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ANY OTHER BUSINESS

Discrepancy in container stacking strength requirements between the pertinent ISO Standard and the Convention for Safe Containers (CSC)

Submitted by France, Italy, ICS, BIMCO, ICHCA, IICL, WSC and BIC

SUMMARY

Executive summary:	This document describes the difference of requirements for the stacking strength of containers in ISO Standard 1496-1 and the CSC and recommends that the CSC be aligned with ISO 1496-1
Strategic direction, if applicable:	Not applicable
Output:	Not applicable
Action to be taken:	Paragraph 8
Related documents:	CSC Convention of 1972 (as amended); DSC 14/WP.7, paragraph 11; DSC15/18, paragraph 13.5 and 13.6; Resolution MSC.310(88), regulation 1 and DSC 16/15, paragraph 10.3.6

Status of ISO Standard 668 (Classification, Dimensions and Ratings)

1 The standard Maximum Gross Mass (MGM) of containers is prescribed in ISO standard 668.

2 Initially set at 30,480 kg and 24,000 kg for 40' and 20' containers respectively, it has most recently been increased to a maximum of 36,000 kg for all sizes of containers (Amendment 2 (2016) to ISO 668).

Status of ISO Standard 1496-1 (Specification and Testing)

3 The ISO standard for Series 1 containers, ISO 1496-1, establishes, among other characteristics, the required stacking strength (maximum superimposed mass) for standard containers. This was for many years set at 192,000 kg. However, in order to keep pace with the increase of container MGM, the growth of the size of containerships and the related height

of container stacks on board, the stacking strength was increased to 213,360 kg in 2005 (Amendment 3). This value was maintained in the latest revision of the standard (1496-1 (2013)).

Status of the Convention for Safe Containers (CSC)

4 The CSC (1972, as amended) stipulates a stacking strength below which a container shall be considered as having limited stacking capability. However, this figure has not been updated since the revision of ISO1496-1, so the original threshold figure of 192,000 kg still appears in the CSC as set forth below:

.1 Annex I, chapter 3 (page 14 and 15) states: "Where the stacking or racking values are less than 192 000 kg or 150 kN, respectively, the container shall be considered as having limited stacking or racking capacity and shall be conspicuously marked as required under relevant standards * …"; and

.2 Supplement - CSC.1/Circ.138/Rev.1, chapter 12.4.4.4 states: "Containers tested in accordance with annex II, chapter 2 (Stacking) with an allowable superimposed static stacking weight less than 192,000 kg for their outermost corner pots, or tested in accordance with annex II, chapter 4 (transverse racking) [….] should be conspicuously marked, as required under the relevant ISO Standard*.

* Refer to current standard ISO 6346, freight containers – Coding, identification and marking".

Current situation in the market

5 A review of production statistics confirms that the vast majority of containers have, for many years, been built with a stacking strength at or above the 213,000 kg figure stipulated in ISO 1496-1. In fact, most major container operators and lessors now cause containers to be built above the required figure, with the most common figure being 216,000 kg.

6 Nevertheless, a small number of containers is still being produced with the original stacking capability of 192,000 kg. However, these containers are being marked as standard containers. This makes it impossible during stowage and other container operations to distinguish containers with reduced stacking strength from containers that are built to the higher stacking strength prescribed in ISO 1496-1. This gives rise to major safety concerns, including in regard to the risk of collapsing container stacks and containers lost overboard, if containers with reduced stacking capacity are handled and placed at the bottom of container stacks in the belief that they are built to the higher stacking strength requirement in 1496-1.

Need for alignment between CSC and ISO 1496-1

7 The co-sponsors are of the view that 14 years after the introduction of the higher stacking strength in ISO 1496-1, it is in the interest of crew, worker, ship and environmental safety, including reducing the incidences of collapsed container stacks, that the CSC's stacking strength requirement now be aligned with that of ISO 1496-1. The co-sponsors therefore respectfully request that consideration be given by the Sub-Committee on how best to make arrangements for such an alignment[1].

[1] It should be noted that the relevant container marking standard, ISO 6346 Amendment 3, is in accordance with the stacking strength requirement in the CSC. It would therefore also require alignment with the higher stacking strength requirement of ISO1496-1 if the requirement in the CSC were changed.

Action requested of the Sub-Committee

8 The Sub-Committee is invited to consider the information provided and take action as appropriate.