



NSAI
Standards

Irish Standard
I.S. EN 13155:2020

Crane - Safety - Non-fixed load lifting attachments

I.S. EN 13155:2020

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National Foreword

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EUROPEAN STANDARD

EN 13155

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Crane - Safety - Non-fixed load lifting attachments

Appareils de levage à charge suspendue - Sécurité -
Accessoires de levage amovibles

Krane - Sicherheit - Lose Lastaufnahmemittel

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 13155:2020) 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of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.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 will supersede EN 13155:2003+A2:2009.

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.

The main modifications between EN 13155:2003+A2:2009 and EN 13155:2020 concern:

- general requirement to introduce the reference to EN 13001-1 and -2 for the calculation;
- vacuum lifters;
- lifting magnet;
- the addition to the scope of lifting insert systems for lifting prefabricated concrete products;
- reduction of load changes from 20 000 to 16 000 in all clauses.

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 document has been prepared to be a harmonized standard to provide one means for non-fixed load lifting attachments used on cranes to conform with the essential health and safety requirements of the Machinery Directive, as amended.

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

The machinery concerned and the extent to which hazards 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 non-fixed load lifting attachments which have been designed and built according to the provisions of this type C standard.

EN 13155:2020 (E)

1 Scope

This document specifies safety requirements for the following non-fixed load lifting attachments for cranes, hoists and manually controlled load manipulating devices:

- a) plate clamps;
- b) vacuum lifters:
 - 1) self-priming;
 - 2) non-self-priming (pump, venturi, turbine);
- c) lifting magnets:
 - 1) electric lifting magnets (battery fed and mains-fed);
 - 2) permanent lifting magnets;
 - 3) electro-permanent lifting magnets;
- d) lifting beams;
- e) C-hooks;
- f) lifting forks;
- g) clamps;
- h) lifting insert systems for use in normal weight concrete,

as defined in Clause 3.

This document does not give requirements for:

- non-fixed load lifting attachments in direct contact with foodstuffs or pharmaceuticals requiring a high level of cleanliness for hygiene reasons;
- hazards resulting from handling specific hazardous materials (e.g. explosives, hot molten masses, radiating materials);
- hazards caused by operation in an explosive atmosphere;
- hazards caused by noise;
- hazards relating to the lifting of persons;
- electrical hazards;
- hazards due to hydraulic and pneumatic components.

For high risk applications not covered by this standard, EN 13001-2:2014, 4.3.2 gives guidance to deal with them.

This document covers the proof of static strength, the elastic stability and the proof of fatigue strength.

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