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## **PREDSTANDARD**

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Tail lifts - Platform lifts for mounting on wheeled vehicles - Safety requirements - Part 1: Tail lifts for goods

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

DRAFT EN 1756-1:2001

prA1

November 2005

**ICS** 

#### **English Version**

# Tail lifts - Platform lifts for mounting on wheeled vehicles - Safety requirements - Part 1: Tail lifts for goods

Hayons élévateurs - Plates-formes élévatrices à monter sur véhicules roulants - Prescriptions de sécurité - Partie 1: Hayons élévateurs pour marchandises Hubladebühnen - Plattformlifte für die Anbringung an Radfahrzeugen - Sicherheitsanforderungen - Teil 1: Hubladebühnen für Güter

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 98.

This draft amendment A1, if approved, will modify the European Standard EN 1756-1:2001. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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 Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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## **Foreword**

This document (EN 1756-1:2001/prA1:2005) has been prepared by Technical Committee CEN/TC 98 "Lifting platforms", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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 EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.



#### 2 Normative references

The following new normative reference is added:

"ISO 12508:1994, Earth-moving machinery — Operator station and maintenance areas — Bluntness of edges"

#### 3 Terms and definitions

#### 3 21

#### control device

In the example "..or a combination of these" is deleted.

any device used to operate the tail lift

EXAMPLE button, switch, joystick, pedal, lever.

## 5 Safety requirements and/or protective measures

#### 5.2 Working area

As a first paragraph before the present text the following text is added:

"Tail lift working areas and operators locations shall be provided with means to allow safe access, position and work. Where necessary, these shall include the provision of suitable work lighting to the loading area. The operator's positions shall allow an adequate view of the working area, the load and any danger zones."

#### 5.11 Crushing and shearing

The present text is replaced by:

"Tail lifts shall be equipped with one or more protective measures to avoid the operator being exposed to crushing and shearing. The selection of the type of protective measure is made by the manufacturer, depending on actual type and design of the tail lift.

Safety measures shall be adopted to ensure that any other persons standing on the platform are not exposed to any avoidable risk.

Annex B gives some typical examples to avoid risk of crushing and shearing, see also clause 8 "Information for use"."

#### 5.13.1 Surface

In the second sentence "Is" is changed to "It". The sentence should read:

"It shall resist slipping at the maximum lateral and longitudinal angles that the manufacturer foresees that the platform may adopt in an elevated working position."

A new sub-clause regarding requirement on the platform edges is added.

#### "5.13.2Bluntness of edges

The outer edges of the platform to the left, to the right and backwards shall not present any sharp edges or acute angles/corners. Radius of corners and bluntness of edges shall comply with ISO 12508 to avoid sharp edges."

Old clause 5.13.2 becomes 5.13.3 "Tail lift used as a link bridge".

Old clause 5.13.3 becomes 5.13.4 "Visibility of platform".

#### 5.14.1.2 Hydraulic systems leakage

On the first line of the first paragraph "if" is added. The first line should read:

"Tail lifts equipped with an hydraulic system shall be designed so that if the hydraulic circuit leaks the maximum ...."

#### 5.14.3.1 General

In the second sentence of the second paragraph "applied" is changed to "applicable". The sentence should read:

"These requirements are not applicable when they are protected against an unauthorised action, e.g. if special tool is needed."

## 5.16.1 Prevention of lifting excessive loads

1,25 % is changed to 125 %. The paragraph should read:

"A tail lift shall not be capable of lifting more than 125 % of its maximum load from the ground (for testing see Annex H)."

#### 5.17.5 Several control devices for one movement

The first sentence is replaced by the following text:

"If fixed controls are used to open, close or fold the platform then the controls shall be of the two-hand control type, see Figure B.1.

Where two-hand or two-foot controls are adopted, the following requirements shall be met:"

The following sentence is included at the end of 5.17.5:

"If portable controls are used to open, close or fold a platform then those controls shall require the operation of more than one control device."

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

#### Table 2 — Verification of the safety requirements and/or measures

In the leftmost column:

- 5.14.1.1 is changed to 5.14.1.2 "Hydraulic systems leakage";
- 5.14.1.2 is changed to 5.14.1.3 "Mechanical suspensions failure";

8.3.1 is changed to 8.4.1 "Marking on the tail lift".

#### 8.4.2.2 The installer handbook shall include

The title is changed to:

#### "8.4.2.2 Installation handbook"

The first two sentences are replaced by the following text:

"An installation handbook containing information for safe installation shall be supplied with each lift. The installation handbook shall include the following information:"

#### **B.1** General

The first sentence is replaced by the following text:

"The types of protective measures, detailed in this annex, correspond to the requirements for protection against crushing and shearing given in 5.11."

The following note is added after the first paragraph:

"NOTE Any of the following examples may be beneficially supported by the provision of clearly marked operator positions on the platform or in the vehicle."

#### **B.2.1 Two-hand control**

The last sentence of the last paragraph is replaced by the following text:

"The distance (L) between the rear edge of the body and the centre line of the controls shall be between 300 mm and 600 mm, see figure B.1."

In the note to Figure B.1 "left" is changed to "right". The note should read:

"NOTE The control shall be fitted on the opposite side of the vehicle generally based in right hand drive traffic countries."

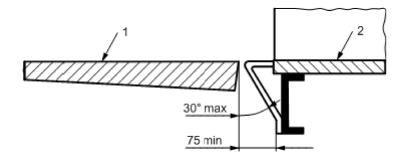
#### B.2.3 Toe guard

Clause B.2.3 is divided into two sub-clauses with the wording as follows:

#### "B.2.3.1 Toe guard for vertical movement

For tail lifts with vertical movement only, if the toe guard alternative is adopted, then:

- there shall be a minimum horizontal gap of 75 mm between moving parts of the platform and fixed parts of the vehicle, except at those points where adequate toe protection is provided, e. g. Figures B.5, B.6;
- such toe protection shall be provided by a guard whose rear sloping edge is at an angle not greater than 30° to the vertical, see Figure B.3.



#### Key

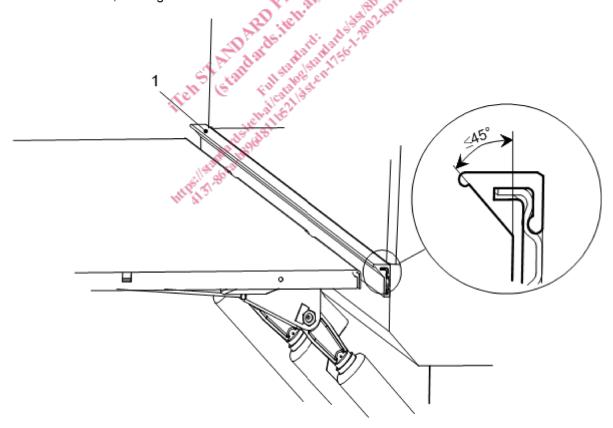
- 1 Tail lift platform
- 2 Vehicle floor

Figure B.3 — Toe guard

## B.2.3.2 Toe guard for parallelogram type system

For tail lifts with parallelogram movement, if the toe guard alternative is adopted, then:

- the toe guard shall be made of flexible material in order to avoid crushing and shearing;
- such toe protection shall be provided by a guard whose rear sloping edge is at an angle of 45° or less relative to vertical, see Figure B.4.



#### Key

1 Flexible material

Figure B.4 — Toe guard for parallelogram type system