



NSAI
Standards

Irish Standard
I.S. EN 13852-1:2013

Cranes - Offshore cranes - Part 1: General-purpose offshore cranes

I.S. EN 13852-1:2013

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Cranes - Offshore cranes - Part 1: General-purpose offshore cranes

Appareils de levage à charge suspendue - Grues off-shore
- Partie 1: Grues off-shore pour usage général

Krane - Offshore-Krane - Teil 1: Offshore-Krane für
allgemeine Verwendung

This European Standard was approved by CEN on 19 July 2013.

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Foreword

This document (EN 13852-1:2013) 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of an identical text or by endorsement, at the latest by March 2014, and conflicting national standards shall be withdrawn at the latest by March 2014.

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 supersedes EN 13852-1:2004.

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 and Annex ZB which are integral parts of this document.

Since the previous version, major changes have been made including the scope. New requirements are introduced on load chart, electrotechnical and non electrical equipment, mode and rigging selector, back-up brake on luffing winches, wire ropes, lighting, dropped object protection, controls, data recorder, motion limiters, rated capacity limiter, boom backstop, emergency operation system, fire protection and protective earthing, etc. Major changes have also been made to Annexes B, F, G, K, M and O.

There are several updates in standard references, and a number of clauses have been redrafted for reasons of clarity and technical and editorial accuracy.

EN 13852, *Cranes — Offshore cranes*, is composed of the following parts:

- *Part 1: General-purpose offshore cranes* (the present document);
- *Part 2: Floating cranes*.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard has been prepared to be a harmonised standard to provide one means for general purpose offshore cranes to conform to the essential health and safety requirements of the Machinery Directive, as mentioned in Annex ZA.

Absolute safety of cranes cannot be ensured by design alone, as their operation depends on the skill of operators, maintenance personnel and inspectors as well as on the numerous technical parameters relating to the crane and its operating environment, which can have large scatter.

As many of the hazards related to general-purpose offshore cranes relate to their operating environment and use, it is assumed in the preparation of this European Standard that all the relevant information relating to the use and operating environment of the crane has been exchanged between the manufacturer and user (as recommended in ISO 9374-1:1989 and ISO 9374-4:1989) covering such issues as, for example:

- clearances;
- requirements concerning protection against hazardous environments;
- processed materials, such as potentially flammable or explosive material (e.g. hydrocarbons, combustible dust, etc).

This European Standard is a type C standard as stated in EN ISO 12100:2010.

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

NOTE 1 A floating crane is a crane mounted on a vessel or barge designed for its support and transport, primarily intended for construction/deconstruction operations in a marine environment.

NOTE 2 EN 13852-2 is not a harmonised standard.

1 Scope

This European Standard specifies the requirements for general-purpose offshore cranes including their supporting pedestals or structures.

The standard is applicable to general-purpose offshore cranes covered by the scope of this European Standard which are manufactured after the date of its publication as EN.

This European Standard is not applicable to general-purpose offshore cranes which are manufactured before the date of its publication as an EN.

This European Standard does not cover use of - or hazards relating to the following:

- a) fabrication, transportation, assembly, dismantling, disabling, scrapping or changing the configuration of the crane;
- b) lifting accessories, i.e. any item between the hook and the load;
- c) minimum design temperature below $-20\text{ }^{\circ}\text{C}$;
- d) operations at an ambient temperature above $45\text{ }^{\circ}\text{C}$;

NOTE: For equipment designed for operation in explosive atmospheres, the normal ambient temperature range is $-20\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$, unless otherwise specified and marked. See Annex O and relevant standards indicated for complete information.

- e) lifting operations involving more than one crane;
- f) accidental loads due to collisions;
- g) hand powered cranes and other cranes with a rated capacity less than 2 t or outreach less than 8 m;
- h) emergency rescue operations; (except training)
- i) subsea lifting operations.

The significant hazards covered by this European standard are identified in Clause 4.

This European Standard includes requirements for the lifting of personnel by a general-purpose offshore crane.

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

EN 842:1996+A1:2008, *Safety of machinery — Visual danger signals — General requirements, design and testing*

EN 953:1997+A1:2009, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

EN 1127-1:2011, *Explosive atmospheres — Explosion prevention and protection — Part 1: Basic concepts and methodology*

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