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BSI Standards Publication

Cranes — Tower cranes

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National foreword

This British Standard is the UK implementation of EN 14439:2025, incorporating corrigendum February 2026. It supersedes BS EN 14439:2006+A2:2009, which is withdrawn.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags. Text altered by CEN corrigendum February 2026 is indicated in the text by AC1 AC1.

The UK participation in its preparation was entrusted to Technical Committee MHE/3/5, Mobile cranes.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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For the Great Britain market (England, Scotland and Wales), if UK Government has designated this publication for conformity with UKCA marking (or similar) legislation, it may contain an additional National Annex. Where such a National Annex exists, it shows the correlation between this publication and the relevant UK legislation. If there is no National Annex of this kind, the relevant Annex ZA or ZZ in the body of the European text will indicate the relationship to UK regulation applicable in Great Britain. References to EU legislation may need to be read in accordance with the UK designation and the applicable UK law. Further information on designated standards can be found at www.bsigroup.com/standardsandregulation.

For the Northern Ireland market, UK law will continue to implement relevant EU law subject to periodic confirmation. Therefore Annex ZA/ZZ in the European text, and references to EU legislation, are still valid for this market.

UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

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English Version

Cranes - Tower cranes

Appareils de levage à charge suspendue - Grues à tour

Krane - Turmdrehkrane

This European Standard was approved by CEN on 11 May 2025.

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.

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 foreword

This document (EN 14439:2025) has been prepared by Technical Committee CEN/TC 147 “Cranes - Safety”, the secretariat of which is held by SFS.

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 December 2025, and conflicting national standards shall be withdrawn at the latest by June 2027.

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 14439:2006+A2:2009.

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.

CEN/TC 147/WG 12 “Tower cranes” has developed a revision of this document, which differs from EN 14439:2006+A2:2009 as follows:

- integration and rules for application of EN 13001 series of standards;
- revision of 4.2, Design requirements on the load bearing structure;
- revision of 4.6.2, Access;
- integration and rules for application of EN ISO 13849-1:2023;
- integration and requirements for mobile self-erecting tower cranes, including introduction of a new dedicated Annex B;
- revision of Annex E, Additional and specific requirements for climbing systems.

To select a suitable set of crane standards for a given application see Annex G.

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 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, Türkiye and the United Kingdom.

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Introduction

This is a harmonized European standard to provide one means for tower cranes to conform with the relevant Essential Health and Safety Requirements of the Machinery Directive 2006/42/EC modified.

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);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

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, hazardous situations and hazardous events are covered are indicated in the scope of this document.

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 cranes that have been designed and built according to the provisions of this type C standard.

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1 Scope

This document specifies safety requirements:

- for tower cranes;
- for climbing systems for tower cranes erected from parts.

This document applies to tower cranes for construction works, which are either erected by parts or self-erecting cranes, including mobile self-erecting tower cranes. Tower cranes for construction works are exclusively equipped with a hook as load-handling device.

This document is applicable to tower cranes to be operated outdoors at ambient temperature between -20 °C and $+40\text{ °C}$.

This document is not applicable to tower cranes, which are permanently installed on a yard or integrated in a manufacturing process, resulting in a significantly different classification of the crane and its mechanisms, or which are equipped with a grab or when a sudden release of the load is intended, resulting in significantly different load actions and number of stress cycles.

This document is not applicable to mobile cranes, mobile harbour cranes, crawler cranes, slewing jib cranes, bridge and gantry cranes, offshore cranes, floating cranes, loader cranes, hand operated cranes or railway cranes.

This document deals with significant hazards, hazardous situations and events relevant to tower cranes, it is used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer. This document specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards (see Annex A).

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

This document covers hazards related to the lifting of persons using a climbing system for tower cranes as defined in 3.6, 3.6.1 and 3.6.2. The lifting of persons by a tower crane itself is not included.

The requirements related to Electromagnetic compatibility (EMC), the specific hazards due to external influence on electrical equipment, potentially explosive atmospheres and ionising radiation are not covered by this document.

To improve readability, additional requirements for climbing systems are given in Annex E of this document. Additional requirements for mobile self-erecting tower cranes are given in Annex B of this document.

This document is not applicable to tower cranes and climbing systems which are manufactured before the date of publication by CEN of this document.

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 795:2012, *Personal fall protection equipment — Anchor devices*

EN 12077-2:2024, *Cranes safety — Requirements for health and safety — Part 2: Limiting and indicating devices*

EN 13000:2010+A1:2014, *Cranes — Mobile cranes*

EN 13001-1:2015, *Cranes — General design — Part 1: General principles and requirements*