

**Lühikeste lülidega tõstekett. Ohutus.
Osa 7: Peene tolerantsiga tõstekett,
Klass T (tüübid T, DAT ja DT)**

Short link chain for lifting purposes - Safety - Part 7:
Fine tolerance hoist chain, Grade T (types T, DAT
and DT)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 818-7:2002 sisaldab Euroopa standardi EN 818-7:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 16.05.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 818-7:2002 consists of the English text of the European standard EN 818-7:2002.</p> <p>This document is endorsed on 16.05.2002 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>
--	---

<p>Käsitlusala:</p> <p>This European Standard specifies the requirements related to safety for hoist chain, Grade T (type T quenched and tempered and types DAT and DT case hardened), for use in serial chain hoists manual and power driven. Type DAT and type DT chains possess surface hardnesses greater than core hardness and are used for power driven chain hoists to offer greater resistance to wear. Type DT chain differs from DAT hoist chain in having higher surface hardness and/or greater case depth to optimise wear resistance.</p>	<p>Scope:</p> <p>This European Standard specifies the requirements related to safety for hoist chain, Grade T (type T quenched and tempered and types DAT and DT case hardened), for use in serial chain hoists manual and power driven. Type DAT and type DT chains possess surface hardnesses greater than core hardness and are used for power driven chain hoists to offer greater resistance to wear. Type DT chain differs from DAT hoist chain in having higher surface hardness and/or greater case depth to optimise wear resistance.</p>
---	---

ICS 53.020.30

Võtmesõnad: grades : quality, h, heat treatment, liftchains, lifting equipment, links, materials, measurement, mechanical properties, properties, round steel chains, safety, safety requirements, steel chains, testing, tolerances, tolerances (measurement), user information

ICS 53.020.30

English version

Short link chain for lifting purposes - Safety - Part 7: Fine
tolerance hoist chain, Grade T (Types T, DAT and DT)

Chaînes de levage à maillons courts - Sécurité - Partie 7:
Chaînes de tolérance serrée pour les palans, classe T
(Types T, DAT et DT)

Kurzgliedrige Rundstahlketten für Hebezwecke - Sicherheit
- Teil 7: Feintolerierte Hebezeugketten, Güteklasse T
(Ausführung T, DAT und DT)

This European Standard was approved by CEN on 8 November 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, 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

Contents

	page
Foreword	3
Introduction	4
1 Scope.....	4
2 Normative references.....	5
3 Terms and definitions.....	5
4 Hazards	6
5 Safety requirements.....	7
6 Verification of safety requirements	14
7 Marking.....	18
8 Manufacturer's certificate.....	18
9 Information for use and assembly of the hoist chain into the hoist.....	18
Annex A (normative) Calculation of dimensions, working load limits and mechanical properties.....	20
Annex B (normative) Selection criteria for fine tolerance chain for power driven hoists. Types T, DAT and DT	23
Annex C (informative) Designation system for hoist chain - grade T	31
Annex D (informative) Approximate mass of Grade T hoist chain	32
Annex E (informative) Chain use	33
Annex ZA (informative) Relationship of this document with EC Directives	34
Bibliography	35

Foreword

This document EN 818-7:2002 has been prepared by Technical Committee CEN /TC 168 "Chains, ropes, webbings, slings and accessories", 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 August 2002, and conflicting national standards shall be withdrawn at the latest by August 2002.

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 EC Directive(s).

For relationship with EC Directive(s), see informative annex ZA, which is an integral part of this document.

The other parts of EN 818 are:

Part 1: General conditions of acceptance

Part 2: Medium tolerance chain for chain slings - Grade 8

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 - Specification for information for use and maintenance to be provided by the manufacturer.

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

The annexes A and B are normative. The annexes C, D, E and ZA 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

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

These chains are intended for use in serial hoists. The multiple pitch is fine toleranced.

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

Annex A is normative and gives the bases for the calculation of the dimensions and the mechanical properties of hoist chains.

Annex B is normative and gives selection criteria for the nominal size of hoist chains, Grade T, types T, DAT and DT for serial hoists.

Annex C is informative and gives a designation system for recording the identifying features of fine tolerance short link chain Grade T. 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 European Standard specifies the requirements related to safety for hoist chain, Grade T (type T quenched and tempered and types DAT and DT case hardened), for use in serial chain hoists manual and power driven.

Type DAT and type DT hoist chains possess surface hardnesses greater than core hardness and are used for power driven chain hoists to offer greater resistance to wear.

Type DT hoist chain differs from DAT hoist chain in having higher surface hardness and/or greater case depth to optimise wear resistance.

The standard is applicable to electrically welded round steel short link hoist chains conforming to EN 818-1.

The range of nominal size of hoist chains covered by this European Standard is from 4 mm to 22 mm.

The hazards covered by this European Standard 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 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 292-1:1991, *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.*

EN 818-1:1996, *Short link chain for lifting purposes – Safety – Part 1: General conditions of acceptance.*

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

EN ISO 7500-1, *Metallic materials - Verification of static uniaxial testing machines - Part 1: Tension/compression testing machines (ISO 7500-1:1999).*

EN 10025, *Hot rolled products of non-alloy structural steels; technical delivery conditions (includes amendment A1:1993).*

ISO 643, *Steels – Micrographic determination of the ferritic or austenitic grain size.*

ISO 4301-1, *Cranes and lifting appliances – Classification – Part 1: General.*

ISO 6507-1, *Metallic materials – Vickers hardness test – Part 1: Test method.*

ISO 4965, *Axial load fatigue testing machines - Dynamic force calibration - Strain gauge technique.*

3 Terms and definitions

For the purposes of this European Standard the terms, definitions and symbols given in EN 818-1 apply.