Series 1 freight containers — Specification and testing —
Part 4: Non-pressurized containers for dry bulk

Conteneurs de la série 1 — Spécifications et essais —
Partie 4: Conteneurs non pressurisés pour produits solides en vrac
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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.

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 1496-4 was prepared by Technical Committee ISO/TC 104, Freight containers, Sub-Committee SC 2, Specific purpose containers.

ISO 1496 consists of the following parts, under the general title Series 1 freight containers - Specification and testing:

- Part 1: General cargo containers for general purposes
- Part 2: Thermal containers
- Part 3: Tank containers for liquids, gases and pressurized dry bulk
- Part 4: Non-pressurized containers for dry bulk
- Part 5: Platform and platform-based containers
- Part 6: International cargo-security devices

Annexes A, B, C, D and E form an integral part of this part of ISO 1496. Annexes F and G are for information only.
Introduction

The following grouping of container types is used for specification purposes in ISO 1496:

Part 1
- General purpose 00 to 09
- Specific purpose
  - closed, vented/ventilated 10 to 19
  - open top 50 to 59

Part 2
- Thermal 30 to 49

Part 3
- Tank 70 to 79
- Dry bulk, pressurized 85 to 89

Part 4
- Bulk, non-pressurized (box type) 20 to 24
- Bulk, non-pressurized (hopper type) 80 to 84

Part 5
- Platform (container) 60
- Platform-based with incomplete superstructure and fixed ends 61 and 62
- Platform-based with incomplete superstructure and folding ends 63 and 64
- Platform-based with complete superstructure 65 to 69

NOTE 1: Containers types 90 to 99 are reserved for air/surface containers (see ISO 8323).
Series 1 freight containers — Specification and testing —

Part 4:
Non-pressurized containers for dry bulk

1 Scope

1.1 This part of ISO 1496 specifies the basic specifications and testing requirements for ISO series 1 freight containers of the dry bulk container non-pressurized type which are suitable for international exchange and for conveyance by road, rail and sea, including interchange between these forms of transport.

1.2 As the density and flow characteristics of dry bulk cargoes vary widely, containers complying with this part of ISO 1496 are not expected to be suitable for the carriage of all such cargoes. Therefore, except where otherwise stated, the requirements of this International Standard are minimum requirements.

Containers to be used for the carriage of dangerous goods may be subject to additional international and national requirements as applied by competent authorities.

1.3 The container types covered by this part of ISO 1496 are given in Table 1.

1.4 The marking requirements for these containers shall be in accordance with the principles embodied in ISO 6346.

NOTE 2 Some types of freight containers constructed in accordance with ISO 1496-1 may satisfactorily be used for the transport of certain non-packed dry bulk solids. Where such containers are used for this purpose, it is essential that care be taken to ensure that the design loadings are not exceeded under operating conditions.

Table 1 — Container types

<table>
<thead>
<tr>
<th>Type</th>
<th>Type code designation(^{1)}</th>
<th>Box types</th>
<th>Hopper types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry bulk non-pressurized,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>closed</td>
<td>20</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>vented</td>
<td>21</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>ventilated</td>
<td>22</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>airtight</td>
<td>23</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>spare</td>
<td>24</td>
<td>84</td>
<td></td>
</tr>
</tbody>
</table>

\(^{1)} In accordance with ISO 6346.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 1496. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 1496 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 666:1966, Series 1 freight containers — Classification, dimensions and ratings.
