

# SLOVENSKI STANDARD SIST EN 15380-2:2006 01-oktober-2006

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Railway applications - Designation system for railway vehicles - Part 2: Product groups

Bahnanwendungen - Kennzeichnungssystematik für Schienenfahrzeuge - Teil 2: Produktgruppen

Applications ferroviaires - Systeme de classification pour véhicules ferroviaires - Partie 2: Groupes des produits (standards.iteh.ai)

Ta slovenski standard je istoveten zigystan EN 15380-2;2006 441b-8288-

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45.060.01 Železniška vozila na splošno Railway rolling stock in

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# **EUROPEAN STANDARD**

## EN 15380-2

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

April 2006

ICS 01.110; 45.060.01

#### **English Version**

# Railway applications - Designation system for railway vehicles - Part 2: Product groups

Applications ferroviaires - Système de classification pour véhicules ferroviaires - Partie 2: Groupes des produits

Bahnanwendungen - Kennzeichnungssystematik für Schienenfahrzeuge - Teil 2: Produktgruppen

This European Standard was approved by CEN on 6 March 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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#### **Foreword**

This document (EN 15380-2:2006) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

The EN 15380 series of standards, Railway applications – Designation system for railway vehicles consists of:

- Part 1: General principles
- Part 2: Product groups
- Part 3: Designation of installation sites and locations

This European Standard is based on Part 2 of the DIN 25002 series of standards. After approval, the text of DIN 25002-2 submitted to the PQ procedure was brought into line with the formal requirements of an EN. The resulting editorial amendments have led to slightly modified wordings but they have no effect on the technical content of this document. Teh STANDARD PREVIEW

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Potand, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom, Swadaches Standards/sist/decl/236e-es-4a-441b-8288-

#### Scope

As a railway-specific technical standard, this European Standard is the basis for establishing productoriented structures.

This standard essentially is for product structuring; however the function-overlapping "combined assemblies" have to be taken into account. This structure is a common basis for communication between customer, suppliers, subcontractors and others in all stages of the cooperation.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 61346-1:1996, Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations – Part 1: Basic rules (IEC 61346-1:1996)

EN 61346-2:2000, Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations - Part 2: Classification of objects and codes for classes (IEC 61346-2:2000)

#### iTeh STANDARD PREVIEW Terms and definition

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(standards.iteh.ai)

For the purposes of this document, the following terms and definitions apply.

3.1 assembly SIST EN 15380-2:2006

https://standards.iteh.ai/catalog/standards/sist/d8c1c36e-e54a-441b-8288-

composition of elements that cannot yet be used independently  $^{15380-2-2006}\,$ 

NOTE Up to now, the classes have been designated as assemblies. If an application-specific subdivision of these assemblies is carried out, the assembly is then often designated as a main assembly and the subdivision is designated as a subassembly

#### 3.2

#### entity treated

part, element, device, subsystem, functional unit, object or system that can be observed in its own right

[EN 13460-2002]

#### 3.3

#### function

characteristic effect or aim of an object in conjunction with other objects

NOTE Instead of object, the universal term entity treated may also be used here

#### 3.4

#### main function

defining function of a product/assembly

#### auxiliary operating equipment

sum of devices supplying power for all product groups as well as controlling and regulating the "converter device and battery device" main product groups of a rail vehicle

#### 3.6

#### fitting out

assemblies and parts making up the external and internal panelling and interior partitioning of the vehicle

#### 3.7

#### interior appointments

assemblies and parts inside the vehicle designed for direct use by passengers and train crews

#### 38

#### combined assembly

assembly that performs several functions together and forms a structural entity

#### 3.9

#### main product group

group that performs the main function of a component/assembly

#### 3.10

#### subproduct group

group that performs a subfunction of a component/assembly within the framework of a main function

#### 3.11

#### component

uniquely identifiable product that is considered indivisible for a particular planning or control purpose and/or which cannot be disassembled without it being destroyed

NOTE A component for one organizational group may be the final assembly of another group, e.g. an electric motor.

# (standards.iteh.ai)

### 4 Prouduct group plan

#### SIST EN 15380-2:2006

#### 4.1 General

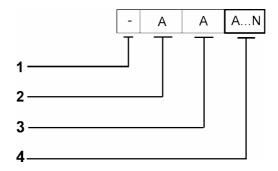
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88446bc891ea/sist-en-15380-2-2006

The designation system of the product group structure is made up of the letters of the alphabet, excluding I and O, and special characters.

The main product groups, see Table 1, and subproduct groups, see Table 2, are each designated by single characters. The designation shall be incorporated in the documentation.

NOTE The function groups of the withdrawn DIN 43104 are reflected in product groups F to P.



#### Key

- 1 "Product" prefix sign according to EN 61346-1
- 2 Main product group (MPG) according to 4.2.1
- 3 Subproduct group (SPG) according to 4.2.2
- 4 Serial number (no specification)

Figure 1 — Principle of product group designation

#### prEN 15380-2:2005 (E)

The designation begins with particulars of the main product group and assembly and is supplemented by the designation of the subproduct group. Further designation at the level of the subproduct groups and at other lower levels is possible.

The distribution software of the individual product groups is allocated to the product groups as required.

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<u>SIST EN 15380-2:2006</u> https://standards.iteh.ai/catalog/standards/sist/d8c1c36e-e54a-441b-8288-88446bc891ea/sist-en-15380-2-2006

### 4.2 Code letters for main product groups and subproduct groups

#### 4.2.1 Code letters for the main product groups (MPG)

Table 1 — Summary of the MPG

MPG designation <sup>a</sup>	Name of the MPG					
В	Vehicle body					
С	Vehicle fitting out					
D	Interior appointments					
E	Running gear					
F	Power system, drive unit					
G	Control apparatus for train operations					
Н	Auxiliary operating equipment					
J	Monitoring and safety equipment					
K Lighting						
†Teh	Air conditioning PREVIEW					
M	Ancillary operating equipment					
N	Doors, entrances					
Р	Information facilities 2:2006					
https://standards	Pheumatic/standardisse/d8c1 46eet e54a-441b-8288- 88446bc891ea/sst-en-15380-2-2006					
R	Brake					
S	Vehicle linkage devices					
Т	Carrier systems, enclosures					
U	Electrical wiring					
3						

The main product groups shall not be used as a single designation. Table 1 contains only a summary of the MPG.

According to the requirements of EN 61346-2:2000, the designations A and V to Z are pre-allocated.

## 4.2.2 Code letters for the subproduct groups (SPG)

# Table 2 — Summary of the MPG and SPG

## Table 2 (continued)

Code letters for		Name		Code letters for		r Name	
MPG	SPG	Name	MPG SPG		SPG	Name	
	Α	Vehicle body			Α	Control apparatus for train operations	
	В	Underframe			В	Power supply controls	
	С	Side walls			С	Driving and brake controls	
	D	Roof		G	D	Power generation controls	
В	Е	Head of vehicle			Е	System data acquisition	
	F	End walls			F	Power storage controls	
	G	Weld-on/add-on parts		н	Α	Auxiliary operating equipment	
	Н	Intermediate floor			В	Converter equipment	
	J	Partitions			С	Battery device	
	Α	Vehicle fitting out			D	On-board supply system	
	В	Window			Е	Cooling unit for power and drive systems	
	С	Floor			F	Emergency power generators	
	D	Interior panelling			Α	Monotoring and safety devise	
С	Е	Partitions	n TH	AD	В	Measuring and protective devices	
	F	External additions   CII   S   A		JAK		Indicating, recording, display devices	
	G	Vehicle paintwork (sta)	hd	ardo	i Pe	Safety equipment	
	Н	Insulation	II	ui ui	Ē	Data transmission devices	
	Α	Interior appointments	IST	EN 1538	0-2:200	Communication equipment	
	В	Rails, handlesı(inside)ndards.iteh.ai/ca	talog/	standard	s/sist/d8	Miscellaneous equipment	
D	С	Seats, sleeping berths, tables 88446b	c891		⊢1 <b>≸</b> 880	Lighting	
	D	Sanitary facilities			В	Exterior lighting equipment	
	Е	Luggage racks			O	Interior lighting equipment	
	F	Additional devices			Α	Air conditioning	
	Α	Running gear		L	В	Intake/evacuation of air	
	В	Supporting structures			С	Treatment	
	С	Wheelsets			D	Distribution	
E	D	Suspension, damping, balancing gear			E	Regulation	
	Е	Driving systems (active)			Α	Ancillary operating equipment	
	F	Driven systems (passive)			В	Sanding equipment	
	G	Safety add-ons			С	Lubricating equipment	
	Α	Power system, drive unit		М	D	Points operating equipment	
	В	Power supply			Е	Ticket machines	
_	С	Power generation			F	Passenger counting device	
F	D	Power conversion			Α	Doors, entrances	
	Е	Power dissipation		N	В	External doors	
	F	Power storage			С	Internal doors	
			-			-	

Table 2 (continued)

Table 2 (continued)

Code letters for				Code letters for		
MPG	SPG			MPG	SPG	
N	D	Entrances, steps (not inside)			С	Manual coupling devices
	E	Entrances for the disabled		s	D	Buffing gear
	Α	Information facilities			E	Towing gear (emergency couplings)
	В	Visual information facilities			F	Gangways/gangway facilities
P	С	Visual information elements			G	Vehicle-vehicle interface for media, signals, power
	D	Entertainment			Α	Carrier systems, enclosures
	E	Advertizing			В	Cabinets, boxes, containers
	F	Audible information facilities		Т	С	Frames, boards
	Α	Pneumatic/hydraulic equipment			D	Control and display units
	В	Generation	1		Е	Electronic rack systems
Q	С	Treatment			Α	Electrical wiring
	D	Storage			В	Cables, conductors and bars
	Е	Distribution STANDA	\R	D P	Rc V	Marking and connection material
	Α	Brake (standar	ds	.itel	1.2i)	Connecting material
R	В	Brake components			E	Bushings
	С	Mechanical brake force SISTEN transmissionlards.iteh.ai/catalog/stan	dards	/sist/d8c		Cable ducts, pipes and flexible tubes 4a-441b-8288-
S	Α	Vehicle linkage devices	st-en	-15380	2-2006	
	В	Automatic coupling devices				

### 4.3 Combined groups

The order of the combined groups in the product group structure depends on their main function (e.g. gantry running gear in subproduct group EA, driver's desk in subproduct group TD).

# **Annex A** (informative)

# **Examples of product groups**

The index in Table A.1 indicates the assignment of important groups and parts.

This list enables the user of this standard to assign frequently used groups and parts to the particular main product groups and subproduct groups. Names with locations, e.g. "Add-on parts on machine room floor" are not included in this index. Installation sites are given in EN 15380-3. Table A.1 does not claim to be complete.

Table A.1 — Examples of subproduct groups

MPG	SPG	Name	Examples of SPG		MPG	SPG	Name	Examples of SPG
В	Α	Vehicle	Body		В	С		Side wall pillar
В	Α	body	Carcass work for vehicle		В	С		Side wall frame
В	Α		Rough bodywork		В	С		Side wall edging
В	В	Underframe	Bead floor		В	С		Sliding wall
В	В		Bottom deck	NID A	DBD	F		Top flange
В	В		Bottom frame	INDA	В	С		Window corner
В	В		Bottom framework (Sta	ndar	ls <sub>b</sub> it	teh.	ai)	Window cross piece
В	В		Breast piece	CICT FN 1	B 5380-2:	C 2006		Window pillar
В	В		Corrugated sheet floor ai/c	utalog/standa	ırds#sist	<u>-000</u> /d8 <b>0</b> 1 c	3 <b>Roof</b> 54a-441b	-Sove-
В	В		Head stock 88446	oc891ea/sis	1-en <sub>B</sub> 15.	<sup>380</sup> ъ <sup>2</sup> -	2006	Cover
В	В		Longitudinal member		В	D		Lifting sliding roof
В	В		Sheet floor		В	D		Roller-shutter roof
В	В		Stanchion support frame		В	D		Roof frame
В	В		Supporting framework		В	D		Roof panel
В	В		Supporting girder for		В	D		Roof arch
В	В		central buffer coupling Tilting frame		В	D		Sliding roof
В	В		Transverse girder		В	D		Swing-roof/tilting roof
В	В		Trough		В	Е	Head of vehicle	Driver's cab metal panelling
В	В		Truss bar		В	Е		Frame of driver's cab
В	В		Underframe middle part		В	Е		Thermoplastic head
В	В		Underframe overhang		В	F	End wall	Back wall frame
В	С	Side walls	Door frame		В	F		End wall edging
В	С		Door pillar		В	F		Front wall belt
В	С		Side panel		В	F		Front wall frame
В	С		Side wall		В	F		Rear end of vehicle
В	С		Side wall flap		В	F		Scuttle panel