## Õhusõidukite maapealsed teenindusseadmed. Erinõuded. Osa 10: Konteinerite/aluste transportöörid KONSOLIDEERITUD TEKST

7.500

Aircraft ground support equipment - Specific requirements -Part 10: Container/Pallet transfer transporters CONSOLIDATED TEXT



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käppeley Epsti standard EVC EN 49249	This Establish standard EV/C EN 40240	
Käesolev Eesti standard EVS-EN 12312- 10:2005+A1:2009 sisaldab Euroopa standardi EN 12312-10:2005+A1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 12312- 10:2005+A1:2009 consists of the English text of the European standard EN 12312- 10:2005+A1:2009.	
Standard on kinnitatud Eesti Standardikeskuse 30.06.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.06.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.	
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 29.04.2009.	Date of Availability of the European standard text 29.04.2009.	
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.	
<b>ICS</b> 49.100		
<b>ICS</b> 49.100		
Võtmesõnad:		
	2	
Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Sta Andmete paljundamine, taastekitamine, kopeerimine, salvestamine e millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirja	andardikeskusele elektroonilisse süsteemi või edastamine ükskõik millises vormis või	

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

#### Right to reproduce and distribute belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; <u>www.evs.ee</u>; Phone: 605 5050; E-mail: <u>info@evs.ee</u>

# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 12312-10:2005+A1

April 2009

ICS 49.100

Supersedes EN 12312-10:2005

**English Version** 

## Aircraft ground support equipment - Specific requirements - Part 10: Container/Pallet transfer transporters

Matériel au sol pour aéronefs - Exigences particulières -Partie 10: Transporteurs de conteneurs et de palettes

Luftfahrt-Bodengeräte - Besondere Anforderungen - Teil 10: Container-/Paletten-Transfer-Transporter

This European Standard was approved by CEN on 13 June 2005 and includes Amendment 1 approved by CEN on 1 March 2009.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

### Contents

		Page
	ord	
Introdu	uction	4
1	Scope	5
2	Normative references	6
3	Terms and definitions	6
4	List of hazards	6
5 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9	Safety requirements and/or measures	7 7 8 8 8 8 8 
6 6.1 6.2 6.3	Information for use Marking Warnings Instructions	9 9 9
7	Verification of requirements	10
Annex	A (informative) Examples of different transporters	11
	B (normative) List of hazards in addition to those of EN 1915-1	
	C (informative) Functional requirements for conveying systems on platforms	
Annex	D (informative) Typical data for unit load devices	16
	ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC	
Annex	ZB (informative) 🕑 Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC ④	19
Bibliog	graphy	20
		S

### Foreword

This document (EN 12312-10:2005+A1:2009) has been prepared by Technical Committee CEN/TC 274, "Aircraft ground support equipment", 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 October 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-03-01.

This document supersedes EN 12312-10:2005.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $A_{1}$ .

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).

A) For relationship with EU Directives, see informative Annexes ZA and ZB, which are integral parts of this document.

The Parts of EN 12312 — Aircraft ground support equipment — Specific requirements — are:

- Part 1: Passenger stairs
- Part 2: Catering vehicles
- Part 3: Conveyor belt vehicles
- Part 4: Passenger boarding bridges
- Part 5: Aircraft fuelling equipment
- Part 6: Deicers and deicing/antiicing equipment
- Part 7: Air-craft movement equipment
- Part 8: Maintenance stairs and platforms
- Part 9: Container/Pallet loaders
- Part 10: Container/Pallet transfer transporters
- Part 11: Container/Pallet dollies and loose load trailers
- Part 12: Potable water service equipment
- Part 13: Lavatory service equipment
- Part 14: Disabled/Incapacitated passenger boarding equipment
- Part 15: Baggage and equipment tractors
- Part 16: Air start equipment
- Part 17: Air conditioning equipment
- Part 18: Nitrogen or Oxygen units
- Part 19: Aircraft jacks, axle jacks and hydraulic tail stanchions
- Part 20: Ground power equipment

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

#### Introduction

This European Standard specifies health and safety requirements, as well as some functional and performance requirements for container/pallet transfer transporters intended for moving unit load devices (ULD) on an airport.

The minimum essential criteria are considered to be of primary importance in providing safe, serviceable, economical and practical container/pallet transfer transporters. Deviations from the recommended criteria should occur only after careful consideration, extensive testing, risk assessment and thorough service evaluation have shown alternative methods or conditions to be satisfactory.

This European Standard is a Type C standard as stated in EN ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this European Standard.

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

## 1 Scope

This European Standard specifies the technical requirements to minimise the hazards listed in Clause 4 which can arise during the commissioning, operation and maintenance of container/pallet transfer transporters when carried out in accordance with the specifications given by the manufacturer or his authorised representative. It also takes into account some performance requirements recognised as essential by authorities, aircraft and ground support equipment (GSE) manufacturers as well as airlines and handling agencies.

This European Standard applies to self-propelled container/pallet transfer transporters, with a seated driver.

Examples of typical transfer transporters are shown in Annex A.

This European Standard does not apply to:

- loading equipment with a height adjustment capability in excess of 150 mm;
- transporter-loaders (single platform loader with transporter capability, see EN 12312-9);
- roller-bed transport platforms mounted on unmodified commercial road chassis.

This European Standard does not establish requirements for noise and vibration.

Noise and vibration are dealt with respectively in EN 1915-4 and EN 1915-3.

This European Standard is not dealing with hazards in respect to a standard automotive chassis and the traffic on the apron.

This Part of EN 12312 is not applicable to GSE which are manufactured before the date of publication by CEN of this European Standard.

NOTE Certain measurements have been given in imperial units (in parentheses) following the metric measurements since the containers/pallets to be handled are based mainly on the imperial system.

M This part of EN 12312 is intended to be used in conjunction with EN 1915-1, EN 1915-2, EN 1915-3 (for vehicles) and EN 1915-4.

## 2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

A1 deleted text (A1

EN 1050:1996, Safety of machinery — Principles for risk assessment

EN 1915-1:2001, Aircraft ground support equipment — General requirements — Part 1: Basic safety requirements

EN 1915-2, Aircraft ground support equipment — General requirements — Part 2: Stability and strength requirements, calculations and test methods

EN 1915-3, Aircraft ground support equipment — General requirements — Part 3: Vibration measurement methods and reduction

EN 1915-4, Aircraft ground support equipment — General requirements — Part 4: Noise measurement methods and reduction (A)

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

EN ISO 12100-2:2003, Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)

A EN ISO 13850:2008, Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006) (A

ISO 2328, Fork-lift trucks — Hook-on type fork arms and fork arm carriages — Mounting dimensions

No 10254 (A), Air cargo and ground equipment — Vocabulary

### 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 1915-1:2001, EN ISO 12100:2003 and the following apply.

#### 3.1

#### transfer transporter

self-propelled GSE capable of transporting and transferring ULDs

#### 3.2

#### container

completely enclosed ULD for use on aircraft that interfaces directly with the aircraft cargo handling and restraint system (see also A) ISO 10254 (A)

#### 3.3

pallet

ULD for use on aircraft, consisting of a flat platform with flat undersurface of standard dimensions on which goods are assembled and secured before being loaded as a unit onto the aircraft and which interfaces directly with the aircraft handling and restraint system (see also A) ISO 10254 (A)

### 4 List of hazards

The list of risks and hazards (see Annex B) is based on EN 1050 and contains the hazards and hazardous situations, as far as they are dealt with in this European Standard, identified by risk assessment as significant for container/pallet transfer transporters and which require action to eliminate or reduce risks.