This is a free page sample. Access the full version online.

National Standards Authority of Ireland
Údarás um Chaighdeáin Náisiúnta na hÉireann

IRISH STANDARD

I.S. EN 1677-3:2001+A1:2008

ICS 53.020.30

National Standards
Authority of Ireland
Northwood, Dublin 9
Ireland
Tel: +353 1 807 3800
Fax: +353 1 807 3838
http://www.nsai.ie

Sales
http://www.standards.ie

COMPONENTS FOR SLINGS - SAFETY - PART 3: FORGED STEEL SELFLOCKING HOOKS - GRADE 8

This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on:
25 June 2008

NO COPYING WITHOUT NSAI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

© **NSAI 2008**

Price Code G

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

This page is intentionally left BLANK.

This is a free page sample. Access the full version online.

I.S. EN 1677-3:2001+A1:2008

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1677-3:2001+A1

April 2008

ICS 53.020.30

Supersedes EN 1677-3:2001

English Version

Components for slings - Safety - Part 3: Forged steel self-locking hooks - Grade 8

Accessoires pour élingues - Sécurité - Partie 3: Crochets autobloquants en acier forgé - Classe 8

Einzelteile für Anschlagmittel - Sicherheit - Teil 3: Geschmiedete, selbstverriegelnde Haken - Güteklasse 8

This European Standard was approved by CEN on 11 August 2001 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

Management Centre: rue de Stassart, 36 B-1050 Brussels

© 2008 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 1677-3:2001+A1:2008: E

This is a free page sample. Access the full version online.

Contents

Page

Foreword 3

Introduction 4

1 Scope 4

2 Normative references 4

3 Terms and definitions 5

4 Significant Hazards 5

5 Safety requirements 6
5.1 Design 6
5.2 Dimensions 6
5.3 Materials and heat treatment 8
5.4 Manufacturing methods and workmanship 8
5.5 Mechanical properties 9

6 Verification of safety requirements 9
6.1 Qualification of personnel 9
6.2 Type tests 9
6.3 Manufacturing test regime and acceptance criteria 11

7 Marking 12

8 Manufacturer's certificate 12

9 Information for use 12

Annex A (informative) **Bases for the calculation of hook dimensions** 13

Annex B (informative) **Designation system for self-locking hooks - grade 8** 14
B.1 Designation 14
B.2 General format 14

Annex ZA (informative) A1 **Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC** 15

Annex ZB (informative) A1 **Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC** 16

Bibliography 17

This is a free page sample. Access the full version online.

Foreword

This document (EN 1677-3:2001+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 1677-3:2001.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ▌A1⟩ ⟨A1▌.

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 the relationship with EC Directives, see informative Annexes ZA and ZB, which are integral parts of this document.

This European Standard 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 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.

This is a free page sample. Access the full version online.

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 European Standard specifies requirements for forged steel self-locking lifting hooks of Grade 8 having eye or clevis and pin up to 21,2 t working load limit (WLL), mainly for use in:

— chain slings according to EN 818-4

— steel wire rope slings according to prEN 13414-1

— textile slings according to EN 1492-1, EN 1492-2

intended for lifting objects, materials or goods.

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

Annex A gives the bases for calculation of hook dimensions.

Annex B gives an example of a designation systems for hooks of Grade 8.

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 292-2:1991/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, 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 for risk assessment

EN 1492-1, Textile slings - Safety - Part 1: Flat woven webbing slings, made of man-made fibres, for general purpose use

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation