádzky / Operation Division

Sekcia technicko-technologickej prípravy prevádzky / Section of Technical and Technological Preparation of Operation

Oddelenie plánovania prevádzky / Operation Planning Unit

Železničná 1

041 79 Košice

2 00421 55 229 5494

a 00421 55 229 5508

□ prenajom.voznov@zscargo.sk

Note:

Connection with railway telephone network is possible by marking the respective area code (Košice - 910), plus the underlined number of person to whom you wish to speak.

In case of ZSSK CARGO ability to meet the demand, ZSSK CARGO concludes an **Agreement on rolling stock rental.** The agreement shall set the renting conditions.

5. WAGON SHEETS USE

ZSSK CARGO owns wagon sheets. Wagon sheets use is conformed to the Regulation **F** 3/34-35/2007 published in Transport and Tariff Bulletin on August 31, 2007 (hereinafter referred to as the "Regulation").

Sheets rental:

The request to rent sheet/sheets specifying their amount shall be proceeded by the customer in forwarding station along with the Transport order and specification of wagons for shipment. Forwarding station shall inform the customer about the possibility of sheet collection in storage station at the customer's own expenses. Storage station shall give the sheet to the customer on the basis of the receipt acknowledgement in the *Dispatch note for transport aids*, sheets and pallets nr. 33135. The list of sheets storage stations is stated in Annex 2 of the Regulation.

Basic sheets information:

Sheet marking	measures (m)	own weight (kg)	surface (m²)
Sheets nr. 2 0xxx	5,5 x 10	40	55
Sheets nr. 4(5,6) xxxx	6 x 8	50	48

Sheets can be used by the customer:

- **carrier** as a protection of loaded goods against weather influences during transport with fee according to TR 1 in domestic transport and in international transport to Poland,
- **renter** for other purposes, e.g. for temporary cover of material, goods during transport by road motor vehicle, for storage purposes, as a package during transport of wagon shipments. Fee for the use of sheet shall be collected by the postal money order.

At the request of customers with trailer, who have increased need of sheets, the carrier shall allow free of charge deposit of sheets on the trailer. For this purpose, the customer with trailer shall conclude special agreement with ZSSK CARGO.

Use of sheet of carrier for international transport is possible only to Poland. Conditions of use are defined by mutual bilateral agreement. For every sheet used for international transport the carrier shall pay fee according to TR 1. Use of sheets in domestic transport is not limited. It is prohibited to use sheets for export shipments on tracks of broad gauge.

Sheet must not be used for cover of lime and other corrosive material, if there is danger, that during transport this load get in touch with sheet. It is prohibited to use sheets for cover of shipments, after which transport the disinfection is necessary.

List of sheets storage stations:

- Bardejov
- Čierna nad Tisou
- Dubnica nad Váhom
- Fiľakovo
- Košice
- Levice
- Martin

- Nové Zámky
- Podbrezová
- Poprad Tatry
- Spišská Nová Ves
- Trnava
- Zvolen nákladná stanica
- Žilina

Use of sheets for other than transport purposes is possible for charge according to Annex 3 of the Regulation. The customer shall rent the sheets on the basis of written document, which is stated in Annex 6 of the Regulation.

Storage station shall take over the sheet back from the customer after thorough inspection by issuing returning acknowledgement. In case of delayed return – sheets delay, the customer shall pay fee for delay according to Annex 3 of the Regulation. In case of sheet damage, the station shall take down General statement with record of damage extent, write out the draft of damage, calculate the compensation for damage according to Annex 8 of the Regulation and draw out the compensation from the customer by the postal money order.

6. EUR WOODEN LOAD CARRIERS – INTERCHANGEABLE PALLETS EUR IN RAILWAY TRANSPORT

European pallet pool is a company founded by the UIC railway undertakings for the use and exchange of EUR carriers of wooden load - (EUR) interchangeable pallets with parameters 800 mm x 1 200 mm in international transport. The basis of the cooperation is the system of exact regulations of production, distribution, exchange and repair of interchangeable pallets, with warranty according to internationally valid regulation FAO/ISPM 15.

Company ZSSK CARGO is, within its scope of activities in the territory of the Slovak Republic, a holder of licence for use of trademark (EUR) to designation of produced and repaired exchangeable four-way wooden pallets with parameters 800 x 1 200 mm. Licence authority of ZSSK CARGO results from its membership in UIC, membership in European pallet pool and Agreement de recto not excluded using of trademark EUR.

ZSSK CARGO can thereby issue permission for production and repair of EUR pallets and provide the right to designate produced and repaired pallets by trademark (EUR) after verification of quality assurance of produced pallets under conditions of the Decree of UIC 435-2, 435-4 and conditions valid in the Slovak Republic.

Inspection of quality of production and repair of EUR pallets is performed by Slovenská železničná kontrola, a.s. Palárikovo on the basis of authorization from ZSSK CARGO.

Slovenská železničná kontrola, a.s. Palárikovo is an inspection authority of type A, which meets the requirements of standard ISO/IEC 17020, with accreditation for European four-way wooden pallets, issued by the Slovak National Accreditation Service (SNAS), with an Accreditation certificate No. I-020 to perform the inspections.

Conditions on transportation of goods by means of consignments in rail traffic on EUR exchangeable pallets are published in the Decree PTV F 3/34-35/2006.

The licence granted to company ZSSK CARGO is published in Annex 3 of EPP Provisions.

EUR wooden carriers, pallets, **EUR** pallets, **Euro** pallets

Pallet - is a flat transport structure with loading and supporting board, lifted by the by forklift, adjusted for stacking. The most frequently used pallets are of standardized dimensions $800 \times 1200 \times 145$ mm (EUR 1), with weight up to 25 kg and load-bearing capacity up to 1000 kg. Pallets enable creation of bigger manipulation units as well as better utilization of loading space in means of transport. They accelerate and make the loading operations more economical and increase safety in handling of goods.





Pallet 800 x 1 200 mm (EUR 1)

New EUR pallets are clean and free of damp mould. All edges are undamaged, splinters-free, made of one piece of wood and single bottom boards are not damaged. Edges of pallets are chopped off. Pallets are made with a symbol of ZSSK CARGO, in accordance with standard UIC 435-2, they are marked with (in oval) on the right corner block, code of sub-licence user (manufacturer) on the central block and sign of approving railway of ZSSK CARGO on the left corner blocks of both longitudinal sides. Effective from 1.January 2010, each new EUR pallet must **be treated as per IPPC (ISPM 15, IPPC).**



EUR pallets 800 x 1200 mm Used - repaired

Used pallet shows the signs of partial wear. It is characterized by a light-coloured wood and does not yet show any signs of damage or damp mould. Pallets repaired in accordance with standard of UIC No. 435-4 are marked with the same registration symbols as the new pallets.

FAO ISPM 15

FAO ISPM 15 - IPPC heat treatment



EUR pallets, made of untreated raw wood must meet the requirements for phytosanitary treatment and marking in accordance with the Directive ISPM 15 of FAO (Food and Agriculture Organization of the United Nations) in order to prevent transport and spread of pests. Treated wood such as plywood, which is treated using high temperature, pressure and glue,

is not considered to be questionable from the phytosanitary point of view. Effective from 1.January 2010, all wooden EUR pallets must bear the symbol of IPPC logo.

Detail information about pallets is available at following address:

Železničná spoločnosť Cargo Slovakia, a.s.

Úsek prevádzky / Operation Division Sekcia prevádzky a prepravy / Operation and Transport Section Železničná 1 041 79 Košice

IČO: 35 914 921 **IČ DPH:** SK2021920065

2 00421 55 229 <u>5420</u>, 00421 55 229 <u>5517</u>

■ 00421 55 633 2901⊠ cargo.S22@zscargo.sk

Interchange able pallets stations ZSSK CARGO:

- Galanta
- Humenné
- Košice
- Liptovský Mikuláš
- Martin
- Nové Mesto nad Váhom
- Nové Zámky
- Poprad Tatry

- Prešov
- Rožňava
- Štúrovo
- Topoľčany
- Trenčín
- Trnava
- Zvolen nákladná stanica
- Žilina

Overview of permitted railways and pallet organizations marks on (EUR) interchangeable flat pallets valid from 1.1.2010:

Mark	Country		Mark	Country		Mark	Country	
B ⁵⁾	Belgium	B	HŽ	Croatia	HŽ	SNCF ³⁾	France	SNCP
CD	Czech Republic		MAV	Hungary	[riAv]_	SJ ⁵⁾	Sweden	
CFL ⁵⁾	Luxembourg	CFL	ÖBB	Austria	ОВВ			
CSD ¹⁾	Tschechoslow. Rep.	CSD			Ø.08	Green Cargo	Sweden	sucr green cargo
DB	Germany		EPAL		(PA)	SŽ	Slovenia	SŽ
		B	NS ⁶⁾	Netherlands	*	VR ¹⁰⁾	Finland	TVP L
DR ²⁾	Germany		NSB ⁸⁾	Norway	NSB	v		
DSB ⁹⁾	Denmark	DSB			PKP	ŽSR ¹¹⁾	Slovakia	ŽSR
			PKP ⁷⁾	Poland	PKP	ZSSK CARGO ¹²⁾	Slovakia	ZBSK
FS ⁴⁾	Italy	FS	SBB	Switzerland	SBB			

¹⁾ Production year must be before 1994

²⁾ Production year must be before 1995

³⁾ Production year must be before 1999

⁴⁾ Production year must be before 2001

⁵⁾ Production year must be before 2002

⁶⁾ Production year must be before 2005

⁷⁾ Production year must be before Mai 2004

⁸⁾ Production year must be before Mai 2006

⁹⁾ Production year must be before 2007

¹⁰⁾ Production year must be before 2009

¹¹⁾ Production year must be before 2004

¹²⁾ Production year must be after April 2007

7. CARRIAGE OF CONTAINERS AND SWAP BODIES

Container - a combined transport freight unit of a prism shape, standardized size and construction, allowing its horizontal and vertical movement, as well as layer stacking.

Container transport system provides the transport of large containers in flat wagons or wagons appointed for container transport. The loading and unloading is performed by a crane or lifters, holding the unit by a spreader.

For easier handling and fixing of containers onto rail wagons and road vehicles, there are unified fixing elements (pins), which may be rigid or collapsible and they are located on the loading surface according to the type of wagon. See UIC 571-4.

Pins are for ISO containers and swap bodies.

Container marking		Length (mm)	Width (mm)	Height (mm)	Gross (kg)	Net (kg)
1 AAA	40 ´	12 192	2 438	2 896	30 480	27 000
1 AA	40 ´	12 192	2 438	2 591	30 480	27 000
1 A	40 ′	12 192	2 438	2 438	30 480	27 000
1 BBB	30 ´	9 125	2 438	2 896	25 400	23 000
1 BB	30 ´	9 125	2 438	2 591	25 400	23 000
1 B	30 ´	9 125	2 438	2 438	25 400	23 000
1 CC	20´	6 058	2 438	2 591	24 000	18 000
1 C	2 0´	6 058	2 438	2 438	24 000	18 000

Technical parameters of containers

HIGH CUBE container - has the same use as the universal 40´ ISO container. In contrast to standard container, it is 350 mm higher (height of high cube container is 2 896 mm).

Marking	ng Name		Length		Width		eight
Walking	Name	in foot	mm	in foot	mm	in foot	mm
40´BOX	Standard	40 ′	12 192	8´	2 438	8′6′′	2 591
40´HC	High cube	40 ′	12 192	8´	2 438	8′6′- 9′6′′	2 603 - 2 896
45´HC	High cube	45´	13 750	8´	2 438	8′6′-9′6′′	2 603 - 2 896

All containers of height exceeding 2 600 mm must be labelled by yellow-black stripes in all upper corners.

Swap body - is a special standardized freight carrying unit of intermodal transport used for transport of goods with support legs, which can be handled by means for combined transport. It is used for combined transport - road/railway.

Swap body transport system is identical to transport of containers and that in utilization of wagons and loading devices, which however must be fitted with ribbands. Their advantage is easy manipulation at the end consumer of goods – manipulation only by special road vehicle intended for transportation of swap bodies. The disadvantage is that they are not stackable.

Swap bodies dimensions:

Category	Maximal weight	Gauge	Length		
	(t)	(m)	(m)		
Α	34	12 - 13	12,19	12,5	13,6
В	34	9 - 10	9,125	10,35	
С	16	6 - 8	7,15	7,2	7,82

Swap bodies, which were qualified for international rail traffic by railway, are marked by a yellow label with the code numbers on each side. (UIC Regulation No. 596 - 6).

8. WAGON CONSIGNMENT TRACKING

In 2005, company ZSSK CARGO, within restructuring of railway undertakings in Slovakia, started to develop its own operational information system to support its main business process – transportation of goods. The new information system to support operational processes in ZSSK CARGO (hereinafter only as ISP) was implemented in productive operation on 4. June 2007 and replaced the information system IRIS-N. (Information and Control IS for freight transport) used in a company by then. Simultaneously, with development of applications for the operation of ZSSK CARGO, the applications to support information service for our customers to track the position of wagons in the district of ZSSK CARGO and in the territory of European rail carriers that are associated in the project ISR (International Service Reliability) were developed as well.

The following carriers are associated in ISR project:

- Austria RCA
- Belgium B-Cargo
- Czech Republic CD Cargo
- Netherlands Railion Nederland
- France SNCF Fret
- Germany Railion Deutschland
- Italy FS-Trenitalia

- Luxembourg CFL
- Hungary MAV Cargo
- Slovakia ZSSK CARGO
- Slovenia SZ
- Spain RENFE
- Sweden Green Cargo
- Switzerland SBB Cargo

Applications for support of information service to customers

The applications for support of information service to customers (provided free of charge) include:

- Tracking the movement of wagons through ZSSK CARGO Internet portal that provides real-time information based on defined input parameters
- Sending the data list to predefined e-mail addresses and in defined times.

Application used to monitor the movement of wagons can be accessed via website of ZSSK CARGO - address to access the application: **Consignment movement**, where, after you have entered the address, the screen with information regarding the correct version of web browser as well as contact information of the information service department, which is an administrator of access rights for tracking the consignments and wagons, are displayed. Entering the application to monitor the wagon movement is ensured by means of **Consignment tracking**.

Description of application "tracking the wagon movement":

Application for tracking the movement of wagons enables the user to obtain updated information on position of wagons for the selected period in part which classifies the wagons assigned to the order and wagons assigned to the wagon keeper. The actual selection of wagons is made on the basis of compulsory and optional input parameters. Depending on whether the user wants to track specific wagons or series of wagons, the compulsory parameters include:

- complete number of wagon
- or wagon series 5th to 8th digit of 12-digit number.

Other compulsory parameters are as follows:

- wagon keeper, which can be selected by the user only on the basis of code list
- · period of tracking from/to
- type of output (all information or only current information) and type of tracking (tracking on the basis of orders or tracking on the basis of wagon keeper)
- display all events related to wagon or display only the current event related to wagon

Optional parameters include the following:

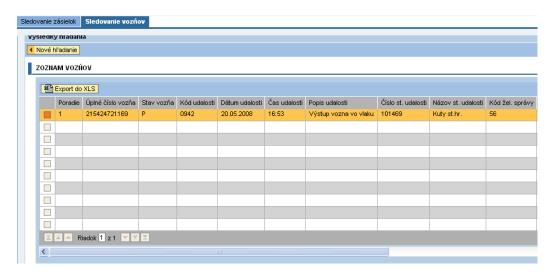
- type of event and selection
- display the consignments belonging to the wagon (note: consignments belonging to the wagon are displayed only in case when Company Registration Number of the party participating in transportation consignor, consignee, payer corresponds with the Company Registration Number of the customer with this account registered)

After the input parameters have been entered and the option has been confirmed, the summary of wagons, matching the input parameters, is displayed to the user. This summary, after it has been displayed to the user structure-wise, can be exported to file of xls format for subsequent processing. The user has, in case of tracking the movement of wagons on the basis of an order, access to information only related to empty wagons, which were assigned to their Transportation order. In case of tracking the movement of wagons on the basis of wagon keeper, the user has access only to information related to wagons, where this user is listed as wagon keeper or has the authorization to track the wagons from the wagon keeper.

Figure No. 1
Input screen to enter the parameters for wagon selection



Figure No. 2
Output overview of wagon movement



Location of wagon is identified by a code of the latest event and its description. Depending on whether it concerns tracking the position of wagon in the district of ZSSK CARGO or abroad, this event is specified either by the numerical code for existing district of ZSSK CARGO, or by a text or code valid for tracking the position abroad, marked as "(WSM_code)". If the user entered input parameters and no output data are displayed on the screen within two minutes, the system offers the possibility to send the output to the e-mail address, which is defined by an administrator when creating the access right.

Description of application "sending the data list":

Another way of information service support in relation to the position of wagons is the function of automatic sending of data list from ISP system to defined electronic addresses of an applicant and in specified time intervals. After the parameters have been defined in ISP system, the outputs are sent regularly to e-mail addresses in agreed output formats (xls, pdf, txt). By means of tracking defined this way, it is possible to obtain such information as shown below:

No.:	Wagon	Latest	Latest	Railway	Date and	Sending	Destination	State of	Note
	number	event	event	station	time	station	station	wagon	
		(code)	(description)	where	when the			(1-loaded,	
				the event	event			0 – empty)	
				occurred	occurred				
				•					

All requirements related to tracking the position of wagons by means of above-mentioned applications must be addressed to the information service workplace.

Železničná spoločnosť Cargo Slovakia, a.s.

Úsek obchodu / Trade Division Sekcia služieb zákazníkom / Customer Services Section **Manažér pre zákaznícky servis / Manager for Customer Services** Železničná 1 041 79 Košice

2 00421 55 229 <u>5513</u>, 00421 55 229 <u>5519</u>

a 00421 55 623 3126

Note:

Connection with railway telephone network is possible by marking the respective area code (Košice – 910), plus the underlined number of person to whom you wish to speak.

INFORMATION

CONTACTS

Detailed information on freight wagons management of ZSSK CARGO, foreign railway undertakings on ŽSR railway tracks, and foreign railways networks can be obtained at following addresses:

Železničná spoločnosť Cargo Slovakia, a.s.

Úsek prevádzky / Operation Division
Sekcia operatívneho riadenia prevádzky / Operative Operations Management Section
Oddelenie hospodárenia s nákladnými vozňami / Wagons Management Unit
Železničná 1
041 79 Košice

•	Head of Unit	*	00421 55 229 <u>5530</u>
•	ZSSK CARGO Transport Authority		00421 55 229 <u>5488</u> 00421 55 633 1454 prepravny.dozorcargo@zscargo.sk
•	Wagons Dispatcher for External Wagons		00421 55 229 <u>5448</u> 00421 55 623 0142 <u>cudzina.dispecer@zscargo.sk</u>
•	Dispatcher for External Wagons Management		00421 55 229 <u>5577</u> 00421 55 623 0142 manazer.zahranicie@zscargo.sk

Železničná spoločnosť Cargo Slovakia, a.s.

Úsek prevádzky / Operation Division Sekcia operatívneho riadenia prevádzky / Operative Operations Management Section **Oddelenie hospodárenia s nákladnými vozňami / Wagons Management Unit** Vysunuté pracovisko Bratislava / Separate Unit Bratislava Kollárova 36 917 01 Trnava

•	Wagons Dispatcher for Tank Wagons	*	00421 33 229 <u>5150</u>
		\bowtie	cisternovy.dispecer@zscargo.sk

Note:

Connection with railway telephone network is possible by marking the respective area code (Košice – 910, Trnava – 921), plus the underlined number of person to whom you wish to speak.

SALES CONTACTS

INFOSERVIS

Providing of information: Monday - Friday, from 07:00 a.m. - to 19:00 p.m.

2 00421 55 229 5513, 00421 55 229 5519

a 00421 55 623 3126

EXTRAORDINARY SHIPMENTS

Mr. Matúš KANDRÍK Manager for Extraordinary Shipments

a 00421 55 229 <u>5371</u>

a 00421 55 623 3126

kandrik.matus@zscargo.sk

TRANSPORT OF DANGEROUS GOODS

Železničná spoločnosť Cargo Slovakia, a.s.

Úsek prevádzky / Operation Division Sekcia prevádzky a prepravy / Operation and Transport Section **Oddelenie prepravné, Tím predpisov / Transport Unit, Team for Regulations**

Železničná 1 041 79 Košice

According to RID:

2 00421 55 229 <u>5521</u>

00421 55 229 <u>5478</u>

00421 911 746 009

According to Annex 2 SMGS:

2 00421 55 229 <u>5502</u>

a 00421 55 229 5478

priloha_2_SMGS@zscargo.sk

SALES MANAGERS FOR FOREIGN TRANSPORT COMPANIES

Mr. Marcel MINICH

2 00421 55 229 <u>5450</u>

a 00421 55 623 0423

00421 903 721 636

minich.marcel@zscargo.sk

Mr. Jozef MIKLOŠ

2 00421 55 229 <u>5451</u>

a 00421 55 623 0423

00421 903 221 626

miklos.jozef@zscargo.sk

Mr. Richard KRIŠPINSKÝ

2 00421 55 229 <u>5689</u>

a 00421 55 623 0423

00421 903 513 109

krispinsky.richard@zscargo.sk

KOŠICE REGION

Mrs. Renáta IHNÁTOVÁ

2 00421 55 229 5510

a 00421 55 229 5409

00421 903 721 626

ZVOLEN REGION

Mrs. Alena VENDERLOVÁ

2 00421 45 229 4271

a 00421 45 533 0420

00421 903 722 115

venderlova.alena@zscargo.sk

ŽILINA REGION

Mr. Peter KOSTKA

a 00421 41 229 <u>2241</u>

00421 903 438 481

kostka.peter@zscargo.sk

BRATISLAVA REGION

Mrs. Ružena HOLICKÁ

2 00421 2 2029 <u>7885</u>

a 00421 2 2029 7885

00421 910 782 543

AUTOMOTIVE

Mrs. Alexandra BOROVANOVÁ

a 00421 2 2029 <u>7188</u>

a 00421 2 2029 7885

00421 903 559 834

borovanova.alexandra@zscargo.sk

Mr. Marek CHACHALAK

3 00421 55 229 5412

a 00421 55 623 0423

00421 903 906 667

chachalak.marek@zscargo.sk

Mrs. Anna KLUKOVÁ

2 00421 55 229 5539

a 00421 55 229 5409

00421 902 990 883

klukova.anna@zscargo.sk

Mr. Ľubomír VYPARINA

2 00421 41 229 <u>2137</u>

00421 903 643 457

vyparina.lubomir@zscargo.sk

Mr. Juraj GAVLAS

2 00421 2 2029 <u>7394</u>

a 00421 2 2029 7885

00421 903 639 230

INTERMODAL TRANSPORT

Mrs. Alena REMÁKOVÁ

2 00421 2 2029 <u>2677</u>

a 00421 2 5557 3831

00421 903 438 423

ROLLING STOCKS SERVICES DIVISION

2 00421 2 2029 7205

a 00421 2 4342 0880

cargo.U40@zscargo.sk

Note:

Connection with railway telephone network is possible by marking the respective area code (Košice – 910, Zvolen – 945, Bratislava – 920, Žilina – 930), plus the underlined number of person to whom you wish to speak.

FOREIGN REPRESENTATIONS

GENERAL REPRESENTATION WIEN (AUSTRIA)

Mr. Mikuláš SABÓ

Parkring 12, 1010 Wien

2 0043 1 512 8974

a 0043 1 512 8974

0043 67 6431 0086

GENERAL REPRESENTATION L'VOV (UKRAINE)

Gogoľa 1, 290 604 Ľvov

2 0038 0322971198

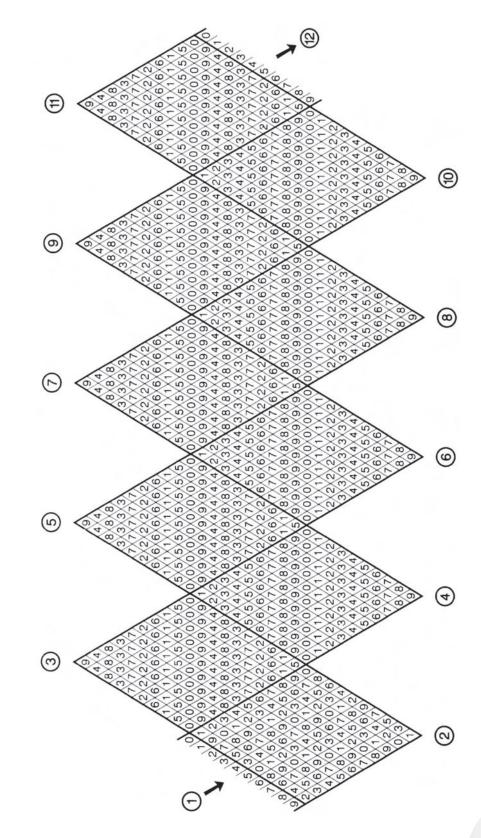
a 0038 0322971198

0038 0503173568

□ railway1@complex.lviv.ua

INSTRUMENT FOR FREIGHT WAGON CONTROL NUMBER DETERMINATION

The control number on the 1 2^n position is determined by progressing in the chart in the direction of indicator, from first digit through every single digit of 11-digits freight wagon identification number in the respective line inside the diamond 2 - 11 so that every digit corresponds to one diamond.



LIST OF CONTAMINATING GOODS REQUIRING WAGON CLEANING AFTER UNLOAD

Alunite ASbestos

Cement - free pickled

Sodium Nitrate for fertilization

Nitrate sodium potassium natural for fertilization

Guano for fertilization

Raw clay Faience mass Porcelain mass Potash fertilizers Nitrogen fertilizers

Phosphate - potassium fertilizers

Phosphate fertilizers

Complex fertilizers (combined i.n.)

Mineral origin fertilizers

Potassium Chloride for fertilization

Potassium Chloride

Till raw Carnalite

Carnalite for fertilization

Chalk flashing Chalk raw Coke pitch

Coke kerosene calcined Coke kerosene non-calcined

Nitrolime Cyanamide for fertilization Saltpetre ammonium phosphate

Saltpetre ammonium phosphate for fertilization Saltpetre ammonium sulphate for fertilization

Saltpetre ammonium

Saltpetre ammonium for fertilization Saltpetre potassium ammonium

Saltpetre potassium ammonium for fertilization

Saltpetre magnesium for fertilization

Saltpetre

Saltpetre sodium for fertilization Saltpetre calcium for fertilization Saltpetre calcium ammonium

Saltpetre calcium ammonium for fertilization Thomass flour phosphate for fertilization Flue

Flue potassium for fertilization

Plaster

Plaster for soil melioration Plaster for fertilization Smut for soil melioration

Sulphur refined

Sulphur

Sulphur colloid ammonium

Sulphur sublime Sulphur condensed

Sulphur ammonium for fertilization

Glist

Salts potassium for fertilization

Steatit

Salt potassium raw for fertilization

Salt potassium raw Salt petrous industrial

Superphosphate ammonium for fertilization Superphosphate bone for fertilization Superphosphate calcium for fertilization

Superphosphate for fertilization

Superphosphate with boron for fertilization Superphosphate triple for fertilization

Superphosphate calcium double for fertilization

Thermophosphate for fertilization

Graphite natural Xylanthrax coal

Limestone for soil melioration

Lime

Lime nitrous for fertilization

Lime nitrous Lime hydrate Lime hydraulic Calcium hydrate Wadding glass Billow glass

CONSTRUCTION GROUP- DIGITS IN FRONT OF THE WAGON

- 10 wagons made in Czechoslovakia after 1945
- 11 wagons made in Czechoslovakia
- 12 wagons made in Czechoslovak Socialistic Republic
- 13 wagons made in Czech and Slovak Federal Republic after 1990
- 23 wagons made in Poland
- 24 wagons made in France
- 25 wagons made in former GDR
- 26 wagons made in Austria
- 27 wagons made in Romania
- 28 wagons made in Czechoslovak Socialistic Republic according to GDR
- 29 wagons made in Hungary
- **30** wagons made in SFRY (without Y25 bogie)
- 31 double-axle wagons made in Switzerland
- 32 wagons made in Switzerland
- 39 wagons made in Sweden
- 50 wagons made in Czechoslovak Socialistic Republic fitted with Y25 bogie (wagons fitted with common components of group 10)
- **51** wagons made in Czechoslovakia fitted with Y25 bogie (wagons fitted with common components of group 11)
- 52 wagons made in Czechoslovakia fitted with Y25 bogie Cs with combined floor space
- 53 wagons made in Czechoslovakia fitted with Y25 bogie Rs with combined floor space
- 54 wagons made in Czechoslovakia fitted with Y25 bogie reconstructed from wagons of construction group nr. 11
- 55 wagons made in Czech and Slovak Republic after 1995
- 56 wagons made in ŽOS Trnava fitted with Y25 Lsd1 bogie
- 63 wagons made in Poland fitted with Y25 bogie
- 64 wagons made in France fitted with Y25 bogie
- 65 wagons made in former GDR fitted with Y25 bogie
- 66 wagons made in Austria fitted with Y25 bogie
- 67 wagons made in Romania fitted with Y25 bogie
- 68 wagons made in Belgium fitted with Y25 bogie
- 69 wagons made in Hungary fitted with Y25 bogie
- 70 wagons made in SFRY fitted with Y25 bogie

MARKING AND SIGNS ON WAGONS

Sign	Meaning
RIV	Wagon meets the regulations of railway Technical Unity and the provisions of leaflets in the UIC Code and satisfies all regulations applicable for its respective type in international rail traffic
TEN	New wagons approved according to TSI (technical specifications of interoperability). The inscription "TEN" (Trans-European Network) can also be associated to the mark "RIV".
UIC	Unified wagon
UIC St	Standard wagon
E	Wagon built for running in Spain and Portugal
E	Wagon built for running in countries with track gauge of 1520 mm (Russia and former Soviet Union)
E	Wagon built for running in Finland
K	Wagon fitted with composite brake blocks
D	Wagon fitted with disc brake
10	Wagon (construction) group
ZSSKC ČD PKP MÁV	Authorized to transport internationally with railway undertakings stated on sign only, according to specific agreements (amended chart)
	Wagon fitted to carry perishable foodstuffs
()() 000 kg	Wagon tare
00 000 kg	Wagon tare and braked weight of the ground-operated hand brake

Sign	Meaning
<u>00 000 kg</u> 00 ö t	Wagon tare and braked weight of the platform-operated hand brake
A B ₁ B ₂ C ₂ C ₃ C ₄ S 000 000 000 SS 000	Maximum load in [t] for wagons running in trains operated with maximum speed of 100 km/h
A B C S 000 000 SS 000	Maximum load in [t] for wagons running in trains operated with maximum speed of 120 km/h
A B C S 000 000 120 000	Maximum load in [t] for wagons (sign 0 in line "120" means that the wagon is only authorised to run in trains up to 120 km/h when empty)
SNOF DES C 000 000	Maximum load in [t] and speed [km/h] valid for wagon under specific agreement between rail companies indicated on sign, which exceeds loading weight set by UIC leaflet
0 D 088 S 000 000 D8 000 000 000 %%, 000 000 000	Maximum load in [t] for wagons running in trains operated with maximum speed of 120 km/h, when wagon brake does not entirely meet S conditions
A B C S 000 000 SS 000	Maximum load in [t] for wagons running in trains operated with maximum speed of 120 km/h, when wagon brake does not entirely meet SS conditions
(000t)	Sign for wagons with carrying capacity that is greater than the maximum load marked, and for wagons with no maximum load marking
	Maximum load for concentrated loads spread over the lengths of the supporting surface or loads resting on two supporting points
R 00 m	Indicates the minimum curve radius that the wagon can negotiate

Sign	Meaning
⋖ 0°00'	Indicates bogie wagons that can only negotiate a ramp angle of less than 2° 30´ when running onto ferries
1000	Height of the loading plane for container wagons in unloaded state
OO.0 m	Wagon loading length
(− 00.00 m →	Wagon length over the buffers
→0.00 m ←	Distance between end axles and bogie centres
(00.0 m²)	Wagon surface area
00.0m³	Capacity of covered wagon and wagon fitted to carry bulk commodities
(00000 l ()	Capacity of tank wagon
00.00 m	Wagon not authorised to negotiate all shunting humps with a vertical radius ofm (as marked under the sign)
00.0 m	Bogie wagons with a distance of more thanm between inner axles and accepted on shunting humps
	Wagon not authorised to pass through retarders or other shunting and stopping devices in active mode
	Special care should be taken when marshalling trains to avoid damage; Wagon must not be loose-shunted with other rolling stock without taking special precautions.

Sign	Meaning
!!!	Wagon must not be fly- or gravity-shunted; wagon must be marshalled by a motive power unit; wagon must not be loose-shunted.
<u></u>	High voltage warning sign
	Do not use nails or wire staples
00.00	Sign for tank wagon tests (month, year) for transport of dangerous goods according to RID
O REV L 00.00.00 *****	Date (day, month, year) of last inspection
	Wagon authorised to run on ferries, through the Channel Tunnel and on the British rail network (additional sign)
A	Buffers fitted with coil spring
C	Buffers fitted with elastometre spring suspension
(1)	Wagon fitted with automatic gauge changeover facilities (additional sign)
	Axle wagon fitted with spark-arrestor plates that are required for carrying of some dangerous commodities (RID, Part 7, points 7.2.4 and W 8).
$\times \times$	If one spring of the wagon is damaged, both springs must be replaced

Sign	Meaning
þ	Permanently-coupled wagon units not to be uncoupled in service
$2\frac{A}{2} 25\frac{A}{35}$	Removable wagon accessories
	Wagon fitted with the automatic coupler (UIC/OSJD standard)
	Marking indicating where to place jacks or lifting devices in order to lift the whole of the wagon body in the workshop
<u>.V.</u>	Sign for lifting at 4 points with or without running gear
	Indicates where to place jacks or lifting devices in order to lift the whole of the wagon body by one end or close to the end, including the running gear where appropriate
	Swap-body carrier wagon
	Recess wagon for semi-trailers
	Recess wagon for carrying semi-trailers that exceed specified capacity
	Roller-unit carrier wagon
	Wagon fitted with a train line of 3000 V
50	Wagon fitted with a train line of 3000 V, approved for running on 50 Hz AC electrified networks

Sign	Meaning
	Wagon fitted with a train line of 1500 V
50	Wagon fitted with a train line of 1500 V, approved for running on 50 Hz AC electrified networks
	Wagon fitted with a train line of 1000 V

Series	Digit interval	Loading capacity C	Loading length	Loading	Loading	Loading height	Loading volume	Crates measures	Total number of crates	Crates lay out scheme
		[t]	[m]	[m]	[m ²]	[m]	[m3]	[mm²]	pc	
Gbs	1502, 1543	24,50	0.4	00 0	0	0	0	EUR 1 200 × 800	31	1.00
Gbgs	1573-1575	21,00	14,70	7,60	33,00	7,40	80,00	ISO 1 200 x 1 000	24	1 24
Gbgkks Gbkks	1533-1534 1537	0.00	10.73	0	000	Ç	0	EUR 1 200 × 800	31	33
abkkys Gbgs Gbgkks	1538 1542 1547-1549	06,45	14,73	7,03	33,00	6,40	00,00	ISO 1 200 x 1 000	24	1 24
	1960.1962	(0	(0	EUR 1 200 × 800	38	7
Gags	1990-1991	00,00	T5,20	2,60	40,00	7,50	100,00	ISO 1 200 x 1 000	30	30
:	L	Ç	7	C C	1	2,07	C C	EUR 1 200 × 800	35	38
S S S	C442	06,45	17,70	2,90	37,00	2,67	98,00	ISO 1 200 x 1 000	24	1 24
i i i	C LL	G G	07.07	0	200	2,07	00 32	EUR 1 200 × 800	31	33
SIGN	0627	20,00	14,70	7,01	34,00	2,67	6,00	ISO 1 200 x 1 000	24	1 24

		40	28	40	78	88	30	48	88	63	42
Crates lay out scheme		1	-	-	-	-	-	•	-		-
Total number of crates	bc	40	28	40	28	88	30	48	38	63	42
Crates measures	[mm²]	EUR 1 200 × 800	ISO 1 200 x 1 000	EUR 1 200 × 800	ISO 1 200 x 1 000	EUR 1 200 × 800	ISO 1 200 x 1 000	EUR 1 200 × 800	ISO 1 200 x 1 000	EUR 1 200 × 800	ISO 1 200 x 1 000
Loading	[m3]	7	TT4,00	4	14,00	95,00		128,00		167,40	
Loading height	[w]	2,90		2,90		2,38		0	ý 9	2,80	
Loading surface	[m²]	42,00		42,00		40,00		50,00		62,40	
Loading	[m]	2,95		C	, O	2,60		2,52		2,84	
Loading Iength	[m]	14,24		14,26		15,28		19,30		22,00	
Loading capacity C	[t]	25,00 / 29,00		26,00 / 30,00		48,50 (56,50)		52,00		55,50 /	
Digit interval		7370	7407	0970	00 00 00 00 00 00 00 00 00 00 00 00 00	700000000	1002	0.71	7617	0770	2
Series		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		, ,	S	=	S C	::	nabls S		

											·
Crates lay out scheme				3	1	38	1	4	36		36
Total number of crates	bc	61	42	3 × 35	3 x 24	2 × 35	2 x 24	46	36	46	36
Crates measures	[ww ₂]	EUR 1 200 × 800	ISO 1200×1000	EUR 1 200 × 800	ISO 1 200 x 1 000	EUR 1 200 × 800	ISO 1 200 x 1 000	EUR 1 200 × 800	ISO 1 200 x 1 000	EUR 1200 × 800	ISO 1 200 x 1 000
Loading	[m³]	7	10 L,40	0	0,000	0	0,000	0		104,00	
Loading height	[m]	00 0	7,80	2,07		2,07	2,67	0 40	î	07.0	,, 0,4
Loading	[m ²]	06,30		3x37,0		2x37,0		49,30		49,30	
Loading	[m]	0.00	7,04	C	0,	C	9	0) i	99.0	2,00
Loading length	[m]	000	77,20	37 07.0	3X LZ, 7 8	2,7	C > T C > T	78 73		0 0 0	10,33
Loading capacity C	[1]	53,20 /	61,20	C 1	00,5	00	000	00		O	0. 0.
Digit interval		0070	0877	0,000	0167	0000	0000	3537 3538		9636	0000
Series		5 1 1 4	nabbillnss	,	0 = = = =	S.i.	0	<u></u>			2

Crates lay out scheme		1	24	(C)	30	1	1
Total number of crates	bc	31	24	88	30	31	24
Crates measures	[mm²]	EUR 1 200 × 800	ISO 1 200 × 1 000	EUR 1 200 × 800	ISO 1 200 × 1 000	EUR 1 200 × 800	ISO 1 200 x 1 000
Loading	[m ₃]	86,00		95,00		72,00	
Loading height	[w]	2,26		2,38		2,00	
Loading Loading Loading Loading width surface height volume	[m ²]	34,00		40,00		36,00	
Loading	[w]	2,67		2,60		2,76	
Loading length	[ш]	12,77		15,28		12,80	
Loading capacity C	[t]	25,50		55,50 50,00		56,50	
Digit interval		, C	ST/O	0811 0814		0807 001-499	
Series		.: F	SIG	Taes		Tams Tams-u	

Loading weight in brackets is applicable for running speed of 90 km/h for railway tracks stated in additional chart (raster). Loading weight stated behind fraction is applicable for track class D.