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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 11577-2020

Replacing GB/T 11577-2010

Container securing fitting for ships

船用集装箱紧固件

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1:1-2009: This standard replaces GB/T 11577-2010 "Marine Container Fasteners": Compared with GB/T 11577-2010, the main technical The technical changes are as follows:

---Updated normative reference documents, and added GB/T 709, GB/T 13912, GB/T 13914, ISO 3874, ISO 17905, Deleted CB/Z343 (see Chapter 2, Chapter 2 of the:2010 edition);

---The classification list of container fasteners is added according to fixed parts and movable parts (see 3:1);

---Added bottom single bottom cone BA-1, automatic lock CE-1, bottom split rotary lock CF-1, bottom semi-automatic rotary lock CG-1, central automatic lock CH-1, suspension double cone EC-2, flangeless suspension cone ED-1 (see Table 1, Table 2, Figure 18, Figure 23~Figure 26, Figure 37, Figure 38);

--- Deleted the auto-locking pile cone DC-1 (see Table 1 and Figure 31 in the:2010 edition);

---The name "turn lock" is changed to "lock", and "height compensator (foot)" is changed to "height compensator" (see Table 1, Table 2,:2010 edition Table 1);

---Dovetail base AA, unified tensile load (SWL/PL/BL) is 250kN/375kN/500kN, shear load is 210kN/315kN/420kN, the vertical base AD increases the compressive load to 1020kN/1326kN, lock CA to lock CH unified tensile load (SWL/PL/BL) is 250kN/375kN/500kN, and shear load is 210kN/ 315kN/420kN, the unified shear load of double cone EA-2, EA-3, EB-2, EB-3, EC-2 is 400kN/600kN/ 800kN (see Table 2, Table 1 of the:2010 edition);

---Adjusted the product's icon, size and reference quality (see Table 2, Figure 4~Figure 12, Table 1, Figure 4~Figure 12 of the:2010 edition);

---Modified the materials of the main parts of container fasteners (see Table 3, Table 2 of the:2010 edition);

---Modified the chemical composition and mechanical properties of steel castings (see Table 4 and Table 5, and Table 3 and Table 4 of the:2010 edition);

--- The test method of the material is changed to 4:1:3 (see 4:1:3, 5:1 of the:2010 edition);

---The hot dip galvanizing process requirements have been revised, and the requirements for the rust removal level and the paint thickness requirements before painting the surface have been added (see 4:4:1, 4:4:2, 4:4:1, 4:4:2 of the:2010 version);

---Added a specific strength load test method (see 5:4:1, 5:5:1 in the:2010 edition);

---Added the functional requirements and flip test methods of automatic locks (see 5:5);

1 Scope

GB/T 11577-2020 is the Chinese national standard on container securing fitting for ships, in the field of shipbuilding and marine structures. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 14 December 2020 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2021. Classification: ICS 47.020.40, CCS U24. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the classification and marking, requirements, test methods, inspection rules, and standards of marine container fasteners (hereinafter referred to as fasteners) Display, packaging, storage and transportation: This standard applies to the design, manufacture and acceptance of fasteners:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article Pieces: For undated references, the latest version (including all amendments) applies to this document:

GB/T 699-2015 High-quality carbon structural steel

GB/T 700-2006 Carbon structural steel

GB/T 709-2019 Size, shape, weight and allowable deviation of hot-rolled steel plate and steel strip

GB/T 712-2011 Structural steel for ships and marine engineering

GB/T 1591-2018 Low-alloy high-strength structural steel

GB/T 3077-2015 Alloy structural steel

GB/T 6414-2017 Casting dimensional tolerance, geometric tolerance and machining allowance

GB/T 8923:1-2011 Visual assessment of surface cleanliness of steel surface treatment before coating-Part 1: Uncoated The corrosion level and treatment level of the steel surface and the steel surface after the original coating has been completely removed

GB/T 12362-2016 steel die forging tolerance and machining allowance

GB/T 13912-2002 Technical requirements and test methods for hot-dip galvanized coatings on steel parts with metal coverings

GB/T 13914-2013 Dimensional tolerance of stamping parts ISO 3874:2017 Series

1 Freight Container Handling and Securing (Series1freightcontainers-Handlingand securing)

ISO 17905:2015 Ships and Ocean Technology Marine Container Securing Device Installation, Inspection and Maintenance (Shipsand marinetechnology-Instalation, inspectionandmaintenanceofcontainersecuringdevicesforships)

3 Categories

1 Classification of fasteners The classification of fasteners is shown in Table 1: