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

GB/T 12466-2019

**Terminology of corrosion and protection for ship and marine
engineering**

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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 12466-1990 "Corrosion and Protection Terms for Ships and Ocean Engineering", compared with GB/T 12466-1990

The technical changes are as follows.

--- Modified 68 terms and definitions such as metal corrosion (see 2.1, 2.3~2.13, 2.27~2.29, 2.34, 2.36~2.43, 2.47~)

2.51, 2.53, 2.54, 3.2~3.7, 3.9~3.12, 3.14, 3.18, 3.19, 3.21~3.25, 3.27~3.30, 3.39~3.42, 4.1, 4.2, 4.4, 4.8, 4.14, 4.15, 4.31, 4.34, 4.35, 4.38, 4.40, 1990 version 2.1~2.10, 2.12, 2.13, 2.15~

2.23, 2.25~2.32, 3.1, 3.2, 3.4~3.9, 3.11~3.14, 3.16, 3.20~3.26, 3.28~3.31, 3.36, 3.36, 3.38, 3.39, 4.1, 4.2, 4.4, 4.8, 4.19, 4.20, 4.25~4.27, 4.30, 4.32);

--- Added 47 terms and definitions such as corrosion system (see 2.2, 2.15~2.26, 2.30~2.32, 2.35, 2.44~2.46, 2.55~)

2.58, 3.20, 3.31~3.35, 3.43, 4.23~4.29, 4.32, 4.33, 4.41~4.47);

--- Removed two terms and definitions such as current protection and heavy anti-corrosion coating (see 3.37, 4.23 in 1990).

This standard is proposed and managed by the National Marine Ship Standardization Technical Committee (SAC/TC12).

This standard is mainly drafted by. China Shipbuilding Industry Corporation, the 725th Institute.

1 Scope

This standard defines the terms of metal corrosion and test methods for ships and marine engineering, electrochemical protection and coating (plating) protection.

Its definition.

This standard applies to scientific research, design, production, practice and teaching activities in the field of metal corrosion and protection of ships and marine engineering.

2 Corrosion and test methods

2.1

Metal corrosion corrosion

The process by which metal is depleted and destroyed by the surrounding medium.

Note. This effect is usually electrochemical.

2.2

Corrosion system corrosion system

A system consisting of one or more metals and environmental elements that affect metal corrosion.

2.3

Corrosion protection anti-corrosion; corrosion protection; corrosion prevention

Artificially improve the corrosion system to reduce corrosion damage.

2.4

Corrosion margin corrosion allowance

When designing a metal component, consider the corresponding length or thickness that is increased by the corrosion loss that may occur during the use period.

2.5

Electrochemical corrosion electrochemical corrosion

Metal materials are corroded by electrochemical reactions caused by the formation of microbatteries in a medium such as humid air or an electrolyte solution.

2.6

Marine corrosion marine corrosion

Corrosion of metallic materials and components in the marine environment.

Note. The marine environment usually refers to the ocean atmosphere, splash zone, tidal zone, full immersion zone, sea mud zone and so on.

2.7

Marine atmospheric corrosion marine atmospheric corrosion

Corrosion of metallic materials and components in the sea or coastal atmosphere.

2.8

Splash zone corrosion sprayzonecorrosion

Corrosion of metal materials and components in the state of ocean spray splashing.

Note. The splash zone refers to the waves that are stirred by wind waves, tides, etc., and the areas where the droplets are scattered.

2.9

Tidal area corroding wavezonecorrosion

Corrosion of fixed metal materials and components at sea or shore in the high and low tide levels.