

KRAANADE OHUTUS, TERVISE JA OHUTUSE NÕUDED.
OSA 2: PIIRAMIS- JA NÄIDUSEADMED

Cranes safety - Requirements for health and safety -
Part 2: Limiting and indicating devices

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 12077-2:2024 sisaldab Euroopa standardi EN 12077-2:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 17.07.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 12077-2:2024 consists of the English text of the European standard EN 12077-2:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 17.07.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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EUROPEAN STANDARD

EN 12077-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 12077-2:1998+A1:2008

English Version

Cranes safety - Requirements for health and safety - Part 2: Limiting and indicating devices

Sécurité des appareils de levage à charge suspendue -
Prescriptions relatives à l'hygiène et à la sécurité -
Partie 2: Limiteurs et indicateurs

Sicherheit von Kranen - Gesundheits- und
Sicherheitsanforderungen - Teil 2: Begrenzungs- und
Anzeigeeinrichtungen

This European Standard was approved by CEN on 17 June 2024.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 12077-2:2024) has been prepared by Technical Committee CEN/TC 147 “Cranes - Safety”, the secretariat of which is held by DIN.

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 January 2025 and conflicting national standards shall be withdrawn at the latest by January 2025.

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 supersedes EN 12077-2:1998+A1:2008.

In comparison with the previous edition, the following technical modifications have been made:

- updated reference documents and cross-references;
- revised grammar and linguistic consistency;
- revised the list of significant hazards and moved it to Annex A;
- revised Annex ZA and added a Bibliography;
- revised and updated Clause 3;
- revised and updated subclauses 4.2.6, 4.2.7, 4.2.9, 4.3.1, 4.3.2, 4.3.4, 4.3.5, 4.4.1.1, 4.4.1.2, 4.5.1.1, 4.5.1.3, 4.5.1.4, 4.6.1.1, 4.6.1.2, 4.7.2;
- removed subclauses 4.5.3, 4.6.2.3, 4.7.2;
- revised and updated Table 1.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, 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, Türkiye and the United Kingdom.

Introduction

This document is a harmonized standard to provide one means for limiting and indicating devices for cranes to conform with the essential health and safety requirements of the Machinery Directive, as mentioned in Annex ZA.

This document is a type-C standard as stated in EN ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- service providers, e.g. for maintenance (small, medium and large enterprises).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

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

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

1 Scope

This document specifies general requirements for limiting and indicating devices used in cranes. These devices restrict operation or provide operational information for the operator or other persons. Specific requirements for particular types of cranes are given in the appropriate European Standard for the particular crane type.

This document does not cover erection, dismantling, or changing the configuration of a crane.

The hazards covered by this document are identified in Annex A.

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

2 Normative references

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 614-2:2000+A1:2008, *Safety of machinery — Ergonomic design principles — Part 2: Interactions between the design of machinery and work tasks*

EN 60204-32:2008, *Safety of machinery — Electrical equipment of machines — Part 32: Requirements for hoisting machines (IEC 60204-32:2008)*

EN 61310-1:2008, *Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, acoustic and tactile signals (IEC 61310-1:2007)*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

EN ISO 13849-1:2023, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2023)*

ISO 4306-1:2007, *Cranes — Vocabulary — Part 1: General*

3 Terms and definitions

For the purposes of this document the terms and definitions given in EN ISO 12100:2010, ISO 4306-1:2007 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp/>

— IEC Electropedia: available at <https://www.electropedia.org/>

3.1

configuration

combination of structural members, counterweights, support or outrigger position, hook block reeving and similar items assembled, positioned and erected according to manufacturers' instructions and ready for operation

3.2

continuous warning

warning that is given visually by either a flashing or uninterrupted light, or acoustic by either a pulsing or uninterrupted sound, and persists throughout the time the condition being indicated exists