

**Sepistatud terasest tõstesääklid üldotstarbelisteks
tõstetöödeks. Rist- ja ümarsääklid. Kategooria 6.
Ohutus KONSOLIDEERITUD TEKST**

Forged steel shackles for general lifting purposes - Dee
shackles and bow shackles - Grade 6 - Safety
CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13889:2007+A1:2008 sisaldab Euroopa standardi EN 13889:2003+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 13889:2007+A1:2008 consists of the English text of the European standard EN 13889:2003+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: dimensions, forged, hazards, heat treatment, lifting equipment, load capacity, marking, materials, mechanical properties, production, safety, safety requirements, shackles, specifications, testing, tests, user information, wrought products

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English Version

Forged steel shackles for general lifting purposes - Dee shackles and bow shackles - Grade 6 - Safety

Manilles forgées en acier pour applications générales de levage - Manilles droites et manilles lyres - Classe 6 - Sécurité

Geschmiedete Schäkel für allgemeine Hebezwecke - Gerade und geschweifte Schäkel - Güteklasse 6 - Sicherheit

This European Standard was approved by CEN on 25 April 2003 and includes Amendment 1 approved by CEN on 9 September 2008.

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Foreword

This document (EN 13889:2003+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 May 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document supersedes EN 13889:2003.

This document includes Amendment 1, approved by CEN on 2008-09-09.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A_1}$ $\boxed{A_1}$.

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).

$\boxed{A_1}$ For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. $\boxed{A_1}$

Annexes A and C are informative. Annex B is normative.

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 harmonised standard to provide one means of conforming with the essential safety requirements of the Machinery Directive and associated EFTA regulations.

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

The designation system given in annex C for recording the identifying features of forged steel shackles has been included in this first edition of this standard as an informative annex. However, should its use become accepted then the status of the annex will need to be reviewed.

1 Scope

This European Standard specifies requirements for forged steel Dee and bow shackles of grade 6 for general lifting purposes in a range of working load limits 0,5 t to 25 t maximum.

This standard applies only to those shackles with threaded pins.

Annex A gives information on the safe use of shackles, annex B gives information on types of pins, and annex C gives an example of a designation system for forged steel shackles.

The hazards covered are identified in clause 4.

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 (including amendments).

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

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

EN 10025: 1990, *Hot rolled products of non-alloy structural steels — Technical delivery conditions*

EN 10045-1, *Metallic materials — Charpy impact test — Part 1: Test method*

EN 10045-2, *Metallic materials — Charpy impact test — Part 2: Verification of the testing machine (pendulum impact)*

EN 10228-1, *Non-destructive testing of steel forgings — Part 1: Magnetic particle inspection*

EN 10228-2, *Non-destructive testing of steel forgings — Part 2: Penetrant testing*

EN 45012, *General requirements for bodies operating assessment and certification/registration of quality systems (ISO/IEC Guide 62:1996)*

EN ISO 7500-1: 1999, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines - Verification and calibration of the force-measuring system. (ISO 7500-1:1999)*

ISO 261, *ISO general-purpose metric screw threads — General plan*

ISO 263, *ISO inch screw threads — General plan and selection for screws, bolts and nuts — Diameter range 0.06 to 6 inch*

ISO 643, *Steels — Micrographic determination of the apparent grain size*