Kranar – Tillträdesleder

Cranes – Access

Cranes - Access

Appareils de levage à charge suspendue - Accès
Krane - Zugang

This European Standard was approved by CEN on 1 October 2003.

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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Foreword

This document EN 13586:2004 has been prepared by WG 4 under the direction of 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of an identical text or by endorsement, at the latest by December 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.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 EC Directive(s).

For relationship with EC Directives, see informative annex ZA, which is an integral part of this document.

Annexes A and B are informative.

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

This European Standard is a harmonised standard to provide one means for access on cranes to conform with the relevant Essential Health and Safety Requirements of the Machinery Directive 98/37/EC.

This European Standard is a type C standard as stated in EN 1070.

The machinery concerned and the extent to which hazards, hazardous situations and events 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 B standard, 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.
1 Scope

This European Standard specifies design requirements for non-powered access installed on cranes.

NOTE 1 For other type of access a requirement for information to be supplied is specified.

This European Standard covers access to control stations and all access required for maintenance, certain erection and dismantling operations (see below) and emergency.

For those cranes which are intended to be erected and dismantled at their places of work, specific requirements for the access needed during these operations are given in the appropriate European Standards for specific crane types.

NOTE 2 Specific requirements for access on particular types of crane are given in the appropriate European Standard for the particular crane type.

The dimensions given in this European Standard do not take into account the safety distances related to:

— guarding;
— relative movement between crane and adjacent structure;
— hazardous surface temperature;
— electrical equipment.

The significant hazards covered by this European Standard are identified in clause 4.

This European Standard is not applicable to cranes which are manufactured before the date of publication by CEN of this standard.

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 the 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 references the latest edition of the publication referred to applies (including amendments).


EN 349, Safety of machinery — Minimum gaps to avoid crushing of parts of the human body.

EN 363, Personal protective equipment against falls from a height — Fall arrest systems.

Terms, definitions and symbols

3.1 Symbols

b  Rung end

d  Distance between centre line of rung and vertical surface

e  Distance between the ladder and an obstacle to the rear

f  Distance between the axis of the ladder and a lateral obstacle

g  Going

h  Gap between stiles if they are discontinuous

i  Gap between separate sections of handrails when they are discontinuous

j  Going

k  Rung pitch

l  Rung size

m  Going

n  Clear width

o  Clear width

p  Diameter, width, thickness

q  Tread width

r  Free length for hand-clearance

s  Vertical distance between the lower part of handrails and handholds and the floor or the foothold

t  Vertical distance between the higher part of the handrail and the floor of the platform or rest platform situated at the top of the ladder or the stair

u  Handrail situated along a ladder. Clearance between the edge of the handrail and the edge of the rung or the side rail of the ladder

v  Clearance between parallel handrails where the body has to pass through

w  Distance between the floor or stair and the handrail or guard-rail

x  Gap between the top of the toe board and the bottom of the intermediate guard rail

y  Gap between the top of the intermediate guard rail and the bottom of the guard-rail

z  Distance between the floor and the top of the toe board

a  Distance between rungs and handhold or handrails
3.2 Terms and definitions

For the purposes of this European Standard the terms and definitions given in EN 1070:1998 and the following apply.

3.2.1 rest platform
standing area for persons to rest, situated at intervals between flights of ladders or stairs

3.2.2 platform
standing area for persons to work from e.g. for maintenance or inspection

3.2.3 handrail
device, which provides continuous hand support between two locations

3.2.4 handhold
means of providing support by a single hand placement

3.2.5 foothold
means of providing support for one or two feet

3.2.6 manhole
access opening to allow the passage of a person and which could have a cover fitted

3.2.7 hatch
access opening to allow the passage of a person and which has a hinged door fitted

4 List of significant hazards

Table 1 contains all the significant hazards, hazardous situations and events, as far as they are dealt with in this standard, identified by risk assessment as significant for this type of machinery and which require action to eliminate or reduce the risk.
### Table 1 — List of significant hazards and associated requirements

<table>
<thead>
<tr>
<th>N°</th>
<th>Hazards</th>
<th>EN 292</th>
<th>EN 292</th>
<th>Annex A of EN 292-2:1991</th>
<th>Relevant clause(s) in this standard</th>
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<td></td>
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<tr>
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<tr>
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<tr>
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<td></td>
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<td></td>
</tr>
<tr>
<td>21.10</td>
<td>Insufficient means for evacuation/emergency exit</td>
<td></td>
<td></td>
<td>3.2.1</td>
<td>6.2.4</td>
</tr>
</tbody>
</table>
5 Classification of access

For the purposes of this standard, the following cases apply:

a) Type 1 Access: Access designed for use without personal protective equipment against falls from a height;

b) Type 2 Access: Access for which some characteristics of type 1 access are not respected and the use of which may require a personal protective equipment against falls from a height (see EN 363).

NOTE For the design of personal protective equipment anchorage, see EN 795.

6 Safety requirements and / or protective measures

6.1 Selection of access

6.1.1 Selection of the means of access

Means of access shall conform to the safety requirements and / or protective measures of this clause. In addition, the equipment shall be designed according to the principles of EN 292 for hazards relevant but not significant which are not dealt with by this standard.

Manufacturers shall take into consideration the following when determining the means of access to be provided:

a) frequency of use;

b) equipment or tools to be carried;

c) vertical distance to cover;

d) nature of use e.g. maintenance, inspection, walkway.