
**Aircraft ground equipment — Basic
requirements —**

**Part 1:
General design requirements**

Matériel au sol pour aéronefs — Exigences de base —

Partie 1: Exigences générales de conception



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 6966-1 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 9, *Air cargo and ground equipment*.

This first edition of ISO 6966-1, together with ISO 6966-2, cancels and replaces ISO 6966:1993, which has been technically revised.

ISO 6966 consists of the following parts, under the general title *Aircraft ground equipment — Basic requirements*:

- *Part 1: General design requirements*
- *Part 2: Safety requirements*

Introduction

This part of ISO 6966 specifies the general requirements to be taken into account by manufacturers for the design of aircraft ground support equipment. It identifies the various concerns to be taken into consideration to ensure ground equipment presents the appropriate general design characteristics.

Throughout this part of ISO 6966, the minimum essential criteria are identified by use of the key word “shall”. Recommended criteria are identified by use of the key word “should” and, while not mandatory, are considered to be of primary importance in providing safe, economical and usable aircraft ground support equipment. Deviation from recommended criteria should only occur after careful consideration and thorough service evaluation have shown alternative methods to provide equivalent equipment.

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Aircraft ground equipment — Basic requirements —

Part 1: General design requirements

IMPORTANT — In most countries, standing government health and safety laws and regulations apply to machinery, implicitly or explicitly including aircraft ground support equipment. Nothing in this International Standard, however, shall be deemed or otherwise used to supersede any locally applicable law or regulation, unless a specific exemption has been obtained for this purpose from the appropriate authority.

1 Scope

This part of ISO 6966 specifies the minimum general design requirements applicable to aircraft ground support equipment, as defined in 3.1, in order to ensure

- a) definition of aircraft ground support equipment general requirements for designers;
- b) effective operation of aircraft ground support equipment.

The requirements of this part of ISO 6966 apply to any piece of aircraft ground support equipment, as defined in 3.1, used on airports.

NOTE An informative list of the most commonly used pieces of ground equipment is provided in Annex B.

This part of ISO 6966 does not provide all the design requirements applicable for aircraft ground support equipment. Other requirements apply, and can be found in separate standards:

- ISO 6966-2 specifies the safety-related requirements applicable to all aircraft ground support equipment;
- ISO 4116 specifies the additional requirements applicable for conveying surfaces of those pieces of aircraft ground support equipment intended for handling and loading of baggage and cargo unit load devices (ULDs);

NOTE In addition, guidelines for efficiency of conveying surfaces of ground support equipment used to handle air cargo ULDs are provided in Annex A.

- specific standards, listed in the Bibliography, define the functional and performance requirements for certain types of aircraft ground support equipment.

This part of ISO 6966 does not apply to unmodified general-use transportation vehicles such as automobiles, vans, buses and flat-bed trucks when used on airports.

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.

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

ISO 4116, *Air cargo equipment — Ground equipment requirements for compatibility with aircraft unit load devices*

ISO 6966-2, *Aircraft ground equipment — Basic requirements — Part 2: Safety requirements*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
aircraft ground support equipment
GSE
ground equipment
ramp equipment
any piece of mobile equipment, whether or not powered or self-propelled, purpose designed, built and used for ground handling, servicing or field maintenance of civil transport aircraft on the ramp area of an airport

NOTE A non-comprehensive informative list of the most commonly used pieces of ground equipment is provided in Annex B.

3.2
booted foot
foot of an operator, appropriately sheathed for protection from occupational hazards and weather conditions

3.3
dead man type control
control design such that continuous deliberate pressure on the control is necessary for activation, and such that release of that pressure will cause control deactivation

3.4
elevated working surface
any working platform or area, located 1,2 m (4 ft) or more higher than the ground or a lower working surface, on or in which an employee may be located in the performance of his/her working duties

3.5
functional
capable of effectively servicing the purpose for which it was designed

3.6
gloved hand
hand of an operator, appropriately sheathed for dexterity and protection from occupational hazards and weather conditions

3.7
guardrail
barrier erected along the exposed edges of an elevated work surface to prevent the fall of persons

3.8
handrail
member supported alongside a stairway to provide persons with a handhold