

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 1709:2004	Safety requirements for cableway installations designed to carry persons - Precommissioning inspection, maintenance, operational inspection and checks	CEN/TC 242	2004-08-23	
	(...)is to establish the rules to the pre- commissioning inspection, maintenance and operational checks of installations for passenger transportation by rope. Its requirements will be observed taking into account the various systems and their respective environment. It includes requirements relating to worker protection. It does not apply to installations for the transportation of goods by rope or to inclined lifts. This standard doesnot deal with acceptance testing prior to opening to the public.			
EN 1907:2005	Safety requirements for cableway installations designed to carry persons - Terminology	CEN/TC 242	2005-10-06	
	(...) defines general terms used in the safety requirements for cableway installations designed to carry persons. The document concerns terms used in the design, manufacture, erection, maintenance and operation of the installations and is restricted to: - those terms which form part of the vocabulary specific to these installations; - those terms, whether scientific, technical or in everyday use, which have a particular meaning in this field or which it appears necessary to define in greater detail. The terms apply both to a particular installation and to their components. Terms which are specific to standards which are listed in the foreword are defined in each of these standards. This document does not apply to installations for the transportation of goods, nor to inclined lifts. In the application of this document, the following definitions are applicable and have been given the reference numbers below.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 1908:2015	Safety requirements of cableway installations designed to carry persons - Tensioning devices	CEN/TC 242	2014-09-14	
	(...) specifies the safety requirements applicable on the tensioning devices for cableway installations designed to carry persons. This document is applicable to the various types of cableway installation and takes into account their environment. This document applies to the design, manufacture, installation, maintenance and operation of rope tensioning devices and anchorages of cableway installations designed to carry persons. It also includes requirements relating to accident prevention and to the protection of workers irrespective of the application of national regulations. National regulations of a construction or regulatory nature or those which serve to protect specific groups of persons remain unaffected. This European Standard does not apply to cableway installations intended for the transport of goods nor to lifts.			
EN 1909:2017	Safety requirements for cableway installations designed to carry persons - Recovery and evacuation	CEN/TC 242	2017-05-14	
	(...) specifies the safety requirements applicable to the recovery of carriers and the evacuation of passengers from cableway installations designed to carry persons, with the exception of ski-tows. This standard is applicable to various types of installations and takes into account their environment. This document establishes the requirements relating to the methods and equipment to be used to ensure the safety of passengers on cableways in the event of extended stoppage of the installation. It covers only the situation resulting from immobilization of the carriers, even if the passengers are not in immediate danger. It does not cover specific operations resulting from an accident. It includes requirements relating to the prevention of work accidents and to worker protection, without prejudice to the application of national regulations in the construction sector, of provisions of a regulatory nature, or provisions which are intended for the protection of specific groups of people. It does not apply to installations for the transportation of goods by rope or to lifts. It does not deal with design requirements for carriers.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12385-8:2002	Steel wire ropes - Safety - Part 8: Stranded hauling and carrying-hauling ropes for cableway installations designed to carry persons	CEN/TC 168	2003-11-16	
	(...) specifies the additional materials, manufacturing and testing requirements to those given in Part 1 for stranded steel wire 'hauling' and 'carrying-hauling' ropes for cableway installations designed to carry persons. The rope grade is limited to 1960. Minimum breaking force values for the more common classes, sizes and grades of rope are provided in Tables 2, 3 and 4. Stranded tension ropes and ski-tow ropes for surface lifts are covered by prEN 12385-4. The additional hazards covered by this European Standard are identified in clause 4.			
EN 12385-9:2002	Steel wire ropes - Safety - Part 9: Locked coil carrying ropes for cableway installations designed to carry persons	CEN/TC 168	2003-11-16	
	(...) specifies the additional materials, manufacturing and testing requirements to those given in Part 1 for locked coil carrying ropes for cableway installations designed to carry persons.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12397:2017	Safety requirements for cableway installations designed to carry persons - Operation	CEN/TC 242	2017-05-14	
	(...) specifies the safety requirements applicable to the operation of installations for passenger transportation by cable. This standard is applicable to the various types of installations and takes into account their environment. This European Standard applies to the operation of an installation and to the passenger transport conditions and also contains requirements for passengers. It is applicable to individual installations or a set of installations. It does not cover legal provisions for the transport service nor transport obligations. It includes requirements relating to the prevention of accidents and protection for workers, as well as to fire prevention and fire-fighting, without affecting the application of national requirements relating to construction law or statutory law, or to the protection of specific groups of people. It does not apply to installations for the transportation of goods nor to lifts.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12408:2004	Safety requirements for cableway installations designed to carry persons - Quality assurance	CEN/TC 242	2005-03-10	
	<p>(...)specifies the safety requirements applicable to quality assurance for cableway installations designed to carry persons. It sets out provisions for the procedures for quality assurance which supplement the requirements of the other standards cited in the foreword. It is applicable to the different cableway systems. This document applies to suppliers of cableway installations designed to carry persons or of safety components for cableway installations designed to carry persons, regardless of whether or not they maintain a quality management system conforming to EN ISO 9001 certified by a certification body accredited in accordance with EN 45012. The provisions of clause 4 apply in all cases. In addition, if quality management systems are used, reference shall be made to EN ISO 9001. For the case of suppliers who do not maintain any quality management system in accordance with EN ISO 9001, the provisions of this document are to be regarded as minimum requirements. The requirements relating to the traceability of safety components, which are applicable to all suppliers, are intended to facilitate the recall or the investigation of components which threaten to endanger safety. The requirements in this document are intended to ensure quality and do not replace the technical requirements in standards EN 1709, EN 1908, EN 1909, EN 12927 1, EN 12927 2, EN 12927 3, EN 12927-4, EN 12927 5, EN 12927 6, EN 12927 7, EN 12927 8, EN 12929 1, EN 12929 2, EN 12930, EN 12397, EN 13107, EN 13223, EN 13243, prEN 13796 1, prEN 13796-2 and prEN 13796-3, but supplement them. This document is not applicable either to cableways for goods transport or to inclined lifts.</p>			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12927-1:2004	Safety requirements for cableway installations designed to carry persons - Ropes - Part 1: Selection criteria for ropes and their end fixings	CEN/TC 242	2004-08-23	
	<p>(...) specifies the safety requirements applicable to the selection criteria for ropes and their end fixings for installations for passenger transportation by rope. Its requirements are to be met taking into account the various types installations systems and their environment.</p> <p>(...) provides guidance on the selection of ropes and their end fixing for use on cableways. It does not apply for transportation of goods nor to inclined lifts.</p>			
EN 12927-2:2004	Safety requirements for cableway installations designed to carry persons - Ropes - Part 2: Safety factors	CEN/TC 242	2004-08-23	
	<p>(...) specifies the safety requirements applicable for safety factors for steelwire ropes (tensiles safety factor, bending ratio and transverse force factors) for installations for passenger transportation by rope.</p> <p>(...) is applicable to various types of installations and takes into account their environment.</p> <p>(...) does not apply to brake ropes.</p> <p>Some requirements concern synthetic ropes.</p> <p>The requirements relating to the protection of workers are not included in this standard.</p> <p>It does not apply to ropes for installations used for the transportation of goods, nor to inclined lifts.</p>			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12927-3:2004	Safety requirements for cableway installations designed to carry persons - Ropes - Part 3: Ropes – Part 3: Long splicing of 6 strand hauling, carrying hauling and towing ropes.	CEN/TC 242	2004-08-23	
	(...) specifies the safety requirements applicable to long splicing of 6 strand hauling, carrying hauling and towing ropes for installations for passenger transportation by rope. (...) is applicable to various types of installations systems and their environment. (...) applies to the requirements for the long splicing, repair and shortening of hauling and carrying hauling ropes that meet the requirements of EN 12385-8. (...) does not apply to installations for the transportation of goods, nor to inclined lifts.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12927-4:2004	Safety requirements for cableway installations designed to carry persons – Ropes – Part 4: End fixings	CEN/TC 242	2004-08-23	
	<p>(...) specifies the safety requirements applicable to end fixings of steel wire ropes for installations for passenger transportation by rope. (...) is applicable to various types of installations systems and takes into account their environment.</p> <p>(...) applies to the following types of end fixing when used in installations for passenger transportation by ropes in conformity with EN 12927-1.</p> <ul style="list-style-type: none"> - filled socket; - clamp socket; - drum; - bolted clamp; - wedge socket; - spliced eye; - gripped eye; - ferrule secured eye; - lever winch. <p>Taking its scope into account, it does not include requirements relating to the prevention of accidents and the protection for workers.</p> <p>It does not apply to installations for the transportation of goods, nor to inclined lifts.</p>			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12927-5:2004	Safety requirements for cableway installations designed to carry persons – Ropes – Part 5: Storage, transportation, installation and tensioning	CEN/TC242	2004-08-23	
	(...) specifies the safety requirements for the storage, transportation, installation and tensioning of ropes for installations for the transportation of passenger by rope. It also includes the requirements for adjusting, measuring and recording the condition of the rope during and on completion of the installation. It provides the safety requirements and measures to reduce the effect of hazards to the rope and possible hazards from the rope to persons and equipment during these operations. It does not apply to installations for the transportation of goods , nor to inclined lifts.			
EN 12927-6:2004	Safety requirements for cableway installations designed to carry persons – Ropes – Part 6: Discard criteria	CEN/TC242	2004-08-23	
	(...) specifies the safety requirements applicable to discard criteria for steel ropes for passenger transportation by rope. (...) is applicable to the various types of installations and takes into account their environment. (...) applies to all types of ropes and end fixing used in cableways for passenger transport. Some requirements concern synthetic ropes. Requirements relating to the protection of workers are not included in this part of EN 12927. (...) is not applicable to installations for the transportation of goods nor to inclined lifts.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12927-7:2004	Safety requirements for cableway installations designed to carry persons – Ropes – Part 7: Inspection, repair and maintenance	CEN/TC 242	2004-08-23	
	(...) specifies the safety requirements applicable to maintaining, inspecting and repairing steel wire ropes and their related installations for passenger transportation by rope. It is essential to meet its requirements taking into account the various types of installation systems and their environment. Some requirements concern synthetic ropes. Requirements relating to the protection of workers are not included in this part of EN 12927. This part does not apply to installations for transportation of goods, not to inclined lifts.			
EN 12927-8:2004	Safety requirements for cableway installations designed to carry persons – Ropes – Part 8: Magneticrope testing (MRT)	CEN/TC 242	2004-08-23	
	(...) specifies the minimum requirements of MRT equipment of MRT equipment and procedures for use in the examination of steel wire ropes used on cableways for passenger transport. Performance requirements and testing of MRT equipment and qualification of personnel engaged in carrying out MRT are also included. (...) does not included requirements relating to the protection of workers.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12929-1:2015	Safety requirements for cableway installations designed to carry persons – General requirements – Part 1: Requirements for all installations	CEN/TC 242	2015-02-13	
	<p>(...) This part of EN 12929 specifies the safety requirements for the general requirements for cableway installations designed to carry persons. These requirements are applied to the various types of installations and their environment. This document defines general technical characteristics and prescribes design principles and general safety requirements. It does not deal with details of operation and maintenance, nor with calculations and detailed requirements for the manufacture of components. This Part 1 does not deal with special regulations applicable to bi-cable reversible aerial ropeways without carrier truck brakes, which are the subject of Part 2. It includes requirements relating to the prevention of accidents and the protection of workers. It does not apply to cableway installations for transportation of goods or to lifts. Clause 11 describes the minimum requirements to be normatively satisfied for passageways and work areas. National regulations of a building or federal/state nature or which serve to protect particular groups of people remain unaffected. It may not always be possible for all types of cableway installation to transport all particular groups of people (e.g. persons with restricted mobility). The objective should be, however, for a cableway installation to enable the transportation of the largest possible passenger population.</p> <p>1.2 General principles</p> <p>1.2.1 Stringent safety requirements are of the utmost importance for the design, manufacture, erection, maintenance and operation of cableway installations. The design, manufacture, erection, maintenance and operation of cableways shall only be entrusted to contractors and experts who have the necessary knowledge and experience and who can ensure careful execution of the installation and proper management of the operation. All the components shall be calculated exactly, be of a good mechanical and electrical design and be manufactured from adequate, defect-free materials possessing the required characteristics .</p>			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12929-1:2015	Safety requirements for cableway installations designed to carry persons – General requirements – Part 1: Requirements for all installations	CEN/TC 242	2015-02-13	
	(Cont.) 1.2.2 All components shall be kept in working order and in good condition. Reference is made to EN 1709 and EN 12397. 1.2.3 In addition to the European Standards specific to cableway installations, the relevant European specifications shall be used for the design, manufacture, erection, maintenance and operation of cableways. 1.2.4 This document takes into account, in certain cases, the careless behaviour of passengers. In all cases, use of the cableway in accordance with its intended use is assumed and not misuse of the installation. 1.3 Exceptions 1.3.1 Exceptions to the requirements of Standards EN 1709, EN 1908, EN 1909, EN 12385-8, EN 12385-9, EN 12397, EN 12927, EN 12929-1, EN 12929-2, EN 12930, EN 13107, EN 13223, EN 13243, EN 13796-1, EN 13796-2 and EN 13796-3 are permissible, particularly in the case of innovation, if they are justified by a safety analysis and offer at least an equivalent level of safety. 1.3.2 Exceptions to this Standard are also permissible in the case of replacement of components in existing installations.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 12929-2:2015	Safety requirements for cableway installations designed to carry persons – General requirements – Part 2: Part 2: Additional requirements for reversible bicable aerial ropeways without carrier truck brakes	CEN/TC 242	2015-03-16	
	(…) specifies additional safety requirements for bicable reversible aerial ropeways without carrier truck brakes. This document is applicable to the various types of cableway installations and takes into account their environment. This Part of the EN 12929 contains: - additional requirements relating to the integrity of the haul rope loop; - additional requirements intended to prevent specific operational incidents; - requirements concerning the attachment of the carriers to the haul rope. This European Standard does not apply to cableway installations for transportation of goods nor to lifts.			
EN 12930:2015	Safety requirements for cableway installations designed to carry persons – Calculations	CEN/TC 242	2015-03-16	
	(…) specifies the general safety requirements applicable to the calculations for cableway installations designed to carry persons. This document is applicable to the various types of cableway installations and takes into account their environment. This document contains: - general requirements for calculations and their presentation; - general requirements relating to the actions to be taken into account in the calculation of components as a basis for the requirements of the standards EN 13223, EN 13107, EN 12927 and EN 1908; - requirements relating to verification of ropes by calculation; - requirements relating to the determination of the drive power; - requirements for the actions of the ropes and carriers on the support structures and for the deformations of these support structures. This document does not apply to installations for the transportation of goods nor to lifts.			

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EN 13107:2015/ AC:2016	Safety requirements for cableway installations designed to carry persons – Civil engineering works	CEN/TC 242	2015-09-14	
	(...) specifies the safety requirements applicable to civil engineering works for cableway installations designed to carry persons. In doing so, the various types of cableway installations and their environment are taken into consideration. It includes requirements relating to the prevention of accidents and the protection of workers, notwithstanding the application of national regulations. National regulations regarding building or construction or that are designed to protect particular groups of people remain unaffected. It does not apply to cableway installations for transportation of goods or to lifts. This European Standard is applicable to: new cableway installations designed to carry persons; alterations to existing cableway installations, as far as the safety of civil engineering works or parts of them is involved and no contrary specifications apply.			
EN 13223:2015	Safety requirements for cableway installations designed to carry persons – Drive systems and other mechanical equipment	CEN/TC 242	2015-09-14	
	(...) specifies safety requirements for the mechanical and electrical devices of the drive system and other mechanical devices for cableway installations designed to carry persons. This standard is applicable to the various types of installations and takes into account their environment. This European Standard applies to the design, manufacture, installation, maintenance and operation of the mechanical and electrical devices of the drive system and other mechanical devices for cableway installations designed to carry persons. It includes requirements concerning the prevention of accidents and the protection of workers without prejudice to the application of national regulations. National regulations regarding building or construction or that are designed to protect particular groups of people, remain unaffected. It does not apply to installations for the transportation of goods, or to lifts. Clauses 6 to 11 apply to the mechanical and electrical devices of the drive system. Clauses 12 to 20 apply to other mechanical devices.			

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EN 13243:2015	Safety requirements for cableway installations designed to carry persons – Electrical equipment other than for drive systems.	CEN/TC 242	2015-03-16	
	(...) specifies safety requirements for electrical devices including application software, apart for those in drive systems for cableway installations designed to carry persons. This standard is applicable to the various types of cableway installations and takes into account their environment. It does not apply to complex electronics and embedded software. For complex electronics and embedded software, reference is made to the relevant publications e.g. EN 61508. Electromagnetic compatibility (EMC) is not covered in this standard; cableways and their components should comply with general requirements for EMC. For electrical devices which are part of drive systems, the requirements of those sections listed in the scope of EN 13223 as relating to drive systems should be observed. This standard contains requirements for the prevention of accidents and protection of workers without prejudice to the application of national regulations. National regulations of a legal nature in regards to building or regulations or that are designed to protect particular groups of people, remain unaffected. It does not apply to cableway installations for the transportation of goods by rope or to lifts.			
EN 13796-1:2017	Safety requirements for cableway installations designed to carry persons - Carriers - Part 1: Grips, carrier trucks, on-board brakes, cabins, chairs, carriages, maintenance carriers, tow-hangers	CEN/TC 242	2017-07-16	
	(...)specifies the safety requirements applicable to carriers for cableway installations designed to carry persons. It is applicable to the various types of installations and takes into account their environment. It includes requirements relating to the prevention of accidents and the protection of workers. It does not apply to installations for the transportation of goods or to inclined lifts.			

Referência	Título / Campo de Aplicação	Emissor	Data de adoção	Observações
EN 13796-2:2017	Safety requirements for cableway installations designed to carry persons - Carriers - Part 2: Slipping resistance tests for grips	CEN/TC 242	2017-07-16	
	(...) specifies the safety requirements applicable to carriers for cableway installations designed to carry persons. It is applicable to the various types of installations and takes into account their environment. This European Standard describes the requirements to be met when testing the slipping resistance of grips clamped: - on the haulage or carrying hauling rope of carriers of monocable or bicable aerial ropeways with fixed or detachable grips, covered in EN 13796 1:2014, 7.5; - on the towing rope of ski-tows with fixed grips, covered in EN 13796 1:2014, 7.7.2. It does not apply to installations for the transportation of goods nor to inclined lifts.			
EN 13796-3:2017	Safety requirements for cableway installations designed to carry persons - Carriers - Part 3: Fatigue testing	CEN/TC 242	2017-07-16	
	(...) specifies the safety requirements applicable to carriers for cableway installations for passenger transportation. This standard is applicable to the various types of installations and takes into account their environment. This standard sets out the requirements to be met for fatigue tests for carriers of unidirectional monocable aerial ropeways of capacity not greater than 16 persons according to EN 13796 1:2014, 6.3.3.1. This standard does not apply to cableway installations for the transportation of goods or to inclined lifts.			

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EN 15700:2011	Safety for conveyor belts for winter sport or leisure use	CEN/TC 242	2012-01-31	
	<p>(...) is applicable for travelators for leisure or winter sports use. These requirements are applicable to travelators for the transport of passengers wearing snow-sliding devices or pedestrians wearing ski boots or heavy boots who may be carrying their snow-sliding devices for winter sports activities. For other uses, users shall wear suitable (enclosed and solid) footwear for travelators. NOTE Snow-sliding devices include seated ski equipment for handicapped people. This European Standard has been prepared on the basis of the automatic operation of these installations with no staff permanently present at the actual installation. It covers requirements relating to the prevention of accidents and the safety of workers. This European Standard covers all the significant hazards, hazardous situations and hazardous events specific to travelators, for leisure or winter sports activities, when they are used in conformity with the application for which they are intended, as well as for inappropriate applications which could be reasonably foreseeable by the manufacturer (see Clause 4). This European Standard does not apply either to moving walks as specified in EN 115 or to loading bands as specified in EN 1907. This European Standard does not apply to travelators manufactured prior to the date of its publication as an EN.</p>			