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

GB/T 34001-2016

China ship repairing quality standard

中国修船质量标准

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard is proposed by the Ministry of Industry and Information Technology of the People's Republic of China. This standard is nationalized by the National Marine Ship Standardization Technical Committee (SAC/TC12). The drafting unit of this standard. COSCO Shipping Engineering Group Co., Ltd., China Shipbuilding Industry Comprehensive Technical and Economic Research Institute, Dalian COSCO Shipping Engineering Co., Ltd., Guangdong COSCO Shipping Engineering Co., Ltd., Shanghai COSCO Shipping Engineering Co., Ltd., Zhoushan COSCO Shipping Engineering Co., Ltd., Tianjin Ship Repair Technology Research Institute, China Shipbuilding Chengxi Shipbuilding Co., Ltd., China Shipbuilding Industry Association Ship Repair Branch, China Classification Society, Shanhai Offshore Heavy Industry Co., Ltd., Shanghai Huarong Dadong Shipping Engineering Co., Ltd., Dalian Liaonan Shipyard, Union Shipyard (Shekou) Co., Ltd., China Shipping Industry Co., Ltd., Qingdao Beihai Shipbuilding Heavy Industry Co., Ltd., Shanghai Shipyard Ship Co., Ltd., China Shipping Chengxi Ship (Guangzhou) Limited company, Dalian Ocean Shipping Company, China Ship Huangpu Wenchong Ship Co., Ltd., Zhoushan Longshan Shipyard Co., Ltd., Zhoushan Wanbang Yongyue Ship Construction Co., Ltd., Qingdao forward shipyard, Tianjin Xingang Shipbuilding Heavy Industry Co., Ltd., Zhoushan Xinya Shipbuilding Co., Ltd. and Fujian Baozhong Ocean Engineering Co., Ltd. The main drafters of this standard. Zhan Shuming, Chen Yingtao, Li Zhengjian, Li Qiang, Zhao Zhijian, Wang Zhian, Sun Changling, Li Tianyu, Chen Yingzhao, Wang Xuebin, Wei Hongyu, Xu Huichao, Zhu Yulei, Gong Weibing, Zhao Guikai, Zhang Guoxiang, Sun He, Wu Yuhong, Liang Miaosen, Bai Xinjian, Wan Li, Wang Ge war, Cui Jinhuan, Zuo Jingmin, Ling Yunfeng, Li Zhuqi, Wei Chonghua, Wang Jiafei, Zhou Ziruo, Gao Xuefeng, Wu Jing, Liu Wei, Sui Shenghua, Sun Qi, Shi Changbai, Teng Hongda, Zhang Bo, Li Zhongqi, Lei Panfeng, Liu Xue, Zhou Qing, Yin Qiang, Wang Xianming, Yang Zhongliang, Liu Bin, Li Youbo, Gu Wei, Cai Yuliang, Chen Jie, Tang Jihe, Song Shuqing, Sun Xuerong, Yao Jun, Cao Jingwei, Zhao Jinwen, Zhou Jixu, Zhou Jianhua, Sun Shumeng, Fang Yuchuan, Zhu Taiyuan, Fan Weilin, Zhang Shutong, Liu Jingchun, Zhao Lijia, Lin Long, Chen Xinhua, Li Zhenen, Liu Jin China Ship repair quality standards

1 Scope

The Chinese ship repairing quality standard, the companion to the shipbuilding standard and the larger of the two - the reference against which repair work carried out in a Chinese yard is measured, and the document an owner, a repair yard, a class surveyor and an insurer all end up quoting. Repair is a harder thing to standardise than construction, and that is why this document is longer. In new construction the yard controls everything from the plate upward; in repair the starting point is a ship that has been in service for years, whose actual scantlings are unknown until they are measured, whose steel is wasted and coated and often contaminated, and which is usually being worked on afloat or in dock against a fixed sailing date. The standard sets the quality requirements and the tolerances for ship repair work: the survey and measurement that establish what condition the ship is actually in and how much material has been lost, the criteria that decide whether a member is repaired, cropped and renewed, or doubled; the steel renewal work with its fit-up, welding and distortion tolerances and the criteria for the repair of a weld defect; the repair of the shell, the decks, the bulkheads, the tanks and the internal structure; the machinery work - the main and auxiliary engines, the shafting and its alignment and the stern gear, the propeller, the rudder and steering gear, the pumps, the compressors and the boilers; the piping systems and their pressure testing; the electrical work; the surface preparation and coating of a ship whose steel is not new, which is the part of a repair most often disputed; and the tests, trials and inspections by which the finished work is accepted before the ship sails. Issued on 22 December 2016 and in force since 1 January 2017.

This standard specifies the requirements for the use of materials in the process of ship repair, the ship routine repair focus on external inspection projects, inspection points, repair Quality requirements, quality control of the repair process and inspection requirements. This standard applies to 500 tons of gross tonnage and above steel marine ship routine repair, other ships reference to use. This standard does not apply to major modifications to ships.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document. Shapes and position tolerances Not included Tolerance values

GB/T 1184-1996 General rules and safety requirements for hydraulic drive systems and their components

GB/T 3766-2015 Casting Dimensional Tolerances and Machining Margin GB/T 6414-1999

GB/T 8923.1-2011 Visual evaluation of surface cleanings of steel surface before coating of coatings - Part 1. Uncoated Of the steel surface and the full removal of the original coating

after the steel surface corrosion grade and treatment level

GB/T 8923.2-2008 Visual evaluation of surface cleanliness of steel surface before coating of coatings - Part 2. Coated Of the surface of the steel to remove the original coating after the treatment level

GB/T 8923.3-2009 Visual evaluation of surface cleanliness of steel surface before coating of coatings - Part 3. Welds, edges And other areas of the surface defect handling level

GB/T 8923.4-2013 Visual evaluation of surface cleanliness of steel surface before coating of coatings - Part 4. Assessment of surface cleanliness with high pressure water The initial surface state, the treatment level and the flash rust level associated with the jet treatment

GB/T 13288.2-2011 Surface treatment of steel before coating coating Surface roughness characteristics of steel after jet cleaning Part

2 Determination of surface roughness grade of steel after abrasive jet cleaning - Comparison of sample method China Shipbuilding Quality Standard

GB/T 34000-2016 IMO/MSC.215 (82) Performance standards for protective coatings for all types of marine seaborne ballast and bulk carriers Called PSPC) (Performance standard for protective coatings for dedicated seawater ballast tanks in all types of ships and double-side skins spaces of bulk carriers

3.1 Ship repair material

3.1.1 General requirements for the use of materials for ship repair The general requirements for the use of materials for ship repair are as follows:

- a) the requirements for the materials used for repair should be the same as those of the original ship;
- b) the materials used in the repair shall be produced by the factory with the qualification of the industry in accordance with the type and grade of supply;
- c) The materials used in the repair shall be supplied with the product certificate at the request of the ship's inspection agency, in exceptional circumstances or generally limited to