Troppide komponendid. Ohutus. Osa 2: Sepaterasest fiksaatoriga tõstekonksud, Klass 8 KONSOLIDEERITUD TEKST

Components for slings - Safety - Part 2: Forged steel de 8 lifting hooks with latch, Grade 8 CONSOLIDATED **TEXT** 



# **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1677-2:2001+A1:2008 sisaldab Euroopa standardi EN 1677-2:2000+A1:2008 ingliskeelset teksti.

This Estonian standard EVS-EN 1677-2:2001+A1:2008 consists of the English text of the European standard EN 1677-2:2000+A1:2008.

Standard on kinnitatud Eesti Standardikeskuse 20.06.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 20.06.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 02.04.2008.

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The standard is available from Estonian standardisation organisation.

ICS 53.020.30

Võtmesõnad: forged steel, grade 8, latch, lifting hooks, safety, slings

### Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

# EUROPEAN STANDARD

# NORME EUROPÉENNE

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EN 1677-2:2000+A1

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Supersedes EN 1677-2:2000

#### **English Version**

# Components for slings - Safety - Part 2: Forged steel lifting hooks with latch, Grade 8

Accessoires pour élingues - Sécurité - Partie 2: Crochets de levage en acier forgé à linguet, Classe 8

Einzelteile für Anschlagmittel - Sicherheit - Teil 2: Geschmiedete Haken mit Sicherungsklappe, Güteklasse 8

This European Standard was approved by CEN on 21 May 2000 and includes Amendment 1 approved by CEN on 21 February 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

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# **Foreword**

This document (EN 1677-2:2000+A1:2008) 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 October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

This document includes Amendment 1, approved by CEN on 2008-02-21.

This document supersedes EN 1677-2:2000.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

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 Annexes ZA and ZB, which are integral parts of this document.

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

Part 1: Forged steel components - Grade 8

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

Part 4: Links - Grade 8

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

Part 6: Links - Grade 4

Annexes A and B of this European Standard are 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 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 hooks 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 hook 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 steel lifting hooks with latch of grade 8 having eye or clevis and pin up to 63 t WLL, mainly for use in:

- chain slings according to EN 818-4
- steel wire rope slings according to prEN 13414-1:1999
- textile slings according to prEN 1492-1:2000, prEN 1492-2:2000

intended for lifting objects, materials or goods.

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

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

Annex A is informative, and gives the bases for calculation of hook dimensions.

Annex B is informative, and gives an example of a designation system for hooks of grade 8.

Annexes ZA and ZB give (41) 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 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 292-1, 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, 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

A EN 1677-1:2000+A1:2008 (A), Components for slings – Safety - Part 1: Forged steel components - Grade 8

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

prEN 13414-1:1999, Steel wire rope slings - Safety - Part 1: Wire rope slings

# 3 Terms and definitions

For the purpose of this Part of EN 1677, the definitions given in A EN 1677-1:2000+A1:2008 (A) apply.

### 4 Hazards

Accidental release of a load, or release of a load due to failure of a hook, puts at risk, either directly or indirectly, the safety or health of those persons within the danger zone.

In order to provide the necessary strength and durability of hooks, this Part of EN 1677 gives requirements for the design, manufacture and testing to ensure the specified levels of performance are met.

Since failure can be caused by the incorrect choice of grade and specification of hook, this Part of EN 1677 also gives requirements for marking and the manufacturer's certificate.

Errors in fitting can also lead to failure and this Part of EN 1677 contains dimensional requirements to allow correct fit.

Risk of injury due to sharp edges, sharp angles or rough surfaces when handling is also covered by this standard.

Those aspects of safe use associated with good practice are given in EN 818-6:2000.

Table 1 contains those hazards which require action to reduce risk identified by risk assessment as being specific and significant for forged steel lifting hooks with latch, Grade 8.

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