



NSAI
Standards

Irish Standard
I.S. EN 16851:2017

Cranes - Light crane systems

I.S. EN 16851:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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National Foreword

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EUROPEAN STANDARD

EN 16851

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2017

ICS 53.020.20

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.

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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Contents	Page
European foreword.....	5
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	9
4 List of significant hazards	11
5 Safety requirements and/or protective measures	16
5.1 General	16
5.2 Aluminium structures	17
5.2.1 General	17
5.2.2 Products and materials	17
5.2.3 Proof of static strength	18
5.2.4 Proof of fatigue strength	18
5.2.5 Proof of elastic stability	19
5.3 Actions on supporting structures	19
5.4 General components	19
5.4.1 Joints in crane tracks, crane bridges and monorails	19
5.4.2 Suspensions	20
5.4.3 Bridge skewing	20
5.4.4 Backup devices for trolleys and suspensions	20
5.4.5 Turntables and switches	20
5.4.6 Interlock	21
5.4.7 Loading/unloading station	22
5.4.8 Telescopic and cantilevered crane systems	22
5.4.9 Trolleys	23
5.4.10 End stops and motion limiters	23
5.4.11 Power supply	24
5.5 Tandem operation of cranes/trolleys from a single control station	24
5.6 Use of multiple lifting devices	24
5.7 Man-machine interface	24
5.7.1 Control devices and control stations	24
5.7.2 Horizontal speeds	24
5.7.3 Guarding and access	25
5.7.4 Lighting	26
5.7.5 Reduction of noise by design	26
5.8 Equipment for warning	27
5.8.1 General	27
5.8.2 Warning markings	27
5.8.3 Cableless control warning light	27
5.8.4 Location of the visual display unit	27
5.9 Safety related functions of control systems	27
6 Fitness for purpose testing	28
6.1 Functional test	28
6.2 Static test	28

6.3	Dynamic test.....	29
7	Information for use.....	29
7.1	General	29
7.2	Operator's manual.....	29
7.3	User's manual.....	30
7.3.1	General	30
7.3.2	Instructions for installation.....	30
7.3.3	Instructions for maintenance.....	32
7.4	Marking of rated capacities.....	33
	Annex A (informative) Guidance for specifying the operating duty.....	34
	Annex B (normative) Actions on supporting structures and installation dimensions.....	35
B.1	Loads and load combinations.....	35
B.2	Jib cranes	36
B.2.1	Pillar jib crane.....	36
B.2.2	Wall-mounted jib crane.....	37
B.3	Suspended light crane systems.....	38
B.4	Free-standing systems	39
	Annex C (normative) Noise test code.....	40
C.1	General	40
C.2	Description of machinery family.....	41
C.3	Determination of a conventional emission sound pressure level by calculation	41
C.3.1	Principle of the method	41
C.3.2	Calculation.....	41
C.4	Determination of emission sound pressure level at control stations and other specified positions and determination of sound power level by measurement.....	43
C.4.1	Measurement method and points.....	43
C.4.1.1	Measurement of sound pressure level at working positions.....	43
C.4.1.2	Determination of sound power level or sound pressure level at determined positions.....	44
C.4.2	Installation and mounting conditions.....	44
C.4.3	Operating conditions.....	45
C.4.3.1	General	45
C.4.3.2	Hoisting and traversing.....	45
C.4.3.3	Travelling	45
C.5	Uncertainties.....	46
C.6	Information to be recorded.....	46
C.7	Information to be reported	46
C.8	Declaration and verification of noise emission values	46
	Annex D (informative) Selection of a suitable set of European Standards for cranes in a given application.....	48

EN 16851:2017 (E)

Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered	50
Bibliography	51

European foreword

This document (EN 16851:2017) 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 July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] 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.

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

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 16851:2017 (E)

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.

1 Scope

This European Standard applies to:

- light crane systems, either suspended or free-standing systems;
- pillar jib cranes;
- wall-mounted jib crane.

NOTE 1 For illustration of crane types, see Annex B.

NOTE 2 The rated capacity of the light crane systems is generally below 10 t, but the standard is still applicable, if the rated capacity is higher.

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

This European Standard is not applicable to cranes covered by another product specific crane standard, e.g. EN 15011 or EN 14985.

This European Standard 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 and operation in pharmacy or food industry are not covered by this European Standard.

This European Standard does not include requirements for the lifting of persons.

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

2 Normative references

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

EN 349, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

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

EN 614-1, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles*

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

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

EN 894-1, *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, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays*

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