

**Lühikeste lülidega tõstekett. Ohutus. Osa 2:
Keskmise tolerantsiga kett tõstetroppide
valmistamiseks. Klass 8**

Short link chain for lifting purposes - Safety - Part 2:
Medium tolerance chain for chain slings - Grade 8

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 818-2:1999 sisaldab Euroopa standardi EN 818-2:1996 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 818-2:1999 consists of the English text of the European standard EN 818-2:1996.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>See standardi EN 818 osa määrab kindlaks tõstetropides ja üldistel tõstmisotstarvetel kasutatavate, 8. klassi lühilüliliste miinimumtolerantsiga tõstekettide ohutusnõuded. Need on ümarterasest elekterkeevitusega valmistatud lühilülilised tõsteketid, mis on termotöödeldud, mida on katsetatud ning mis vastavad eelstandardis prEN 818-1 toodud üldistele vastuvõtutingimustele. Standardi EN 818 see osa hõlmab tõstekette nimimõõtmetega 4÷45 mm.</p>	<p>Scope:</p>
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Võtmesõnad: katsed, keemiline koostis, keevitatud ketid, ketilülid, kontrollimine, konveieriketid, mehaanilised omadused, mõõtmed, ohud, ohutus, terased, tõstetropid, õnnetuste vältimine

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Descriptors: Chains, safety, lifting appliances, chain slings.

English version

Short link chains for lifting purposes

Safety

Part 2: Medium tolerance chains for chain slings, grade 8

Chaînes de levage à maillons courts;
sécurité. Partie 2: Chaîne de tolérance
moyenne pour élingues en chaînes,
classe 8

Kurzgliedrige Rundstahlketten für
Hebezwecke; Sicherheit. Teil 2:
Mitteltolerierte Rundstahlketten für
Anschlagketten, Güteklasse 8

This European Standard was approved by CEN on 1996-03-07.

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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.

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 Central Secretariat has the same status as the official versions.

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CEN

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 168 "Chains, ropes, webbing, slings and accessories - Safety" of which the secretariat 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 December 1996, and conflicting national standards shall be withdrawn at the latest by December 1996.

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).

The other parts of EN 818 are:

- Part 1: General conditions of acceptance
- Part 3: Medium tolerance chain for chain slings - Grade 4
- Part 4: Chain slings - Grade 8
- Part 5: Chain slings - Grade 4
- Part 6: Chain slings - Instructions for use and maintenance.

A further part or parts will cover fine tolerance chains for chain hoists and other lifting appliances.

This is the first edition of this Part of EN 818.

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

0 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.

The Directive stipulates that where chain with welded links is used for lifting accessories it is to be of short link type and for the purposes of this standard this is chain having a ratio of nominal pitch to nominal size of 3:1.

The extent to which hazards are covered is indicated in the scope of this Part of EN 818. In addition, lifting equipment shall comply as appropriate with EN 292 for hazards which are not covered by this standard.

Annex C gives a designation system for recording the identifying features of grade 8 short link chain. Since this system is not widely used it has been included in this first edition of this standard as an informative annex, however, should its use become more generally accepted then the status of the information would need to be reviewed.

1 Scope

This Part of EN 818 specifies the requirements related to safety for short link lifting chains, Grade 8, of medium tolerance for use in chain slings and for general lifting purposes. They are electrically welded round steel short link chains, heat treated and tested and complying with the general conditions of acceptance in EN 818-1.

The range of nominal sizes of chain covered by this Part of EN 818 is from 4 mm to 45 mm.

The hazards covered by this Part of EN 818 are identified in clause 4.

The bases for calculation of tabulated values for dimensions, working load limits and mechanical properties are given in annex A.

Annex B gives information on weight/metre of chain.

Annex C gives an example of a designation system for chains.

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 292-1	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
EN 292-2: 1991 /A1:1995	Safety of machinery - Basic concepts - General principles for design Part 2: Technical principles and specifications
EN 818-1	Short link chain for lifting purposes - Safety Part 1: General conditions of acceptance
prEN 818-6	Short link chain for lifting purposes - Safety Part 6: Chain slings - Instructions for use and maintenance
prEN 1050	Safety of machinery - Risk assessment

3 Definitions

For the purposes of this Part of EN 818 the definitions given in EN 818-1 apply.

4 Hazards

The release of a load due to failure of lifting accessories such as slings or their component parts puts at risk either directly or indirectly the life or health of those persons within the danger zone of lifting equipment.

In order to provide the necessary strength and durability of lifting accessories this Part of EN 818 lays down requirements for the design, selection of materials of construction and testing to ensure that specified levels of performance are met.

Fatigue failure has not been identified as a hazard when chain having the specified levels of performance given in this Part of EN 818 is used in general lifting service.

Since failure can be caused by the incorrect choice of grade and specification of lifting accessories this Part of EN 818 also gives the requirements for marking and the manufacturers certificate.

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

Table 1 contains all the hazards, which require action to reduce risk identified by risk assessment as being specific and significant for short link chain (medium tolerance) grade 8 for lifting purposes.