

# Cranes — Information for use and testing —

## Part 2: Marking

The European Standard EN 12644-2:2000 has the status of a  
British Standard

ICS 53.020.20

## National foreword

This British Standard is the official English language version of EN 12644-2:2000.

The UK participation in its preparation was entrusted to Technical Committee MHE/3/11, Crane safety and testing, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

### Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 6, an inside back cover and a back cover.

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### Amendments issued since publication

Amd. No.	Date	Comments

This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 May 2000

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English version

## Cranes — Information for use and testing — Part 2: Marking

Appareils de levage à charge suspendue —  
Informations pour l'utilisation et les essais —  
Partie 2: Marquage

Krane — Informationen für die Nutzung und  
Prüfung — Teil 2: Kennzeichnung

This European Standard was approved by CEN on 3 January 2000.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

## Foreword

This European Standard 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 August 2000, and conflicting national standards shall be withdrawn at the latest by August 2000.

This European Standard 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 standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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## 0 Introduction

This European Standard is a type C-standard as defined in EN 414.

This standard has been prepared to be a harmonized standard to provide one means of conforming with the essential health and safety requirements of the Machinery Directive, as amended.

This is part 2 of a series intended to give information for use to be supplied by the manufacturers of cranes.

The other parts of this standard are:

- *Part 1: Instructions;*
- *Part 3: Fitness for purpose.*

This is the first edition of this part of EN 12644.

The extent to which hazards are covered is indicated in the scope of this standard.

## 1 Scope

This part of EN 12644 specifies the requirements for markings, signs and warnings for cranes.

This crane standard has been written to be used in conjunction with other crane standards being prepared by CEN/TC 147.

NOTE Specific requirements for particular types of crane, are given in the appropriate European Standards for the particular crane type.

The hazards covered by this standard are identified in clause 4.

This part of EN 12644 applies to cranes which are manufactured after the date of approval by CEN of this standard.

This standard does not cover hazards related to the lifting of persons.

## 2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and publications are listed hereafter. For dated references, subsequent amendments to, or revisions of, any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated reference the latest edition of the publication referred to applies.

EN 292-1:1991, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology.*

EN 292-2:1991 +A1:1995, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles and specifications.*

prEN 12644-1:1997, *Cranes — Safety — Requirements for inspection and use — Part 1: Instructions.*

ISO 13200, *Cranes — Safety signs and hazard pictorials — General principles.*

NOTE The Bibliography provides information regarding relevant EU directives, European and International standards.

## 3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply.

### 3.1

#### rated capacity

load that the crane is designed to lift for a given operating condition (e.g. configuration, position of the load)

### 3.2

#### rated capacity chart/display

device to chart/display the actual rated capacity of the crane for the current configuration and position (e.g. radius, outreach, angle) of the load

### 3.3

#### hoist mechanism

drive mechanism for lifting and lowering the load

## 4 Hazards

Cranes can present hazards to persons in the danger zone.

Instructions regarding marking, safe putting into service, use, handling, maintenance, training etc. are necessary to reduce or eliminate the risks associated with the hazards.

This standard specifies requirements for markings, signs and warnings for cranes, in order to prevent or minimize hazards or hazardous situations.

A list of hazards is given in the appropriate crane standards for each crane type.

## 5 Safety requirements and/or measures

### 5.1 General

General requirements for marking, signs and warnings for machines shall be in accordance with clause 5 of EN 292-2:1991 +A1:1995.

NOTE See also the international standards quoted in the "Bibliography", in particular for pictograms, symbols, colours etc.

### 5.2 Manufacturer's plate

Cranes shall be provided with a plate which shall be permanently fixed, marked legibly and indelibly and containing the following information:

- name and address of manufacturer and, if appropriate, the supplier;
- year of manufacture;
- identification number;
- type, if there is a type designation.

### 5.3 Rated capacity information

#### 5.3.1 General

The rated capacity shall be expressed as a mass.

The rated capacity shall be consistent with the technical data as specified in prEN 12644-1:1997.

#### 5.3.2 Cranes with constant rated capacity

On cranes with constant rated capacity, this capacity shall be stated in such a position(s) on the crane so that the information can be read by the crane driver at the operating position and also by the slinger.

#### 5.3.3 Cranes with variable rated capacity

For cranes having a variable rated capacity depending on the crane outreach, or other variable parameters of the crane, the information about the rated capacity shall be provided in such a way so that it is available to the crane driver from the operating position.

The rated capacity information shall be presented specifying the positions or conditions to which the rated capacity applies.

The rated capacity of the crane shall be presented in such a manner that the crane driver does not need to take into account the weights of parts of the crane other than non-fixed load lifting attachments, and does not need to calculate the rated capacity.

If a crane has several hoisting mechanisms, the rated capacity for each hoisting mechanism shall be stated and information shall also be provided to show any permitted combined use of the hoisting mechanisms.

### 5.4 Warning information and prohibiting signs

Where risks cannot be fully eliminated they shall be described in the appropriate crane type standards. They shall be addressed by warning information as described in ISO 13200.

If the prohibiting/warning signs are to be placed on site, the manufacturer shall provide instructions to the user. See prEN 12644-1:1997.

## 6 Verification of the safety requirements and/or measures

Before first use of any crane it shall be verified by visual assessment that markings, signs and warnings have been provided in accordance with this standard.

## **Annex ZA (informative)**

### **Relationship of this European standard with EU Directives**

This European Standard 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:

Machinery Directive 98/37/EEC.

Compliance with this standard provides one means of conforming with the specific essential requirements of the Directive concerned.

WARNING Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

## **Bibliography**

### **A.1 EU Directives**

EU Directive 98/37/EEC dated 22.06.1998, for adjustment of the legal provisions of the member countries relating to machinery.

EU Directive 77/576/EEC dated 25.07.1977 for adjustment of the legal provisions of the member countries relating to safety marking at the workplace.

EU Directive 79/649/EEC dated 21.06.1979 for amendment of the annexes further to Directive 77/576/EEC dated 25.07.1977.

EU Directive 89/655/EEC dated 30.11.1989, and its amendment 95/63/EEC on the minimum safety and health requirements for the use of work equipment by workers at work.

EU Directive 93/68 EEC, dated 22.07.1998 on CE-marking.

### **A.2 European Standards**

prEN 12937:1997, *Safety of machinery — Technical principles and specifications for mobility and for lifting.*

Crane standards in preparation by CEN/TC 147.

### **A.3 International standards**

ISO 3461-1:1988, *General principles for the creation of graphical symbols — Part 1: Graphical symbols for use on equipment.*

ISO 3864:1984, *Safety colours and safety signs.*

ISO 4196:1984, *Graphical symbols — Use of arrows.*

ISO 7000:1989, *Graphical symbols for use on equipment — Index and synopsis.*

ISO 7296-1:1991, *Cranes — Graphical symbols — Part 1: General.*

ISO 7296-2:1996, *Cranes — Graphical symbols — Part 2: Mobile cranes.*

ISO 9942-1: 1994, *Cranes — Information labels — Part 1: General.*





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