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Lyftkranar – Krav på containerok

Cranes – Requirements for container handling spreaders

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Denna standard ersätter SS-EN 15056:2006, utgåva 1.

The European Standard EN 15056:2006+A1:2009 has the status of a Swedish Standard. This document contains the official English version of EN 15056:2006+A1:2009.

This standard supersedes the Swedish Standard SS-EN 15056:2006, edition 1.

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 15056:2006+A1

May 2009

ICS 53.020.20

Supersedes EN 15056:2006

English Version

Cranes - Requirements for container handling spreaders

Appareils de levage à charge suspendue - Prescriptions
pour les spreaders manutentionnant des conteneurs

Krane - Anforderungen an Spreader zum Umschlag von
Containern

This European Standard was approved by CEN on 28 August 2006 and includes Amendment 1 approved by CEN on 24 April 2009.

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Foreword

This document (EN 15056:2006+A1:2009) has been prepared by Technical Committee CEN/TC 147 "Cranes - 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of an identical text or by endorsement, at the latest by November 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-04-24.

This document supersedes EN 15056:2006.

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 EU Directive(s).

A1 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

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 standard is a type C standard as stated in EN ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this standard.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

1 Scope

This European Standard specifies safety requirements for spreaders used with cranes designed for the purpose of handling ISO containers based on ISO 668 including other lengths such as 45 ft. The connection between the spreader and the container is by the use of twistlocks that engage into the container's upper corner castings.

The standard deals with all significant hazards, hazardous situations and events relevant to container handling spreaders, when used as intended and under conditions foreseen by the manufacturer (see Clause 4).

The spreader is interfaced to the crane's control and safety system.

This European Standard does not cover the following types of spreaders:

- hand operated spreaders (without external power supply);
- bottom lift grapple spreaders used for swapbodies and road trailers.

This European Standard does not deal with the lifting of persons.

This European Standard is applicable to spreaders which are manufactured after the date of approval by CEN of this standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

~~A1~~ deleted text ~~A1~~

EN 982, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics*

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

EN 12644-1, *Cranes — Information for use and testing — Part 1: Instructions*

EN 13001-1, *Cranes — General design — Part 1: General principles and requirements*

EN 13001-2, *Cranes — General design — Part 2: Load actions*

CEN/TS 13001-3-1, *Cranes — General design — Part 3-1: Limit states and proof of competence of steel structures*

EN 13135-2, *Cranes — Equipment — Part 2: Non-electrotechnical equipment*

EN 60204-32, *Safety of machinery — Electrical equipment of machines — Part 32: Requirements for hoisting machines (IEC 60204-32:1998)*

EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)*

^{A1} EN ISO 13850:2006, *Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)* ^{A1}

ISO 668, *Series 1 freight containers — Classification, dimensions and ratings*

3 Terms, definitions and terminology

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100-1:2003 and the following apply.

3.1.1

fixed length spreader

lifting device for handling ISO containers of one size

3.1.2

telescopic spreader

lifting device for handling ISO containers of several sizes

3.1.3

mid frame

middle section of a telescopic spreader

3.1.4

telescopic beam

extending frame of a telescopic spreader which slides in and out of the mid frame

3.1.5

end beam

outer end beam of a telescopic spreader extending frame

3.1.6

telescopic motion

adjusting the length of the spreader to different container sizes

3.1.7

tare weight

spreader's own weight in operation

3.1.8

twistlock

rotating locking device for connecting a spreader to a container corner casting (Figure 2)

3.1.9

fixed twistlock

twistlock that does not float to adapt to holes deviating from nominal dimensions

3.1.10

floating twistlock

twistlock that will float around its vertical axis

3.1.11

mechanical blockading

action of mechanically blocking the twistlock in order to prevent unsafe rotation