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

**GB/T 20842-2024**

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**Technical requirement of lifeboat**

船用救生艇技术条件

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## Table of Contents

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| 1 Scope .....                                                             | 1  |
| 2 Normative references .....                                              | 1  |
| 3 Terms and Definitions .....                                             | 1  |
| 4 Categories .....                                                        | 2  |
| 5.Requirement .....                                                       | 2  |
| 5.1 Materials .....                                                       | 2  |
| 5.2 Design and Structure .....                                            | 3  |
| 5.3 Weight and main scale deviation .....                                 | 3  |
| 5.4 Outfitting .....                                                      | 3  |
| 5.5 Attachments .....                                                     | 5  |
| 5.6 Strength of lifeboats .....                                           | 6  |
| 5.7 Seats .....                                                           | 7  |
| 5.8 Lifeboat freeboard and stability .....                                | 9  |
| 5.9 Release device .....                                                  | 10 |
| 5.10 Operability .....                                                    | 11 |
| 5.11 Towing and bow line release .....                                    | 12 |
| 5.12 Sealing and structure of enclosed lifeboats .....                    | 12 |
| 5.13 Additional requirements for totally enclosed lifeboats .....         | 13 |
| 5.14 Additional requirements for lifeboats with air support systems ..... | 13 |
| 5.15 Additional requirements for fire-resistant lifeboats .....           | 14 |
| 6 Test methods .....                                                      | 14 |
| 6.1 Materials .....                                                       | 14 |
| 6.2 Weight .....                                                          | 15 |
| 6.3 Main scale .....                                                      | 15 |
| 6.4 Outfitting parts .....                                                | 15 |
| 6.5 Attachments .....                                                     | 16 |
| 6.6 Overload Performance .....                                            | 16 |
| 6.7 Impact and drop test .....                                            | 16 |
| 6.8 Free-fall lifeboat free fall .....                                    | 17 |
| 6.9 Seat Strength .....                                                   | 17 |
| 6.10 Seat Test .....                                                      | 18 |
| 6.11 Freeboard and stability test of enclosed lifeboat .....              | 18 |

|                                                                                                                                                |    |
|------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 6.12 Release mechanism test .....                                                                                                              | 18 |
| 6.13 Operability .....                                                                                                                         | 19 |
| 6.14 Towing and bow line release .....                                                                                                         | 20 |
| 6.15 Vertical Awning .....                                                                                                                     | 20 |
| 6.16 Watertightness of enclosed lifeboats .....                                                                                                | 21 |
| 6.17 Enclosed lifeboat stretcher test .....                                                                                                    | 21 |
| 6.18 Enclosed lifeboat rainwater collection test .....                                                                                         | 21 |
| 6.19 Additional requirements for totally enclosed lifeboats .....                                                                              | 21 |
| 6.20 Air source for lifeboats with air maintenance systems (totally enclosed lifeboats<br>and fire-resistant totally enclosed lifeboats) ..... | 22 |
| 6.21 Additional test for fire-resistant lifeboats .....                                                                                        | 22 |
| 7 Inspection Rules .....                                                                                                                       | 23 |
| 7.1 Inspection categories .....                                                                                                                | 23 |
| 7.2 Type inspection .....                                                                                                                      | 23 |
| 7.3 Factory Inspection .....                                                                                                                   | 24 |
| 8 Certificates and Logos .....                                                                                                                 | 27 |
| 8.1 Certificate .....                                                                                                                          | 27 |
| 8.2 Sign .....                                                                                                                                 | 27 |
| 41 Reference .....                                                                                                                             | 42 |

## Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document replaces GB/T 14355-2009 "Technical requirements for open lifeboats" and GB/T 20842-2007 "Technical requirements for closed lifeboats". Compared with GB/T 14355-2009 and GB/T 20842-2007, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) Added the classification of lifeboats (see Chapter 4);
- b) The normative reference document GB/T 4543-2023 has integrated and revised the relevant standards for pyrotechnic signals, and changed the color requirements, temperature Requirements, classification and marking examples (see Table 1 and Table A.1, Table 1 of GB/T 14355-2009, Table Table 2);
- c) The weight of lifeboat occupants has been changed (see 5.7.1.2, 6.7.1, 6.19.1,

4.10 of GB/T 14355-2009, GB/T 20842- 2007, 4.3.2);

d) Added the design and performance requirements for lifeboat release mechanisms (see 5.9.1.2,

5.9.1.4 to 5.9.1.6);

e) Added test requirements for lifeboat releasing gear (see 6.12.1.3.3 to 6.12.1.3.5). Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document is proposed and coordinated by the National Technical Committee for Ship Outfitting Standardization (SAC/TC129). This document was drafted by: China Shipbuilding Industry Corporation Comprehensive Technical and Economic Research Institute, Guangzhou Shipyard International Co., Ltd., Jiangsu Jiaoyan Shipbuilding Equipment Co., Ltd., CSIC Oasis Zhenjiang Marine Auxiliary Machinery Co., Ltd., Hunan Jinhang Shipbuilding Co., Ltd., Chongqing Jiaotong University, China Railway Construction Port and Shipping Administration Group Co., Ltd., Taizhou Zhonggang Machinery Equipment Co., Ltd., East China University of Science and Technology Huachang Polymer Co., Ltd., China Shipbuilding Group Co., Ltd. Engineering Management Center, China Shipbuilding Industry Corporation No. 708 Research Institute. The main drafters of this document are. Liu Wei, Li Pingjun, Sun Yonggan, Zeng Hongli, Kuang Wenqi, Ding Yufei, Jiang Yuliang, Feng Liwei, Li Heng, Li Taiping, Ren Cailong, Gong Yingbin, Tan Shilin, Lin Jing, Zhu Jiashuai, Sun Yaogang, Yao Yu, Chai Wei, Wang Yaowu, Liao Chaochang, Lin Changwei, Lü Xiaoping, Liu Shiqiang, Wang Lirui, Wang Jian, and Ji Jing. The previous versions of this document and the documents it replaces are as follows:

---First published in.2007 as GB/T 20842-2007, merging GB 11573-1989, GB/T 14651-1993 and Contents of GB/T 16302-1996;

--- This is the first revision. This revision incorporates the contents of GB/T 14355-2009 (previous versions of GB/T 14355 The publication status is. first published in.1993 and revised for the second time in.2009). Technical requirements for marine lifeboats

## 1 Scope

GB/T 20842-2024 sets the technical requirements for marine lifeboats built in China, and China builds a very large share of the world's lifeboats. A lifeboat is an unusual product: it is stowed unused for years, it must launch and function on the worst day of a ship's life, and almost every requirement in the standard exists because of a specific way that has failed. The document sets the categories of boat, then the requirements in detail: the materials, the design and construction, the weight and principal dimension tolerances, the outfitting and the equipment carried, the strength of the boat including the load cases for launching and for a fall, the seats, the freeboard and stability, the release device, which is the component with the worst historical record and is treated at length, the operability, the

towing and painter release, and the sealing and structure of totally enclosed boats and their air supply and fire protection where fitted. It then covers the test methods, the inspection rules and the marking. For a builder, a shipowner or a survey body working to Chinese requirements, this is the acceptance text. It takes effect on 1 February 2025.

This document specifies the classification, requirements, test methods, inspection rules, certificates and markings, transportation and and storage. This document applies to the design, manufacture and acceptance of lifeboats configured on ships, and lifeboats and rescue boats shall be implemented as a reference.

## 2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 1446 General principles for test methods for properties of fiber reinforced plastics

GB/T 4541 Marine life-saving equipment position indicator lights

GB/T 4543-2023 Life-saving pyrotechnic signals

GB/T 8242.4 Terminology of Hull Equipment Lifesaving Appliances

GB 11946 Marine tempered safety glass

GB/T 34185 Aluminosilicate glass for aviation CB/Z343 Hot-dip galvanizing of marine steel parts Sea(SOLAS)]. International Maritime Organization

## 3 Terms and Definitions

The terms and definitions defined in GB/T 8242.4 and the following apply to this document.

3.1 prototype lifeboat prototypelifeboat The first lifeboat built in a class of its kind that is identical in size, construction and performance.

3.2 prototype tests Tests conducted on prototype lifeboats of new design or those first manufactured by the manufacturer in accordance with the relevant requirements of statutory inspections.

3.3 enclosed lifeboat A rescue boat having a rigid hull and a roof, or a combination of a rigid hull and a partially rigid roof with a foldable roof that can be fixedly attached. Lifeboat.