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Interested committees:

Title: Draft BS ISO 1161 Series 1 freight containers - Corner and intermediate fittings - Specifications.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 1161

Series 1 freight containers — Corner and intermediate fittings — Specifications

*Conteneurs de la série 1 — Pièces de coin et pièces de fixation
intermédiaires — Spécifications*

ICS: 55.180.10

ISO/TC 104/SC 1

Secretariat: **AFNOR**

Voting begins on:
2025-03-17

Voting terminates on:
2025-06-09

This document is circulated as received from the committee secretariat.

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ISO/DIS 1161:2025(en)

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Dimensional requirements	1
3.1 General	1
3.2 Detailed dimensional and manufacturing requirements	2
4 Strength requirements	2
5 Design requirements	2
5.1 Loading	2
5.1.1 General	2
5.1.2 Stacking	3
5.1.3 Lifting and Tipping	3
5.1.4 Longitudinal restraint	3
5.1.5 Vertical restraint (compression only)	3
5.1.6 Lashing and securing	3
5.1.7 Misgather (offset loading)	4
5.2 Compulsory features	4
6 Minimum bearing area — Top and bottom corner and intermediate fittings	4
7 Corner and intermediate fitting marking	4
8 Required prototype tests	5
8.1 General	5
8.2 Casting defect checks	5
8.3 Tests	5
9 Required sample production line tests	6
9.1 Casting defect checks	6
9.2 Tests	7
Annex A (normative) Testing methodology	12
Annex B (informative) Typical examples of twistlock lifting devices	17
Annex C (informative) Chemical Composition of Container Corner Fittings	19
Bibliography	20

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 104, *Freight containers*, Subcommittee SC 1, *General purpose containers*.

It also incorporates the Amendment ISO 1161:1984/Amd 1:2007 and the Technical Corrigendum ISO 1161:1984/Cor 1:1990.

This sixth edition cancels and replaces the fifth edition (ISO 1161:2016), which has been technically revised with the following changes:

- removed all Imperial measures as agreed in virtual meeting December, 2nd, 2020;
- added [Clause 3.2.1](#);
- revised design load values for top, bottom and intermediate fittings in [5.1.1](#) to [5.1.7](#) in accordance with the updated Gross Mass R=36 000 Kg;
- Renamed [Clause 8](#) from “required tests” to “required prototype tests”;
- Rewriting wording [Clause 8.1](#) in accordance with new title of [Clause 8](#);
- revised test values in [8.3.1](#) to [8.3.12](#) in accordance with revised design load from [5.1.1](#) to [5.1.7](#);
- rewriting drawings of top, bottom and intermediate fittings with the dimensions [Figure 2](#), [3](#), [4](#);
- revised values in drawings in [Annex A](#), “Testing methodology” according updated values in [8.3.1](#) to [8.3.12](#).
- new [Annex C](#), (informative) “Chemical Composition of Container Corner Fittings”.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This International Standard on corner fittings is the result of the efforts of technical and operational personnel drawn from all phases of the transportation industry. The figures show the fittings for the top and bottom corners of series 1 freight containers which will provide compatibility in interchange between transportation modes. Care has been taken to limit consideration only to those details vital to this function.

The size and configuration of corner and intermediate fitting apertures are specified. The faces of the corner and intermediate fittings having apertures for the engagement of handling and securing devices have specified thickness and tolerances as shown in [Figures 2 to 4](#). The minimum thickness of the blank walls is specified even though they are not involved in the engagement of the handling and securing devices; they can be thicker than the minimum provided that their inner surfaces do not protrude into the corner fitting cavity reserved for the engaging device.

The purpose of this International Standard is to define some details of design vital to container interchange in automatic, semi-automatic and conventional systems.

The strength and testing requirements specified in this International Standard do not take any account of the stresses which can result from the practice of end-to-end coupling of containers.

NOTE The requirements of this International Standard do not preclude the Provision of additional facilities for lifting either from the top or at the base of the freight container.

Series 1 freight containers — Corner and intermediate fittings — Specifications

1 Scope

This International Standard establishes the basic dimensions and the functional and strength requirements of corner and intermediate cast fittings for series 1 freight containers, i.e. containers which conform to ISO 668 and ISO 1496 (all parts) with the exception of air mode containers (see ISO 8323).

WARNING — Recognizing that there are containers which have ratings and dimensions different from ISO Series 1 containers referred to in ISO Standard 668, which can be fitted with corner fitting of the same design as those described in this standard, or of another design, special arrangements for certification of any fittings for such containers may be required.

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.

ISO 1496-1, *Series 1 freight containers — Specification and testing — Part 1: General cargo containers for general purposes*

ISO 148-1, *Metallic materials — Charpy pendulum impact test — Part 1: Test method*

ISO 668, *Series 1 freight containers — Classification, dimensions and ratings*

ISO 3874, *Series 1 freight containers — Handling and securing*

3 Dimensional requirements

3.1 General

3.1.1 The dimensions and tolerances of the corner fittings shall conform to [Figures 2, 3, 4](#).

Each series 1 container shall have two right-hand top corner fittings (on the right as the observer faces either end of the container) and two left-hand top corner fittings which are the mirror image of the right-hand fittings.

The bottom corner fittings shall have a similar configuration except in respect of the end (i.e. front or rear faces aperture).

45 ft containers shall have intermediate fitting in the 40 ft position (see “3D general view container 20 ft, 40 ft & 45 ft”), the dimensions and tolerances of the intermediate fittings shall conform to [Figures 3](#) and [4](#).

The [Figure 2](#) illustrates left-hand top corner fitting and right-hand top corner fitting as symmetrical.

The [Figure 3](#) illustrates left-hand top intermediate fitting and right-hand intermediate fitting as symmetrical.

The [Figure 4](#) illustrates left-hand bottom corner fitting and intermediate fitting and right-hand bottom corner fitting and intermediate fitting as symmetrical.