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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 3033-2025

Replacing GB/T 3033.1-2005, GB/T 3033.2-2005

Ships and marine technology - Identification colours for the content of piping systems

船舶与海上技术 管路系统内含物的识别颜色

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 3033.1-2005 "Identification Colors of Contents in Ship and Offshore Technical Piping Systems - Part 1: Primary Colors".

"Color and Medium" and GB/T 3033.2-2005 "Identification Colors of Contents in Ship and Offshore Technical Piping Systems Part 2: Different Mediums" Additional colors for quality and/or function. Compared with GB/T 3033.1-2005 and GB/T 3033.2-2005, except for

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structural adjustments and editing.

Aside from the sexual modifications, the main technical changes are as follows.

a) The scope has been changed (see Chapter 1, GB/T 3033.1-2005).

b) The term and definition of "additional color" have been added (see 3.2).

c) The content regarding the primary and secondary colors has been changed (see Chapter 4, Chapter 4 of GB/T 3033.1-2005 and GB/T 3033.2-).

Chapter 3 (2005).

d) Change the term "primary color" to "color" (see Chapter 4, GB/T 3033.1-2005).

e) The content of the primary color chromaticity in Table 1 has been modified (see Table 1, GB/T 3033.1-2005), as follows.

---Change the term "primary color and basic identification color name" to "color chromaticity";

---Delete the content "chromaticity coordinate inflection points of permissible similar color regions as determined by CIE Publication 15.2";

---Added information on the brightness factor beta;

---Changed the chromaticity coordinate inflection point of the purple color area;

---Adding a white border to improve visibility;

---The identifier position and content of comment b in Table 1 have been changed.

f) Change the term "pale yellowish-brown" to "yellow," and the English term "YEO" to "YE" (see Table 1, GB/T 3033.1-2005).

Table 1).

g) The content of Table 2 "Primary Color and Medium" has been changed as follows (see Table 2, Table 2 of GB/T 3033.1-2005).

---Change the term "particulate matter (dry and wet) c" corresponding to the medium of "reddish-brown" to "air and sounding pipeline", and delete...

Apart from the description of the comment "c".

h) The content of "Additional colors for different media or functions" has been changed (see Table 3, Table 2 of GB/T 3033.2-2005), as follows.

---Change the term "additional colors for different media and/or functions" to "additional colors for different media or functions";

---Change the term "used oil" to "soiled oil";

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---Change the term "chilled water" to "refrigeration water";

---Change the term "refrigeration agent" to "cooling agent"

---Change the term "low-pressure compressed air (LP)" to "compressed air LP (low pressure)";

---Change the term "High-Pressure Compressed Air (HP)" to "Compressed Air HP (High Pressure)";

---Change the term "mechanical exhaust" to "mechanical ventilation";

---Added waste media, fresh water, fuel oil, seawater, non-flammable gases, oils other than fuel oil, steam, fire extinguishing agents, acids, and alkalis.

Color specifications for flammable media, ventilation systems, and combustible gases;

---The description of comment "a" has been changed;

---Added "Drive Steam" (SR-GN-SR).

i) Change "mark" to "identifier" (see Chapter 5, GB/T 3033.1-2005).

j) An explanation of how to use additional color markings has been added (see 5.1).

k) The content of the "General Provisions" has been changed (see 5.1, 5.1 of GB/T 3033.2-2005).

l) The content of "pipes marked with color bands" has been changed (see 5.2, 5.2 of GB/T 3033.2-2005).

m) The content of "Additional Marks" has been changed (see 5.3, Chapter 6 of GB/T 3033.2-2005).

This document adopts ISO 14726:2008 "Identification colors of contents in marine and offshore technical piping systems".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Marine Ships (SAC/TC12).

1 Scope

This document specifies the primary and secondary color markings for components within a ship's piping system, which can be used to identify piping systems on ships and offshore structures.

The media and/or functions in the system.

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The primary and secondary colors in this document can be used simultaneously in piping system drawings.

This document does not apply to piping systems that transport medical gases, industrial gases, and goods.

This document can also be used for onshore facilities.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

CIE015 Colorimetry

3 Terms and Definitions

The following terms and definitions apply to this document.

main color

Pipeline identification colors used to represent a group of similar media.

Additional color

Used in conjunction with the primary color, it is used to identify pipelines containing specific media.

4 Colors

The colors shown in this document are reference colors. Similar colors and hues can also be used to mark pipes.

Table 1 lists the chromaticity of the primary colors.

Table 2 lists the primary colors and media.

Table 3 lists the additional colors for different media or functions. Each primary color can be used in combination with 11 additional colors. (Table 3 contains...)

There are gaps in the scope for further standardization.

Appendix A provides explanations of some of the media/functions.

Appendix B lists the standard colors and their equivalent color codes in other color systems.

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