

# INTERNATIONAL STANDARD

**ISO**  
**9711-1**

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## **Freight containers — Information related to containers on board vessels —**

### **Part 1: Bay plan system**

*Conteneurs pour le transport de marchandises — Informations relatives  
aux conteneurs à bord des navires —*

*Partie 1: Système du plan de chargement*



Reference number  
ISO 9711-1:1990(E)

## 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.

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.

International Standard ISO 9711-1 was prepared by Technical Committee ISO/TC 104, *Freight containers*.

ISO 9711 consists of the following parts, under the general title *Freight containers — Information related to containers on board vessels*:

- Part 1: *Bay plan system*
- Part 2: *Telex data transmission*

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## Introduction

Because of the rapid turn-round of modern container ships and the short distances between ports, the traditional information system by air mail no longer meets basic requirements. Several large terminal operators and shipping lines have therefore started using a telefax service for transmitting all necessary data and loading plans within a short time to the next loading/discharging port. Certain operators with a central planning office are using coded telex sets which are sent to the various ports and transfer stations; they are comparable to the advanced telex information system used by the railroad. Other operators have recently equipped their vessels with mini-computers for calculating the various moments, trim and stability prior to and upon completion of the loading/discharging operation.

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# Freight containers — Information related to containers on board vessels —

## Part 1: Bay plan system

### 1 Scope

This part of ISO 9711 specifies a method for identifying the locations in which containers may be carried on board a container ship. By setting up this uniform identification method, it is then possible to transmit information about the space assignments given to the specific containers being carried. Further, by knowing the physical design characteristics of the vessel, and the physical data about the containers and the cargo loaded in each container, calculations can be made about the stability and trim of the ship before setting out to sea. Also, knowing what containers are on board and where they are destined, it is possible to notify cargo agents in advance of the ship's arrival in order that they may plan to pick up and deliver their containers promptly.

It is applicable to all standard freight containers covered by International Standards and should, wherever appropriate and practicable, be applied to those containers not covered by International Standards.

It applies only to vessels stowing containers longitudinally.

### 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 9711. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 9711 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 6346:1984, *Freight containers — Coding, identification and marking*.

### 3 Stowage plan

The stowage plan is based on a module having the following dimensions:

2 438 mm (8 ft) in the transversal direction;

6 096 mm (20 ft) in the longitudinal direction;

1 295 mm (4 ft 3 in) in the vertical direction.

The container location in the ship is accurately specified by bay, row and tier numbers.

#### 3.1 Bay numbers

The bay number shall consist of two Arabic numerals. Bay numbers 1 to 9 shall be preceded by a zero to make up two digits. Forty-foot bays shall be denoted by even numbers, twenty-foot bays by odd numbers with the numerical order from fore to aft. In the case of mixed stowage of two 20 ft containers in a 40 ft bay, the forward 20 ft container shall be shown in the 40 ft bay plan, while the aft 20 ft container shall be shown in a separate bay plan having the next higher odd number.

#### 3.2 Row numbers

The row number shall consist of two Arabic numerals. Row numbers 0 to 9 shall be preceded by a zero to make up two digits. The numbering of rows shall start at the ship's centre and shall be even to port

side and odd to starboard. The centre row, if one exists, shall be denoted "00".

### 3.3 Tier numbers

Layer or tier numbers shall consist of two Arabic numerals. They shall start with "02" with the height of an 8 1/2 ft standard container directly above the double bottom at the ship's centre and rise with even numbers for each container height. Tiers on deck shall start with "82" and rise with even num-

bers above the hatch covers. Half-height containers shall be marked with odd numbers. Containers at the same height above the keel therefore have the same tier specification. Figure 1 shows an example of a stowage plan.

The tier numbering scheme shall be kept unchanged even if containers of heights other than the 1 295 mm modulus are loaded. These deviating heights may be identified by the use of the container size code specified in ISO 6346.

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