# Troppide komponendid. Ohutus. Osa 4: Lülid, Klass 8

Components for slings - Safety - Part 4: Links, Grade 8



# **EESTI STANDARDI EESSÕNA**

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1677-
4:2001 sisaldab Euroopa standardi EN
1677-4:2000 ingliskeelset teksti.

Käesolev dokument on jõustatud 09.03.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1677-4:2001 consists of the English text of the European standard EN 1677-4:2000.

This document is endorsed on 09.03.2001 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 1677 specifies requirements for forged or welded steel master links, intermediate master links, master link assemblies and lower terminal links of grade 8 up to 132 t WLL, mainly for use in all types of lifting slings (e.g. chain, wire rope and textile) intended for lifting objects, materials or goods.

## Scope:

This Part of EN 1677 specifies requirements for forged or welded steel master links, intermediate master links, master link assemblies and lower terminal links of grade 8 up to 132 t WLL, mainly for use in all types of lifting slings (e.g. chain, wire rope and textile) intended for lifting objects, materials or goods.

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Võtmesõnad: grade 8, links, safety, slings

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English version**

# Components for slings - Safety

Part 4: Links, grade 8

Accessoires pour élingues - Sécurité - Partie 4: Mailles - Classe 8

Einzelteile für Anschlagmittel – Sicherheit – Teil 4: Einzelglieder, Güteklasse 8

This European Standard was approved by CEN on 2000-09-30.

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

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

# CEN

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

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## **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 April 2001, and conflicting national standards shall be withdrawn at the latest by April 2001.

This European Standard 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 standard.

It is a Part of a products standard related to safety for components for slings.

The other Parts of EN 1677 for components for slings are:

Part 1: Forged steel components - Grade 8

Part 2: Forged steel lifting hooks with latch - Grade 8

Part 3: Forged steel self-locking hooks - Grade 8

Part 5: Forged steel lifting hooks with latch - Grade 4

Part 6: Links - Grade 4

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.

#### 0 Introduction

This European standard has been prepared to be a harmonized standard providing one means of complying with the essential safety requirements of the Machinery Directive and associated EFTA regulations.

The links covered by this Part of EN 1677 are normally supplied to be part of a sling, but they may also be used for other applications. In such instances it is important that the link design is checked to ensure its fitness for the intended use.

The extent to which hazards are covered is indicated in the scope. In addition, lifting equipment shall conform as appropriate to EN 292 for hazards that are not covered by this standard.

## 1 Scope

This part of EN 1677 specifies requirements for forged or welded steel master links, intermediate master links, master link assemblies and lower terminal links of grade 8 up to 132 t WLL, mainly for use in:

- chain slings according to EN 818-4
- steel wire rope slings
- textile slings according to EN 1492-1:2000, EN 1492-2:2000.

intended for lifting objects, materials or goods.

This Part of EN 1677 does not apply to hand forged links.

The hazards covered by this Part of EN 1677 are identified in clause 4.

Annex ZA gives the relationship with EU-Directives

## 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	Safety of machinery - Basic concepts - General principles for design Part 1: Basic terminology, methodology
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 818-4:1996	Short link chain for lifting purposes - Safety Part 4: Chain slings - grade 8
EN 818-6:2000	Short link chain for lifting purposes - Safety Part 6: Chain slings - Specification for information for use and maintenance to be provided by the manufacturer.
EN 1050:1996	Safety of machinery - Principles of risk assessment.
EN 1492-1:2000	Textile slings - Safety Part 1: Flat woven webbing slings made of man-made fibres
EN 1492-2:2000	Textile slings - Safety Part 2: Round slings made of man-made fibres
EN ISO 9002:1994	Quality systems - Model for quality assurance in production, installation and servicing
EN 10002-2:1991	Metallic materials - Tensile test - Part 2: Verification of the force measuring system of the tensile testing machine
EN 10025:1990/A1:1993	Hot rolled products of non-alloy structural steels — Technical deliveryconditions
EN 10228-1:1999	Non-destructive testing of steel forgings Part 1: Magnetic particle inspection
EN 10228-2:1998	Non-destructive testing of steel forgings Part 2: Penetrant testing
EN 45012	General criteria for certification bodies operating quality system certification
ISO 643	Steels - Micrographic determination of the ferritic or austenitic grain size
	Oteols - Micrographic determination of the ferritae of disternitie grain size