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Dock levellers – Safety requirements

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This standard supersedes the Swedish Standard SS-EN 1398, edition 1.

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1398

March 2009

ICS 53.080

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English Version

Dock levellers - Safety requirements

Rampes ajustables - Prescriptions de sécurité

Ladebrücken - Sicherheitsanforderungen

This European Standard was approved by CEN on 14 February 2009.

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Foreword

This document (EN 1398:2009) has been prepared by Technical Committee CEN/TC 98 “Lifting platforms”, 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of an identical text or by endorsement, at the latest by September 2009, and conflicting national standards shall be withdrawn at the latest by September 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1398:1997.

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 Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document.

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Introduction

This European Standard is a type C-standard as defined in EN ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this European Standard. In addition, machinery shall comply as appropriate with EN ISO 12100 for hazards which are not covered by this European Standard.

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

1 Scope

1.1 This European Standard specifies the safety requirements for design, construction, installation, maintenance and testing of dock levellers and for safety components on dock levellers.

With the exception of:

- a) dock levellers for marine and aircraft applications;
- b) lifting tables;
- c) vehicle mounted tail lifts.

NOTE 1 Requirements for lifting tables are laid down in EN 1570.

NOTE 2 Requirements for vehicle mounted tail lifts are laid down in EN 1756-1.

1.2 This European Standard is applicable to dock levellers which are used by persons and/or manual or power driven transport equipment (e. g. forklift trucks) as traffic paths between goods vehicles, both road vehicles and rail wagons, and parts of buildings such as loading docks. This standard does not deal with other bridging devices not shown in Figure 1.

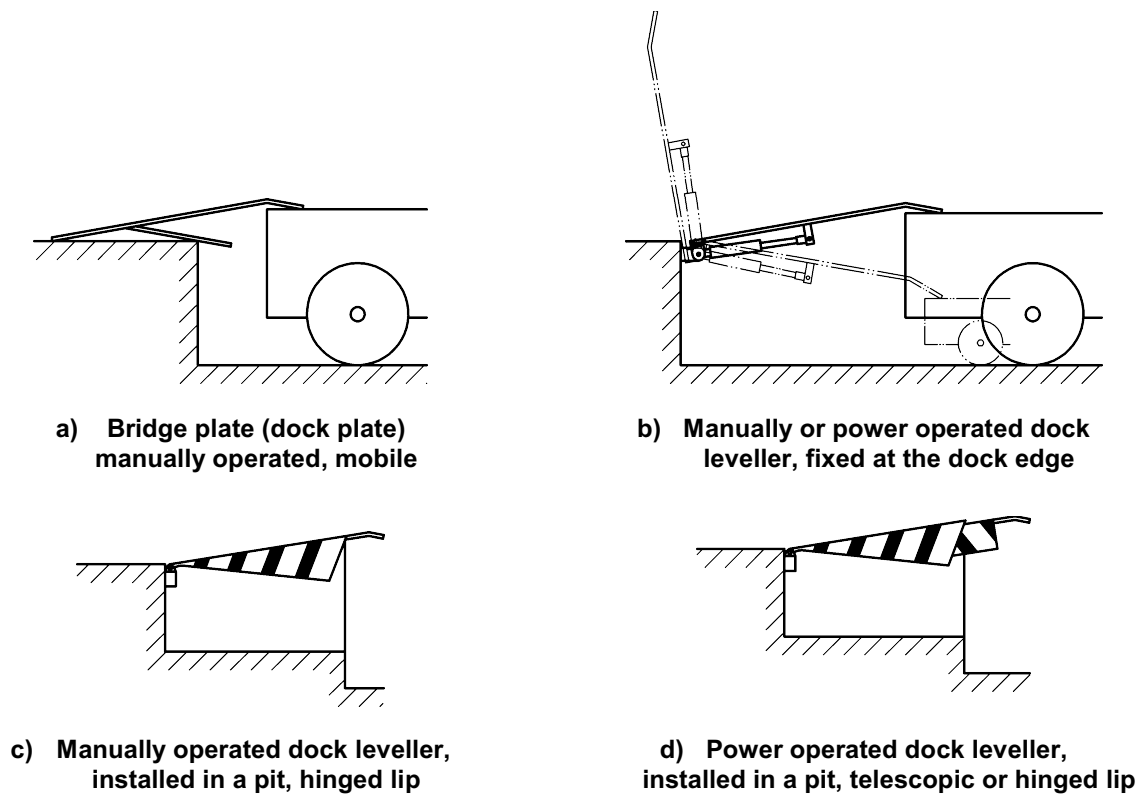


Figure 1 — Types of dock levellers

NOTE Only dock levellers fitted with a drive system other than directly applied human effort are machines in the sense of the Machinery Directive.

1.3 This European Standard specifies requirements in order to protect persons and objects against accidents and health problems and damage during use and operation of dock levellers.

Persons to protect are:

- a) operators and users;
- b) maintaining and inspecting personnel;
- c) persons near the dock leveller.

Objects to be protected are:

- d) goods on dock levellers;
- e) transport equipment on dock levellers.

1.4 The significant hazards of dock levellers are listed in Clause 4. These hazards have been identified by risk assessment according to EN ISO 12100-2 and require actions to avoid the hazard, or to reduce the risk, which are covered in Clause 5.

1.5 The safety requirements are based on the assumption that the dock levellers are regularly maintained by competent persons to the instructions of the manufacturer and that the operating person has been instructed in the use of the dock leveller.

1.6 This European Standard is not applicable to dock levellers which are manufactured before the date of its publication as EN.

1.7 This European Standard deals with all significant hazards, hazardous situations and events relevant to dock Levellers, when they are used as intended and under the conditions foreseen by the manufacturer (see Clause 4).

2 Normative references

The following referenced documents are indispensable for the application 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 349, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

EN 982, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics*

EN 983, *Safety of machinery — Safety requirements for fluid power systems and their components — Pneumatics*

EN 60204-1:2006, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005, modified)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

EN 60947-4-1, *Low-voltage switchgear and controlgear — Part 4-1: Contactors and motor-starters; Electromechanical contactors and motor-starters (IEC 60947-4-1:2000)*

EN 60947-4-2, *Low-voltage switchgear and controlgear — Part 4-2: Contactors and motor-starters — AC semiconductor motor controllers and starters (IEC 60947-4-2:1999)*

EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*