



NSAI
Standards

Irish Standard
I.S. EN 16851:2017+A1:2020

Cranes - Light crane systems

I.S. EN 16851:2017+A1:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document is based on:

EN 16851:2017+A1:2020

Published:

2020-12-16

This document was published under the authority of the NSAI and comes into effect on:

2021-01-03

ICS number:

53.020.20

NOTE: If blank see CEN/CENELEC cover page

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National Foreword

I.S. EN 16851:2017+A1:2020 is the adopted Irish version of the European Document EN 16851:2017+A1:2020, Cranes - Light crane systems

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EUROPEAN STANDARD

EN 16851:2017+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2020

ICS 53.020.20

Supersedes EN 16851:2017

English Version

Cranes - Light crane systems

Appareils de levage à charge suspendue - Systèmes de
grue légère

Krane - Leichtkransysteme

This European Standard was approved by CEN on 14 November 2016 and includes Amendment 1 approved by CEN on 9 November 2020.

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-CENELEC Management Centre or to any CEN member.

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EN 16851:2017+A1:2020 (E)

European foreword

This document (EN 16851:2017+A1:2020) 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of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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).

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

This document includes Amendment 1 approved by CEN on 9 November 2020.

A1 This document supersedes EN 16851:2017. **A1**

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

For relationship with other European Standards for cranes, see Annex D.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

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

This European Standard has been prepared to provide one means for equipment of cranes to conform to the essential health and safety requirements of the Machinery Directive.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this document (see Clause 1).

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.

EN 16851:2017+A1:2020 (E)

1 Scope

A1 This document applies to:

- light crane systems, either suspended or free-standing systems, where the rated capacity of any single lifting device is 4 t or less;
- pillar and wall-mounted jib cranes, without an operator's cabin, whose rated capacity is 10 t or less and whose overturning load moment is 500 kNm or less.

NOTE For illustration of crane types, see Annex B.

This document is not applicable to cranes covered by another product specific crane standard, e.g. EN 15011:2011+A1:2014 or EN 14985:2012.

This document is applicable to cranes and crane systems, whose structures are made of steel or aluminium, excluding aluminium structures containing welded joints.

This document gives requirements for all significant hazards, hazardous situations and events relevant to cranes, when used as intended and under conditions foreseen by the manufacturer (see Clause 4).

The specific hazards due to potentially explosive atmospheres, ionizing radiation, operation in electromagnetic fields beyond the range of EN 61000-6-2:2016 and operation in pharmacy or food industry are not covered by this document.

This document does not cover hazards related to the lifting of persons.

This document is applicable to cranes, which are manufactured after the date of its publication by CEN as a European Standard.

This document is not applicable to cranes manufactured before the date of its publication. **A1**

2 Normative references

A1 The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 515:2017, *Aluminium and aluminium alloys - Wrought products - Temper designations*

EN 614-1:2006+A1:2009, *Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles*

EN 755-9:2016, *Aluminium and aluminium alloys - Extruded rod/bar, tube and profiles - Part 9: Profiles, tolerances on dimensions and form*

EN 795:2012, *Personal fall protection equipment - Anchor devices*

EN 894-1:1997+A1:2008, *Safety of machinery - Ergonomics requirements for the design of displays and control actuators - Part 1: General principles for human interactions with displays and control actuators*

EN 894-2:1997+A1:2008, *Safety of machinery - Ergonomics requirements for the design of displays and control actuators - Part 2: Displays*

EN 12077-2:1998+A1:2008, *Cranes safety - Requirements for health and safety - Part 2: Limiting and indicating devices*

EN 12644-1:2001+A1:2008, *Cranes - Information for use and testing - Part 1: Instructions*

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