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Freight containers— Vocabulary

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Contents

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms related to Containers	1
3.1 Terms related to container designation	1
3.2 Terms related to container characteristics	2
4 Terms related to container types	4
4.1 Terms related to general cargo containers	4
4.2 Terms related to specific cargo containers	5
5 Terms related to and container characteristics	9
5.1 Terms related to dimensions and capacities	9
5.2 Terms related to ratings and masses	10
5.3 Terms related to capabilities	11
6 Terms related to container components and structures	12
6.1 Terms related to container components	12
6.2 Structures	15
7 Terms related to certain container types	17
7.1 Terms related to platform-based containers	17
7.2 Terms related to thermal containers	18
7.3 Terms related to tank containers	20
7.4 Terms related to dry bulk containers	21
8 Terms related to container handling and securing, visual identification and automatic identification	22
8.1 Terms related to the handling and securing of containers	22
8.2 Terms related to visual identification of containers	22
8.3 Terms related to the automatic identification of containers	23
Annex A (informative) Development of the types, variations and terminology	25
A.1 Development of freight container types	25
A.2 Container types	26
A.3 Freight container classification	27
Bibliography	28
Foreword	vi
Introduction	vii
1 Scope	1
2 Normative references	1
3 General terms and definitions	1
4 Container types	3
4.1 General	3

4.2	Terms and definitions	5
5	Container characteristics	9
5.1	Designations	9
5.2	Terms and definitions related to dimensions and capacities	10
5.3	Terms and definitions related to ratings and masses	11
5.4	Terms and definitions related to capabilities	11
6	Terms and definitions related to container components and structures	12
6.1	Components	12
6.2	Structures	15
7	Terms and definitions applicable to certain container types	17
7.1	Platform-based containers	17
7.2	Thermal containers	18
7.3	Tank containers	20
7.4	Dry bulk containers	21
8	Definitions applicable to container handling and securing, visual identification and automatic identification	22
8.1	Handling and securing	22
8.2	Visual identification	22
8.3	Automatic identification	23
Bibliography		27

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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.

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 document 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*.

This third edition cancels and replaces the second edition (ISO 860:1999), which has been technically revised.

The main changes are as follows:

- some terms and definitions have been modified.

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

ISO 830 was first published in 1981 alongside many of the international standards developed for the freight container and was amended in 1999 to reflect the development of freight containers and the introduction of new container types and terms.

Since the publication of the second edition of this document there has been an increase in the number of freight container types and variations and changes to length and height variations. -Details of the development of the types, variations and terminology is shown in Annex A Annex A

Concurrently with the increase of container types and variations, regional and national containers have started to develop. These too carry freight and conform to the definition of a container as described in the International Convention for Container Safety (CSC Code) and therefore can be described as “freight containers” and appear to be similar to the “series 1 freight container”. Therefore, this document defines terms and definitions from all freight containers, and Clause 3 Clause 3 identifies the various terms that are used to describe and differentiate the various types of container used internationally and regionally.

The term “freight container” or “shipping container” is used to differentiate it from other types of ~~container~~ containers that cannot be used intermodally. Therefore, any structure that outwardly appears to be freight container whether it is able to transport freight or not, is referred to as a “freight container”.

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Freight containers — Vocabulary

1 Scope

This document defines terms and definitions related to containers.

NOTE The different parts and components used in the construction of containers are specified in ISO 9897.

2 Normative references

There are no normative references in this document.

3 Terms related to Containers

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org>

3.1 Terms related to container designation

3.1.1 container

article of transport equipment which is:

- of a permanent character and accordingly strong enough to be suitable for repeated use;
- specially designed to facilitate the transport of goods, by one or more modes of transport, without intermediate reloading;
- designed to be secured and/or readily handled, having corner fittings for these purposes;
- and, of a size such that the area enclosed by the four outer bottom corners is either:
 - at least 14 m² (150 sq ft) or
 - at least 7 m² (75 sq ft), if it is fitted with top corner fittings,

but does not include vehicles or packaging

[SOURCE: *International Convention for Safe Containers, 1972, as amended (CSC)*]

3.1.2

freight container

article of transport equipment which is

- a) of a permanent character and accordingly strong enough to be suitable for repeated use;

~~b) b)~~ specially designed to facilitate the carriage of goods by one or more modes of transport, without intermediate repacking;

~~c) e)~~ fitted with devices permitting its ready handling, particularly its transfer from one mode of transport to another;

~~d) d)~~ so designed as to be easy to pack/fill and empty;

~~e) e)~~ having an internal volume of at least 1 m³

Note_1_to_entry:- The term “freight container” includes neither vehicles nor conventional packing.

Note_2_to_entry:- Also known as a shipping container.

3.1.3

intermodal container

container (3.1.1) that can be moved from one transport mode to another without requiring its contents to be repacked.

3.1.4

ISO container

~~Container~~*container* (3.1.1) manufactured in compliance with applicable ISO freight container standards at the time of its manufacture.

Note_1_to_entry:- Relevant ISO freight container standards are listed in the Bibliography

3.1.4.1

Series 1 freight container

variant of an *ISO container* (3.1.4) that complies with dimensional requirements of ISO 668 and tested in accordance with the latest version of the relevant part of ISO 1496.

3.1.5

smart container

container (3.1.1) that can embed track and trace and/or monitoring systems

3.2 Terms related to container characteristics

3.2.1

container classification

~~Alphanumeric~~*alphanumeric* code starting with a 1 followed by one to three uppercase letters related to the container's length and height.

Note_1_to_entry:- See ~~Annex A clause A.3.3~~ for a list of container classifications.

3.2.2

container type

group or groups that are subdivided according to the following concepts: mode of transport, categories of cargo, and the physical characteristics of the container

~~note~~*Note* 1_to_entry:- see ~~Annex clause A.2~~ See A.2 for list of container types.

3.2.3

type codes

Container type codes are given in ISO 6346.

The type code consists of

two characters: ~~character code comprising an alphabetic character in~~ the first, ~~an alphabetic character, position that~~ indicates the *container type* (3.2.2), and ~~the~~ second, ~~a numeric or an alphabetic character, that~~ indicates the main characteristics related to the container type.

~~NOTE Note 1—Annex A to entry: Container type codes are given in ISO 6346.~~

~~Note 2 to entry: Annex A Table 1 and Clause 4.1 does~~ Clause 4.1 do not constitute an exhaustive list of container types.

~~NOTE 2—Note 3 to entry: When the second character is a numeral, the container is designed and tested with full stacking and racking capabilities, as defined in the ISO 1496 series.~~

~~Note 4 to entry:~~ When the second character is alphabetic, the container is designed and tested with reduced stacking and/or racking capabilities.

~~NOTE 3—In 4.1.1~~ Note 5 to entry: In 4.1.1 and 4.1.2, where a reference is given in square brackets after the name of a container type, this identifies the document in which the specification and testing requirements are given for the type of container in question.

~~NOTE 4—Note 6 to entry:~~ When type codes are quoted with definitions, they are given as typical examples only.

3.2.4

size codes

~~two alphanumeric characters indicating the~~ container size, *i.e. external dimensions* (5.1.1)

~~Note 1 to entry: Container size~~ codes are given in ISO 6346.

~~Note 2 to entry: For Series 1 containers, the size designations are given in Annex A Table 2.~~

~~Note 3 to entry: The container size (i.e. external dimensions) shall be indicated by two characters as follows:~~

~~—First~~ first character: *is a* numeric or alphabetic character representing the length.

~~—Second~~ Note 4 to entry: The second character: *is a* numeric or alphabetic character representing the width and the height.

~~Note 1 to entry: For Series 1 containers, the size designations are given in Annex A Table 2.~~

3.2.5

container variations

sub categories of *container type* (3.2.2) reflecting a specific use or design

4 Terms related to container types

4.1 Terms related to general cargo containers

4.1.1

general cargo container

freight container (see 3.1.2)(3.1.2) that is not intended for use in air transport, nor primarily intended for the carriage of a particular category of cargo such as a cargo requiring temperature control, liquid or gas cargo, dry solids in bulk or cargoes such as automobiles (cars) or livestock

4.1.1.1

general-purpose container

general cargo container (4.1.1) that is totally enclosed and weatherproof, having a rigid roof, rigid side walls, rigid end walls and a floor, having at least one of its end walls equipped with doors and intended to be suitable for the transport of cargo of the greatest possible variety

Note_1_to_entry:- The simplest form of this type of container is given the type code G0.

4.1.1.1.1

folding container

closed box type *container* (3.1.1) designed and tested to be able to fold either vertically or horizontally

Note_1_to_entry:- Detailed type code numbers have been allocated to containers folding on their base structure (W0), and containers folding on their side structure (W1).

4.1.1.2

specific-purpose container

general cargo container (4.1.1) that has constructional features either for the “specific purpose” of facilitating packing/filling and unpacking/emptying other than by means of doors at one end of the container, or for other specific purposes such as ventilation

Note_1_to_entry:- The container types covered by this term are those defined in 4.1.1.2.1 to 4.1.1.2.4.

4.1.1.2.1

closed ventilated container

specific-purpose general cargo container (4.1.1.2) that is totally enclosed and weatherproof, having a rigid roof, rigid side walls, rigid end walls and a floor, at least one of its end walls equipped with doors and that has devices for ventilation, either natural or mechanical (forced)

Note_1_to_entry:- The type codes for the simplest forms of these containers are:

- —V0 for those specifically designed for carriage of cargo where natural ventilation is required, ~~and;~~
- —V2 for those having mechanical ventilation.

4.1.1.2.2

open-top container

specific-purpose general cargo container (4.1.1.2) that has no permanent rigid roof but can have a flexible and movable or removable cover, made, for example, of canvas or plastic or reinforced plastic material, normally supported on movable or removable roof bows or a removable hard top roof structure, held in place using clips

Note_1_to_entry:- Such containers can have movable or removable top-end transverse members above their end doors.

Note_2-to-entry:- The simplest form of this type of container is given by the type code U0.

4.1.1.2.3

platform container

specific-purpose container (4.1.1.2) that has no superstructure at all, but has the same length, width, strength requirements and handling and securing features as required for interchange

Note_1-to-entry:- Containers of this type have type code P0.

4.1.1.2.4

platform-based container

specific-purpose container (4.1.1.2) that has no side walls, but has a base structure similar to that of a platform container

Note_1-to-entry:- See 4.1.1.2.3, 4.1.1.2.3.

4.1.1.2.4.1.1.2.5

platform-based containers with incomplete superstructure and fixed ends

platform-based container (4.1.1.2.4) without any permanently fixed longitudinal load-carrying structure between ends other than at the base

Note_1-to-entry:- The term “load” as used refers to a static/dynamic type load, not a cargo load.

Note_2-to-entry:- Containers of this type have type codes P1 and P2.

4.1.1.2.4.26

platform-based container with incomplete superstructure and folding ends

platform-based container (4.1.1.2.4) with incomplete superstructure) but having folding end frames with a complete transverse structural connection between corner posts

Note_1-to-entry:- See 4.1.1.2.4.1, 4.1.1.2.5.

Note_2-to-entry:- Containers of this type have type codes P3 and P4.

4.1.1.2.4.37

platform-based container with complete superstructure

platform-based container (4.1.1.2.4) with a permanently fixed longitudinal load-carrying structure between ends at the top

Note_1-to-entry:- The term “load” as used refers to a static/dynamic type load, not a cargo load.

Note_2-to-entry:- Containers of this type have type code P5.

4.2 Terms related to specific cargo containers

4.2.1

specific cargo container

container (3.1.1) which is primarily intended for the carriage of particular categories of cargo

4.2.1.1

thermal container

freight container (3.1.2) built with insulating walls, doors, floor and roof designed to slow the rate of heat transmission between the inside and the outside of the container