
Podporna oprema na tleh za letalski promet - Splošne zahteve - 2. del: Zahteve za stabilnost in vzdržljivost, izračuni in preskusni postopki

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

Luftfahrt-Bodengeräte - Allgemeine Anforderungen - Teil 2: Standsicherheits- und Festigkeitsanforderungen, Berechnungen und Prüfverfahren

Matériel au sol pour aéronefs - Exigences générales - Partie 2: Prescriptions de stabilité et de résistance mécanique, calculs et méthodes d'essai

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ICS:

49.100

Oprema za servis in
vzdrževanje na tlehGround service and
maintenance equipment**SIST EN 1915-2:2026****en,fr,de**

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

Matériel au sol pour aéronefs - Exigences générales -
Partie 2 : Exigences de stabilité et de résistance
mécanique, calculs et méthodes d'essai

Luftfahrt-Bodengeräte - Allgemeine Anforderungen -
Teil 2: Standsicherheits- und
Festigkeitsanforderungen, Berechnungen und
Prüfverfahren

This European Standard was approved by CEN on 5 July 2026.

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EN 1915-2:2026 (E)**European foreword**

This document (EN 1915-2:2026) 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of an identical text or by endorsement, at the latest by March 2027, and conflicting national standards shall be withdrawn at the latest by March 2027.

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

This document supersedes EN 1915-2:2001+A1:2009.

This document includes the following significant technical changes with respect to EN 1915-2:2001+A1:2009:

- a) the Introduction was updated;
- b) the Scope was updated;
- c) Clause 2, Normative references, was updated;
- d) requirements for steel constructions changed to metal (or metallic) constructions;
- e) the methods of calculation changed;
- f) factors for stress calculations have new bases;
- g) fatigue strength factors were updated;
- h) it has been determined when inspections can be dispensed with (see 6.1);
- i) Annex A, List of significant hazards, was added;
- j) Annex ZA was updated;
- k) the Bibliography was updated.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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

EN 1915, *Aircraft ground support equipment – General requirements*, consists of the following parts:

- *Part 1: Basic safety requirements*;
- *Part 2: Stability and strength requirements, calculations and test methods* (the present document);
- *Part 3: Vibration measurement methods and reduction*;

— *Part 4: Noise measurement methods and reduction.*

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: Aircraft movement equipment;*
- *Part 8: Maintenance or service 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 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.*

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

EN 1915-2:2026 (E)

Introduction

The abbreviation GSE means a complete item of aircraft ground support equipment in the context of this document.

When compiling this document, it was assumed that:

- a) components without specific requirements are:
 - 1) designed in accordance with good engineering practice and calculation codes;
 - 2) of sound mechanical and electrical construction;
 - 3) made of materials with adequate strength and of suitable quality;
 - 4) made of materials free of defects;
- b) components are kept in good repair and working order, so that the required characteristics remain despite wear;
- c) by design of the load bearing elements, a safe operation of the machine is ensured for loading ranges from zero to 100 % of the rated possibilities and during tests;
- d) a negotiation took place between the user and the manufacturer concerning particular conditions for the use and places of use of the GSE;
- e) the place of operation allows a safe use of GSE.

The extent to which hazards are covered is indicated in the scope of this document.

The minimum essential criteria are considered to be of primary importance in providing safe, economical and usable GSE. Deviation from the recommended methods and conditions should occur only after careful consideration, extensive testing and thorough in-service evaluation have shown alternative methods or conditions to be satisfactory. Such deviations are outside the scope of this document and a manufacturer should be able to demonstrate an equivalent level of protection.

This European Standard is a Type C standard as defined in EN ISO 12100:2010.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type C standard are different from those which are stated in type A or type B standards, the requirements of this type C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type C standard.

1 Scope

This document specifies the conditions to be taken into consideration when calculating the strength and the stability of GSE. It also specifies general test methods.

This part of EN 1915 is intended to be used in conjunction with EN 1915-1:2023, EN ISO 31915-3:2026 (for self-propelled GSE) and EN 1915-4:2004+A1:2009, and with the relevant part of EN 12312 to give the requirements for the types of GSE within the scope of EN 12312.

When EN 12312 does not contain a relevant part for a GSE, EN 1915 (all parts) gives general requirements that may apply, although additional machine specific requirements, to be determined by the manufacturer, are likely to be required.

NOTE The methods given in this document demonstrate one way of achieving an acceptable safety level. Methods that produce comparable results can be used.

This document does not establish additional requirements for the following:

- a) operation elsewhere than in an airport environment;
- b) operation in severe conditions, e.g. ambient temperature below $-20\text{ }^{\circ}\text{C}$ or over $50\text{ }^{\circ}\text{C}$, tropical or saturated salty atmospheric environment;
- c) hazards caused by wind velocity in excess of the figures given in this document;
- d) earthquake, flood, landslide, lightning and more generally any natural catastrophe.

This document is not applicable to GSE which are manufactured before the date of publication by CEN of this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1915-1:2023, *Aircraft ground support equipment — General requirements — Part 1: Basic safety requirements*

EN ISO 31915-3:2026, *Aircraft ground support equipment — General requirements — Part 3: Vibration measurement methods and reduction*

EN 1915-4:2004+A1:2009, *Aircraft ground support equipment — General requirements — Part 4: Noise measurement methods and reduction*

EN 1993-1-9:2025, *Eurocode 3: Design of steel structures — Part 1-9: Fatigue*

EN 12312-1:2024, *Aircraft ground support equipment — Specific requirements — Part 1: Passenger stairs*

EN 12312-2:2014, *Aircraft ground support equipment — Specific requirements — Part 2: Catering vehicles*

EN 12312-3:2017+A1:2020, *Aircraft ground support equipment — Specific requirements — Part 3: Conveyor belt vehicles*

EN 12312-4:2024, *Aircraft ground support equipment — Specific requirements — Part 4: Passenger boarding bridges*