



NSAI
Standards

Irish Standard
I.S. EN 12312-9:2013

Aircraft ground support equipment - Specific requirements - Part 9: Container/Pallet loaders

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I.S. EN 12312-9:2013

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Partie 9 : Chargeurs de conteneurs/palettes

Luftfahrt-Bodengeräte - Besondere Anforderungen - Teil 9:
Container-/Paletten-Hubfahrzeuge

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Contents

Page

Foreword.....	3
Introduction	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	7
4 List of hazards.....	8
5 Safety requirements and/or measures	8
5.1 General requirements	8
5.2 Overall dimensions	8
5.3 Platform design, guide-rails and stops	8
5.3.1 Platform types	8
5.3.2 Guide-rails and stops.....	9
5.3.3 Aircraft interface device.....	9
5.4 Operation and loading	10
5.5 Access	10
5.5.1 General	10
5.5.2 Access to the operator's position	10
5.5.3 Additional access.....	10
5.6 Transportability	11
5.7 Crushing, shearing.....	12
5.8 Warning devices.....	12
5.9 Controls, monitoring devices and displays	12
5.9.1 Controls.....	12
5.9.2 Emergency stops	12
5.10 Stability.....	12
5.11 Mobility	13
5.12 Operating speeds.....	13
5.12.1 Translational speed.....	13
5.12.2 Autolevelling speed	13
5.13 Operator's workplace.....	13
5.14 Safeguards against falling	13
5.15 Working lights	15
5.16 Options	15
6 Information for use.....	15
6.1 Marking.....	15
6.2 Additional marking.....	16
6.3 Warnings	16
6.4 Instructions	16
7 Verification of requirements	17
Annex A (normative) List of hazards in addition to those of EN 1915-1	18
Annex B (informative) Functional requirements for platforms equipped with conveying systems	21
Annex C (informative) Loading control	23
C.1 Machinery Directive requirements	23
C.2 Demonstration of absence of risk of overloading/overturning	23
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	24
Bibliography.....	25

Foreword

This document (EN 12312-9:2013) 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of an identical text or by endorsement, at the latest by July 2013, and conflicting national standards shall be withdrawn at the latest by July 2013.

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 12312-9:2005+A1:2009.

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 2006/42/EC on machinery.

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

EN 12312, *Aircraft ground support equipment — Specific requirements*, consists of the following parts:

- *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 (the present document);*
- *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 vehicles;*
- *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: Electrical ground power units.*

The main changes compared to the previous edition are:

- a) Amendment A1:2009 was incorporated;
- b) the Introduction was updated;
- c) the Scope was updated;
- d) Clause 2, Normative references, was updated;
- e) three terms and definitions were added, one was deleted;
- f) List of hazards was moved to Annex A, thus making it necessary to re-number the following Annex;
- g) 5.1, 5.2, 5.3 and 5.4 were changed;
- h) 5.5, Access, was inserted, thus making it necessary to re-number the following subclauses;
- i) 5.7 to 5.10, 5.13 and 5.15 were changed;
- j) 5.14, Safeguards against falling, was inserted, thus making it necessary to re-number the following subclauses;
- k) Clause 6 and 7 were changed;
- l) Annex B, Examples of different loaders, was deleted;
- m) Annex C was changed;
- n) Annex D, Typical data for loading equipment, was deleted;
- o) Annex ZA referring to the Machinery directive 98/37/EC was replaced by Annex ZA referring to the new Machinery directive 2006/42/EC;
- p) the Bibliography was updated.

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

Introduction

This European Standard specifies health and safety requirements for container/pallet loaders intended for loading/unloading of unit loads with the exception of bulk material for all aircraft types commonly in service in civil air transport.

The minimum essential criteria are considered to be of primary importance in providing safe, serviceable, economical and practical container/pallet loaders. 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. Such deviations are outside the scope of this standard and a manufacturer should be able to demonstrate an equivalent level of protection.

This document 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 document.

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. Deviations from requirements do not fall within the presumption of conformity given by the standard.

For information, a summary of equipment functional design requirements covered by International Standards, e.g. ISO 6967 and ISO 6968, and IATA Airport Handling Manual, is given in Annex B.

1 Scope

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

This document applies to:

- a) Container/Pallet loader (self-propelled) single platform;
- b) Container/Pallet loader (self-propelled) two or more platforms;
- c) Container/Pallet loader/transporter (self-propelled);
- d) Container/Pallet loader/transfer platform (towed).

This document does not establish requirements for noise and vibration.

NOTE 1 EN 1915-3 and EN 1915-4 provide the general GSE noise and vibration requirements.

This standard does not deal with hazards in respect to a standard automotive chassis and from other vehicles on the apron.

This part of EN 12312 is not applicable to container/pallet loaders which are manufactured before the date of publication of this standard by CEN.

NOTE 2 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.

This part of EN 12312 when used in conjunction with EN 1915-1, EN 1915-2, EN 1915-3 and EN 1915-4 provides the requirements for container/pallet loaders.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1837, *Safety of machinery — Integral lighting of machines*

EN 1915-1:2013, *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*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

EN ISO 13849-1:2008, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006)*

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