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

GB/T 15361-2009

Replacing GB/T 15361-1994

Quayside container cranes

岸边集装箱起重机

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Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard replaces GB/T 15361-1994 "shore container crane technical conditions" and GB/T 15360-1994 "quayside container Crane test methods ", the original content GB/T 15360 into GB/T 15361 in. The main technical differences between standard compared with GB/T 15361-1994 as follows:

- Modify pulley rope out of declination (see 3.6.1.5);
 - Modify the brake band (or brake shoe) and the brake wheel (or discs) the contact area should not be less than the percentage of the total area. (See 3.6.2.8);
 - Removed cart track requirements (see 3.6.5);
 - For "hydraulic systems" content has been modified and supplemented (see 3.6.6);
 - On the "Painting and appearance" has been modified and perfected (see 3.8);
 - To increase and modify the content to simplify the test methods (see Chapter 4).
- Appendix A of this standard is an informative annex. The standard proposed by the Ministry of Transport of the People's Republic of China. This standard by the Ministry of Port Machinery standard focal point. This standard was drafted. Shanghai Zhenhua Port Machinery (Group) Co., Ltd., Shanghai Port Machinery Heavy Industry Co., Ltd., the Ministry of Water Transport Section Graduate School. The main drafters of this standard. Ding Min, Shang Weijun, mountain Jianguo, Liu Jinchuan, Yang Qin, to co-workers. This standard replaces the standards previously issued as follows:

- GB/T 15360-1994;
- GB/T 15361-1994. Shore container cranes

1 Scope

China's national standard for quayside container cranes - the ship-to-shore gantries that load and discharge container vessels, the largest cranes built in quantity anywhere, and the machines on which the productivity of a container port is directly measured. China builds

the great majority of the world's supply. It specifies the technical requirements, the test methods, the inspection rules, and the marking and transport of quayside container cranes. The machine is defined by the ship it has to reach over. Container vessels have grown continuously, and the crane's outreach, its lift height and its back reach are set by the largest vessel the terminal expects to serve - which is why these cranes are built with a boom that raises to clear a ship's superstructure and why the whole structure is as large as it is. The requirements cover the structure and the portal, the boom and its hoisting arrangement, the hoisting, trolley and gantry travel mechanisms and their brakes, the spreader with its twistlocks and its telescoping between container lengths, the anti-sway system, the electrical supply along the quay, the operator's cab which travels with the trolley high above the ship, and the machinery house. Two groups of requirements are peculiar to the type. The wind provisions: the crane stands on an exposed quay, must be secured against storm winds with tie-downs and stowage pins, and must have a wind speed alarm - a quay crane blown along its rail into the next crane is one of the classic port catastrophes. And the collision and reach limits, since the crane works with a ship on one side and other cranes on the same rail, and the anti-collision arrangements are what keep them apart. Issued on 4 June 2009 and in force since 1 January 2010, it replaces GB/T 15361-1994.

This standard specifies the quayside container crane (hereinafter referred to as the crane) technical requirements, test methods, inspection rules, marks and transportation Content and other aspects. This standard applies to shore handling in line with 20ft and 40ft international container crane GB/T 1413's.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 699 high-quality carbon structural steel

GB/T 700 carbon structural steel (GB/T 700-2006, ISO 630.1995, NEQ)

GB/T 755 rotary motor fixed and performance

GB/T 985.1 gas welding, arc welding, gas welding and beam welding Recommended groove (GB/T 985.1-2008,

ISO 9692-1.2003, welding and allied processes recommended welding groove - Part 1. Steel SMAW, GMAW Welding, gas welding, TIG welding and high-energy beam welding, MOD)

GB/T 985.2 SAW recommended groove (GB/T 985.2-2008,

ISO 9692-2.2003, welding and allied processes recommended Welding Groove Part 2. Submerged arc welding of steel, MOD)

GB/T 1182 General shape and position tolerances, definitions, symbols and drawings showing the method (GB/T 1182-1996, eqv ISO 1101. 96)

GB/T 1228 high strength steel with large hexagon head bolts (GB/T 1228-2006, ISO 7412. 1984, NEQ)

GB/T 1229 steel with high strength large hexagon nuts (GB/T 1229-2006, ISO 4775. 1984, NEQ)

GB/T 1230 high-strength steel washer (GB/T 1230-2006, ISO 7416. 1984, NEQ)

GB/T 1231 Steel hexagon head bolts, hexagon nuts, plain washers for high-strength

GB/T 1413 Series 1 freight containers - Classification, dimensions and ratings (GB/T 1413-1998, idt ISO 668.1995)