

**Terastraadist trosside tropid. Ohutus. Osa 3:  
Kaitserõngad ja kaablikinnitusega tropid  
KONSOLIDEERITUD TEKST**

Steel wire rope slings - Safety - Part 3: Grommets and  
cable-laid slings CONSOLIDATED TEXT

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13414-3:2003+A1:2008 sisaldab Euroopa standardi EN 13414-3:2003+A1:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 15.12.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 12.11.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13414-3:2003+A1:2008 consists of the English text of the European standard EN 13414-3:2003+A1:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 15.12.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 12.11.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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**Võtmesõnad:** cables, inspect, lifting equipment, load capacity, ropes, safety, safety engineering, safety requirements, specification (approval), specifications, steel wires, steel-wire ropes, terminal fittings (ropes), testing, wire rope, wire rope slings, wire ropes

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Aru 10 Tallinn 10317 Eesti; [www.evs.ee](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

English Version

**Steel wire rope slings - Safety - Part 3: Grommets and cable-laid slings**

Elingues en câbles d'acier - Sécurité - Partie 3: Estropes et élingues en grelin

Anschlagseile aus Strahldrahtseilen - Sicherheit - Teil 3: Grummets und Kabelschlag-Anschlagseile

This European Standard was approved by CEN on 25 March 2003 and includes Corrigendum 1 issued by CEN on 5 May 2004 and Amendment 1 approved by CEN on 18 September 2008.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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.



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 13414-3:2003+A1:2008) has been prepared by Technical Committee CEN/TC 168 "Chains, ropes, webbings, 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 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document supersedes EN 13414-3:2003.

This document includes Amendment 1, approved by CEN on 2008-09-18 and Corrigendum 1 issued by CEN on 2004-05-05.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

The modifications of the related CEN Corrigendum have been implemented at the appropriate places in the text and are indicated by the tags **AC** **AC**.

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).

**A1** For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

The other parts of this European Standard are:

Part 1 Slings for general lifting service

Part 2 Specification for information for use and maintenance **AC** to **AC** be provided by the manufacturer

Annexes A to F are normative. Annex G is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, 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.

## Introduction

This Part of the standard has been prepared to provide a means of complying with the essential safety requirements of the Machinery Directive and associated EFTA regulations.

Purchasers are advised to specify in their purchasing contract that the supplier operates a quality management system applicable to this standard (e.g. ISO EN 9001) to ensure that products claimed to comply consistently achieve the required level of quality.

The coefficient of utilization ( $Z_p$ ) used in this standard for slings with a diameter greater than 60 mm is lower than that normally used for general service wire rope slings. This is justified for the following reasons.

- a) Slings over 60 mm diameter are not intended for general service and are subjected to special conditions relating to design, construction, frequency of use, service and discard.
- b) The mass of the load is generally calculated or measured with considerable accuracy and as such slings are usually specially manufactured for one or a limited number of special lifts.
- c) The lifting operation is controlled and supervised.
- d) The dynamic factors, e.g. shock loading, are limited.

These factors reduce the unknown aspects which dictate that slings in general service require a higher coefficient of utilization; lower coefficients have been and are used with confidence.

## 1 Scope

This European Standard specifies the construction requirements, calculation of WLL, testing and certification of steel wire rope grommets, cable-laid grommets and cable-laid slings using strand and wire rope conforming to EN 12385-4.

The hazards covered by this standard are identified in clause 4.

This standard covers ferrule-secured cable-laid slings up to 60mm.

## 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.

EN 292-2:1991/A1:1995, *Safety of machinery – Basic concepts, general principles for design Part 2: Technical principles and specifications (Amendment 1: 1995)*

EN 1050:1996, *Safety of machinery – Principles for risk assessment*

EN 12385-4:2002, *Steel wire ropes – Safety – Part 4: Stranded ropes for general lifting applications*

prEN 13411-3, *Terminations for steel wire ropes – Safety – Part 3: Ferrules and ferrule securing*