N.S. OCUMPAN

# Ohutusnõuded inimeste transportimiseks mõeldud köisteepaigaldistele. Köied. Osa 5: Ladustamine, transport, paigaldamine ja pingutamine

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



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12927-	This Estonian standard EVS-EN 12927-
5:2004 sisaldab Euroopa standardi EN	5:2004 consists of the English text of the
12927-5:2004 ingliskeelset teksti.	European standard EN 12927-5:2004.
Käesolev dokument on jõustatud	This document is endorsed on 21.12.2004
21.12.2004 ja selle kohta on avaldatud	with the notification being published in the
teade Eesti standardiorganisatsiooni	official publication of the Estonian national
ametlikus väljaandes.	standardisation organisation.
Standard on kättesaadav Eesti	The standard is available from Estonian
standardiorganisatsioonist.	standardisation organisation.
standardiorganisatsioonist.	standardisation organisation.

Käsitlusala:	Scope:
This part of EN 12927 specifies the safety	This part of EN 12927 specifies the safety
requirements for the storage,	requirements for the storage,
transportation, installation and tensioning	transportation, installation and tensioning
of ropes for installations for the	of ropes for installations for the
transportation of passenger by rope. It also includes the requirements for	transportation of passenger by rope. It also includes the requirements for
adjusting, measuring and recording the	adjusting, measuring and recording the
condition of the rope during and on	condition of the rope during and on
completion of the installation.	completion of the installation.
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<b>ICS</b> 45.100	
Võtmesõnad:	
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## EUROPEAN STANDARD NORME EUROPÉENNE **EUROPÄISCHE NORM**

### EN 12927-5

October 2004

ICS 45,100

English version

### Safety requirements for cableway installations designed to carry persons - Ropes - Part 5: Storage, transportation, installation and tensioning

Prescriptions de sécurité pour les installations à câbles transportant des personnes - Câbles - Partie 5 : Stockage, transport, mise en place et mise en tension

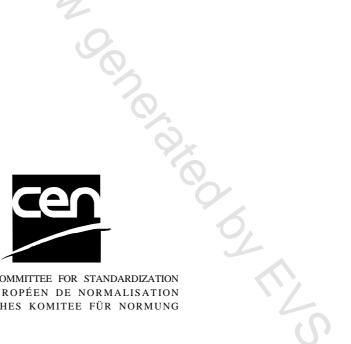
Sicherheitsanforderungen für Seilbahnen und Schleppaufzüge des Personenverkehrs - Seile - Teil 5: Lagerung, Transport, Einbau, und Spannen

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.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

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Image: State Stat

### Foreword

This document (EN 12927-5:2004) 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 Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This EN 12927 includes the following parts under the general title "Safety requirements for cableway installations designed to carry persons – Ropes":

- Part 1: Selection criteria for ropes and their end fixings
- Part 2: Safety factors
- Part 3: Long splicing of 6 strand hauling, carrying-hauling and towing ropes
- Part 4: End fixings
- Part 5: Storage, transportation, handling and tensioning
- Part 6: Discard criteria
- Part 7: Inspection, repair and maintenance
- Part 8: Magnetic rope testing (MRT)

This European Standard forms part of the standards programme adopted by the CEN Technical Board in relation of safety requirements for passenger transportation by rope. This programme includes 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 equipment
- 7) Safety requirements for cableway installations designed to carry persons Carriers
- 8) Safety requirements for cableway installations designed to carry persons Electrical equipment other than for 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, manufacture, production, maintenance and operation of all installations for passenger transportation by rope.

In respect of ski-tows, the drafting of this European Standard 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, , Hur, yvakia, S Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

#### 1 Scope

This part of EN 12927 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.

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

prEN 1907:2004, Safety requirements for cableway installations designed to carry persons - Terminology.

EN 1908, Safety requirements for cableway installations designed to carry persons - Tensioning devices.

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

EN 12385-2:2002, Steel wire ropes - Safety - Part 2: Definitions, designation and classification.

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 fixings.

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: Inspection, 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 passenger transportation by rope - 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 reversible 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, in EN 12385-2:2002 and the following apply.

#### 3.1

#### installer

person or organisation responsible for the whole rope installation, the splicing and the end connecting, the tensioning and the adjustment, or a part of it