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

**GB/T 19683-2025**

Replacing GB/T 19683-2005

**Rail mounted container gantry cranes**

轨道式集装箱门式起重机

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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 19683-2005 "Rail-Mounted Container Gantry Cranes". Compared with GB/T 19683-2005, except for the structure... Aside from adjustments and editorial changes, the main technical changes are as follows:

- a) The scope of application for cranes has been changed (see Chapter 1, Chapter 1 of the.2005 edition);
- b) Added the terms "rail-mounted container gantry crane", "span", "effective cantilever extension", "main beam camber", and "main beam deflection". "Static stiffness" and its definition (see Chapter 3);
- c) Added categories (see 4.1);
- d) The main technical parameters of the crane have been changed (see 4.2, 3.3.4 of the.2005 edition);
- e) The working environment conditions have been changed (see 5.1, 3.3 in the.2005 edition);
- f) The basic requirements for the design and allowable deviations of the main technical parameters of the crane have been changed (see 5.2.1, 5.2.9, Section 3 of the.2005 edition). Chapter Suspension Section, 3.4);
- g) The basic requirements for crane testing have been added (see 5.2.2~5.2.8);
- h) The technical requirements for materials have been changed (see 5.3, 3.5 of the.2005 edition);

i) Technical requirements for static stiffness, horizontal bending of the main beam, camber of the main beam, and lifting lugs have been added (see 5.4.1~5.4.3, 5.4.7);

## 1 Scope

GB/T 19683-2025 is the Chinese national standard covering the RMG in a container yard - its span, lift and speeds, the structure and the wheel loads on the rails, the anti-sway and the automation, and the storm anchoring that matters in a typhoon port. It replaces GB/T 19683-2005, under the Ministry of Transport. It was issued on 2 December 2025 and has been in force since 1 July 2026, replacing GB/T 19683-2005. The document is under the responsibility of the Ministry of Transport. This page is published from the official record of the 2025 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 classification, main technical parameters, technical requirements, inspection rules, marking, and packaging of rail-mounted container gantry cranes. The requirements for transportation and storage are described, along with the corresponding test methods. This document applies to the design and manufacture of container cranes for loading and unloading 20ft and larger containers.

## 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 699-2015 High-quality carbon structural steel

GB/T 700-2006 Carbon Structural Steel

GB/T 709-2019 Dimensions, shape, weight and permissible deviations of hot-rolled steel plates and strips

GB/T 755 Ratings and Performance of Rotating Electrical Machines

GB/T 985.1 Recommended bevels for gas welding, shielded metal arc welding, gas shielded welding and high energy beam welding

GB/T 985.2 Recommended bevel for submerged arc welding

GB/T 1184-1996 Geometric Tolerances - Tolerances Without Specified Values

GB/T 1228 High-strength large hexagonal head bolts for steel structures

GB/T 1229 High-strength large hexagonal nuts for steel structures

GB/T 1230 High-strength washers for steel structures

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

GB/T 1591-2018 Low-alloy high-strength structural steel

GB/T 1800.1-2020 Product Geometric Specification (GPS) - Linear Dimensional Tolerances  
- ISO Notation System - Part

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