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

GB/T 27997-2026

Replacing GB/T 27997-2011

Shipbuilding gantry cranes

造船门式起重机

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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 27997-2011 "Shipbuilding Gantry Cranes". Compared with GB/T 27997-2011, except for structural adjustments and rewriting... Aside from the logical changes, the main technical changes are as follows:

---The job level range has been changed, and a job level table has been added (see 4.2.1, 2011 version 4.2.1);

---The rated lifting capacity of the entire machine and the upper and lower trolleys has been increased, and a table of rated lifting capacity for double upper trolleys has been added (see 4.2.2);

---The power supply voltage level has been changed (see 5.1.1, 2011 version 5.1.1);

---The main beam deviation requirements and main beam gauge measurement standards have been revised (see 5.4.1.2,

5.7.1.2 in the 2011 version);

---The requirement for flexible hinges has been added (see 5.5.11);

---The description of the crane safety supervision standard has been revised (see 5.7, 5.9.6.6 in the 2011 edition);

---An intelligent system has been added (see 5.8);

---The parallelism tolerance requirement for crane end stops or buffers perpendicular to the longitudinal axis has been removed (see 2011 edition). 5.8.6);

---The range setting range for the distance measuring device has been changed (see 5.10.3.6, version

5.4.3.6 of the 2011 edition);

1 Scope

GB/T 27997-2026 is the Chinese national standard covering the shipyard gantry - the crane that lifts a thousand-tonne hull block over a building dock, with its structure and fatigue design, the multiple hoists working together, the wind loading on a structure that size and the safety of the lift. It replaces GB/T 27997-2011, and it belongs with the crane welding and wind resistance standards GB/T 47748-2026 and GB/T 47722-2026. It was issued on 28 January 2026 and has been in force since 1 August 2026, replacing GB/T 27997-2011. The document is under the responsibility of the China Machinery Industry Federation. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the types and basic parameters, technical requirements, inspection rules and marking, packaging, transportation and storage of shipbuilding gantry cranes. The document describes the corresponding experimental methods. This document applies to gantry cranes with upper and lower trolleys for lifting and turning operations, used in shipyards, marine engineering sites, and other similar locations.

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.

GB/T 1231 High-strength large hexagonal head bolt assemblies for steel structures

GB/T 3811-2008 Crane Design Specification

GB/T 4208-2017 Degrees of protection provided by enclosures (IP code)

GB/T 5226.32 Electrical Safety of Machinery - Electrical Equipment of Machinery - Part

32. Technical Conditions for Lifting Machinery

GB/T 5905.1 Crane Inspection and Testing Standards Part

5 Bridge and Gantry Cranes

GB/T 8918 Steel Wire Ropes for Important Purposes

GB/T 8923.1-2011 Visual assessment of surface cleanliness of steel surfaces before coating - Part

1.Uncoated steel surfaces Rust level and treatment level of steel surface and steel surface after complete removal of original coating.

GB/T 9286-2021 Paints and varnishes - Cross-cut test

GB/T 10051 (All Parts) Lifting Hooks

GB/T 10095.1-2022 Cylindrical gears - ISO tooth surface tolerance classification system - Part

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