

Aircraft ground support equipment — Stability requirements for loading and servicing equipment

ICS 49.100; 49.120

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee ACE/57, Aircraft cargo systems and ground equipment, upon which the following bodies were represented:

- Association of Webbing Load Restraint Equipment Manufacturers
- British Airways
- British Narrow Fabrics Association
- Civil Aviation Authority (Airworthiness Division)
- Health and Safety Executive
- Ministry of Defence
- Society of British Aerospace Companies Ltd.
- Society of Motor Manufacturers and Traders Ltd.

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National foreword

This British Standard has been prepared by Technical Committee ACE/57 and is identical with ISO 11995:1996 *Aircraft — Stability requirements for loading and servicing equipment*, published by the International Organization for Standardization (ISO).

Cross-reference

Publication referred to	Corresponding British Standard
ISO 6966:1993	BS M 74:1994 <i>Air cargo equipment. Basic requirements for aircraft loading equipment</i> (Identical)

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Introduction

Throughout this International Standard, the minimum essential criteria are identified by the use of the key word “shall”. Recommended criteria are identified by the use of the key word “should”, and while not mandatory are considered to be of primary importance in providing safe equipment. Deviation from the recommended criteria should occur only after careful consideration, extensive testing, and thorough service evaluation have shown alternate methods to be satisfactory.

1 Scope

1.1 This International Standard specifies:

- a) the criteria to be used to determine stability of aircraft loading and servicing equipment, including wind loads;
- b) the classification of systems recommended to achieve stability;
- c) the formula to be used for calculating steady-state wind stability;
- d) the recommended test methods applicable to equipment.

1.2 The intent of this International Standard is not to specify equipment design, but rather to define uniform criteria, calculation and testing methods in order to provide a safe work environment under all predictable circumstances for the users of aircraft loading and servicing equipment.

1.3 This International Standard specifies the worldwide requirements recognized by aircraft and equipment manufacturers as well as airlines and handling agencies.

In addition, it shall be applied with due reference to national governmental regulations of the country where the equipment is to be operated.

1.4 This International Standard applies to aircraft loading and servicing equipment, typically but not exclusively defined as follows:

- container and pallet loaders (see ISO 6967 and ISO 6968);
- catering trucks (see ISO 10841);
- passenger stairs (see ISO 12056);
- maintenance and fueling access platforms,

when operated in a static position on an aircraft.

1.5 This International Standard does not apply to:

- forklifts;
- aircraft de-icers;
- any equipment with rotating booms,

and more generally any equipment the normal mode of operation of which includes moving in the elevated position.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards. ISO 6966:1993, *Aircraft — Basic requirements for aircraft loading equipment*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 wind

movement of air which causes a force imposed on surfaces of aircraft loading and servicing equipment

NOTE 1 Wind in this context includes

- steady-state natural wind;
- wind gusts (temporary peak intensities);
- the effect of jet blast from other aircraft's engines.

3.2 stabilizers

structural devices capable of supporting the weight of the equipment and any additional forces resulting from wind or other sources, used to reduce the lateral deflection of vehicles, when extended within the outer planview envelope of the vehicle

NOTE 2 Stabilizers will normally eliminate or reduce the part of the vehicle's weight supported by tyres and suspensions.

3.3 outriggers

stabilizers which, when extended, project outside the outer planview envelope of the vehicle

NOTE 3 Outriggers enlarge the supporting base of the vehicle.

3.4 tip point

condition where the vehicle center of gravity has been rotated by the combined effect of load distribution, ramp slope, structural deformation if any, and the force of wind up to a point directly above the vehicle's pivot point