

**Ohutusnõuded inimeste
transportimiseks mõeldud
kõistepaigaldistele. Pingutusseadmed**

Safety requirements for cableway installations
designed to carry persons - Tensioning devices

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1908:2004 sisaldab Euroopa standardi EN 1908:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1908:2004 consists of the English text of the European standard EN 1908:2004.</p> <p>This document is endorsed on 21.12.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard specifies the safety requirements applicable for the tensioning devices for cableway installations designed to carry persons. This standard is applicable to the various types of installations and takes into account their environment.</p>	<p>Scope: This European Standard specifies the safety requirements applicable for the tensioning devices for cableway installations designed to carry persons. This standard is applicable to the various types of installations and takes into account their environment.</p>
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English version

Safety requirements of cableway installations designed to carry persons - Tensioning devices

Prescriptions de sécurité pour les installations à câbles transportant des personnes - Dispositifs de mise en tension

Sicherheitsanforderungen für Seilbahnen für den Personenverkehr - Spanneinrichtungen

This European Standard was approved by CEN on 23 August 2004.

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.

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Foreword

This document (EN 1908:2004) has been prepared by Technical Committee CEN/TC 242 "Safety requirements for passenger transportation by rope", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2005, and conflicting national standards shall be withdrawn at the latest by April 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directives.

For relationship with EU Directives, see informative Annex ZA, which is an integral part of this document.

This document forms part of the standards programme approved by the CEN Technical Board on safety requirements for cableway installations designed to carry persons. This programme comprises the following standards:

- 1) Safety requirements for cableway installations designed to carry persons – Terminology.
- 2) Safety requirements for cableway installations designed to carry persons - General requirements.
- 3) Safety requirements for cableway installations designed to carry persons – Calculations.
- 4) Safety requirements for cableway installations designed to carry persons – Ropes.
- 5) Safety requirements for cableway installations designed to carry persons - Tensioning devices.
- 6) Safety requirements for cableway installations designed to carry persons – Drive systems and other mechanical devices.
- 7) Safety requirements for cableway installations designed to carry persons – Carriers.
- 8) Safety requirements for cableway installations designed to carry persons – Electrical installations apart from drive systems.
- 9) Safety requirements for cableway installations designed to carry persons - Civil engineering works.
- 10) Safety requirements for cableway installations designed to carry persons – Pre-commissioning inspection, maintenance and operational inspection and checks.
- 11) Safety requirements for cableway installations designed to carry persons – Recovery and evacuation.
- 12) Safety requirements for cableway installations designed to carry persons – Operation.
- 13) Safety requirements for cableway installations designed to carry persons - Quality assurance.

Together these form a series of standards regarding design, production, maintenance and operation of all installations for cableway installations designed to carry persons.

In respect of ski-tows, the drafting of this document has been guided by the works of the International Organisation for transportation by rope (OITAF).

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, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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1 Scope

This document specifies the safety requirements applicable for the tensioning 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 document applies to the design, manufacture, installation, maintenance and operation of rope tensioning devices and anchorages for cableway installations designed to carry persons.

It includes requirements relative to the prevention of accidents and the protection of workers.

It does not apply either to installations intended for the transport of goods or to inclined lifts.

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 982, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics.*

EN 1709, *Safety requirements for cableway installations designed to carry persons — Pre-commissioning inspection, maintenance and operational inspection and checks.*

prEN 1907:2004, *Safety requirements for passenger transportation by rope — Terminology.*

EN 1909, *Safety requirements for cableway installations designed to carry persons — Recovery and evacuation.*

EN 12397, *Safety requirements for cableway installations designed to carry persons — Operation.*

EN 12408, *Safety requirements for cableway installations designed to carry persons — Quality assurance.*

EN 12927-1, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 1: Selection criteria for ropes and their end fixings.*

EN 12927-2, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 2: Safety factors..*

EN 12927-3, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 3: Long splicing of 6-strand hauling, carrying-hauling and towing ropes.*

EN 12927-4, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 4: End fixing.*

EN 12927-5, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 5: Storage, transportation, installation and tensioning.*

EN 12927-6, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 6: Discard criteria.*

EN 12927-7, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 7: Calculation, repair and maintenance.*

EN 12927-8, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 8: Magnetic rope testing (MRT).*

EN 12929-1, *Safety requirements for cableway installations designed to carry persons — General requirements - Part 1: Requirements applicable to all installations.*

EN 12929-2, *Safety requirements for cableway installations designed to carry persons — General requirements - Part 2: Additional requirements for jig back bicable aerial ropeways without carrier truck brakes.*

EN 12930, *Safety requirements for cableway installations designed to carry persons — Calculations.*

EN 13107, *Safety requirements for cableway installations designed to carry persons — Civil engineering works.*

EN 13223, *Safety requirements for cableway installations designed to carry persons — Drive systems and other mechanical equipment.*

EN 13243, *Safety requirements for cableway installations designed to carry persons — Electrical equipment other than for drive systems.*

prEN 13796-1, *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.*

prEN 13796-2, *Safety requirements for cableway installations designed to carry persons — Carriers — Part 2: Slipping resistance tests for grips.*

prEN 13796-3, *Safety requirements for cableway installations designed to carry persons — Carriers — Part 3: Fatigue testing.*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in prEN 1907:2004 and the following apply.

3.1

tensioning device

all of the components which are used for maintaining the tension of a rope within pre-established permissible limits

3.2

travel

the distance available for the moving part of a tensioning device to absorb variations in the length and sag of a rope under tension

3.3

nominal tension

the theoretical static force applied to the rope through the tensioning device by counterweights, or the mean value of the pre-established limits in the case of another tensioning device

3.4

tension sheave

sheave for deflecting a tension rope

3.5

fixed anchorage tensioning device

rope tensioning device whose tension cannot be adjusted during operation