Load restraint assemblies on road vehicles - Safety - Part 2: Web lashing made from man-made fibres

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12195-2:2001 sisaldab Euroopa standardi EN 12195-2:2000 ingliskeelset teksti. Käesolev dokument on jõustatud 04.04.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12195-2:2001 consists of the English text of the European standard EN 12195-2:2000. This document is endorsed on 04.04.2001 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This part of EN 12195 specifies safety requirements for web lashing made from man-made fibres with woven webbings for multiple use and of lashing combinations with woven webbings for the safe surface transport of goods on road vehicles, e.g. trucks and trailer which are used on roads or located on vessels or on rail waggons and/or combinations thereof; includes only tension devices to be hand driven with a maximum hand force of 500 N.	**Scope:** This part of EN 12195 specifies safety requirements for web lashing made from man-made fibres with woven webbings for multiple use and of lashing combinations with woven webbings for the safe surface transport of goods on road vehicles, e.g. trucks and trailer which are used on roads or located on vessels or on rail waggons and/or combinations thereof; includes only tension devices to be hand driven with a maximum hand force of 500 N.

ICS 53.080, 55.180.99

Võtmesõnad: load restraint assemblies, man-made fibres, safety, web lashing equipment

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Load restraint assemblies on road vehicles – Safety
Part 2: Web lashing made from man-made fibres

Dispositifs d'arrimage des charges sur véhicules routiers – Sécurité – Partie 2: Sangles en fibres synthétiques

Ladungssicherungseinrichtungen auf Straßenfahrzeugen – Sicherheit – Teil 2: Zurrgurte aus Chemiefasern

This European Standard was approved by CEN on 2000-06-26.

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CEN

European Committee for Standardization
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Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 168 "Chains, ropes, webbing, slings and accessories – Safety", the secretariat of which is held by BSI.

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 May 2001, and conflicting national standards shall be withdrawn at the latest by May 2001.

This European Standard has been prepared under a mandate given by CEN by the European Commission and the European Free Trade Association.

The annexes A and B are normative.

This series EN 12195 "Load restraint assemblies on road vehicles — Safety" consists of the following parts:

Part 1: Calculation of lashing forces

Part 2: Web lashing made from man-made fibres

Part 3: Lashing chains

Part 4: Lashing wire ropes

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European Standard has been prepared to be a harmonized standard to provide conformity of the safety requirements for web lashings on the European Market and thus to enable free trade.

The extent to which hazards are covered is indicated in the Scope of the Standard. In addition web lashings for securing of loads on vehicles shall conform as appropriate to EN 292 for hazards which are not covered by this Standard.

1 Scope

This Part of EN 12195

- specifies safety requirements for web lashing made from man-made fibres with flat woven webbings for multiple use and of lashing combinations with woven webbings for the safe surface transport of goods on road vehicles, e.g. trucks and trailers which are used on roads or located on vessels or on rail waggons and/or combinations thereof;
- includes only tensioning devices to be hand driven with a maximum hand force of 500 N;
- specifies methods for testing of web lashing for securing of loads;
- deals with the significant hazards which could occur when web lashings are in use as intended and under conditions foreseen by the manufacturer (see clause 4 and Annex A);
- includes composite load restraint assemblies also for the same purpose as above.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 292-1:1991, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology.*

EN 292-2:1991, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles and specifications.*

prEN 12195-1:1995, *Load restraint assemblies on road vehicles — Safety — Part 1: Calculation of lashing forces.*

EN ISO 9001:1994, *Quality systems — Model for quality assurance in design, development, production, installation and servicing (ISO 9001:1994).*

EN ISO 9002:1994, *Quality systems — Model for quality assurance in production, installation and servicing (ISO 9002:1994).*

EN ISO 9003:1994, *Quality systems — Model for quality assurance in final inspection and test (ISO 9003:1994).*

EN 10002-2:1991, *Metallic materials — Tensile testing — Part 2: Verification of the force measuring system of the tensile testing machines.*

ISO 1833:1977, *Textiles — Binary fibre mixtures — Quantitative chemical analysis.*

ISO 2076:1999, *Textiles — Man-made fibres — Generic names.*

ISO 2859-1:1989, *Sampling procedures for inspection by attributes — Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection.*

ISO 9227:1990, *Corrosion tests in artificial atmospheres — Salt spray tests.*

3 Terms and definitions

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

3.1
load restraint assembly
systems and devices for the securing of loads

3.2
lashing equipment
device designed to be attached to the lashing points in order to secure the cargo on a road vehicle; the lashing equipment consists of tensioning elements (e. g. webbing, chain, wire rope), tensioning devices (e. g. wrench, ratchet, spanner, tension jack) and connecting components, if required (e. g. hook, terminal link)

3.3
web lashing
means of securing as under 3.2, consisting of a tensioning device or a tension retaining device and flat woven textile webbing with or without end fittings (see figure 1c: two-piece web lashing)

3.4
flat woven textile webbing
conventional or shuttleless woven narrow fabric, generally with multiple plies, and the prime function of which is loadbearing; a characteristic of webbing is its narrow fabric selvedges

3.5
tensioning device
mechanical device inducing and maintaining a tensile force in a load restraint assembly (e. g. ratchets, winches, overcentre buckles; see figure 2, C1 to C5)

3.6
end fitting
device connecting the means of web lashing or the tensioning device with the lashing point of the vehicle or the attachment point of the load (see figure 2, D1 to D7)

3.7
tension force indicator
device which indicates the force applied to the lashing system by means of the tension devices and movement of the load or elastic deformation of the vehicle body, acting on the lashing equipment

3.8
single part web lashing
web lashing which comprises only one flat woven textile webbing and a tensioning device with end fittings (see figure 1b), shown with floating end fittings

3.9
two-piece web lashing
web lashing which comprises two woven textile webbings, one with a tensioning device, both with one end fitting (see figure 1c)

3.10
length l_G
the length of a one-piece web lashing measured from the free end of the webbing to the outer turning radius of its connection to the tensioning device