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

GB/T 29560-2013

Portal slewing cranes

门座起重机

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. The standard proposed by China Machinery Industry Federation. This standard by the National Standardization Technical Committee crane (SAC/TC227) centralized. This standard is drafted by: Shanghai Zhenhua Heavy Industry (Group) Co., Ltd., Beijing Institute of hoisting and conveying machinery design, from the State Heavy transport machinery for Quality Supervision and Inspection Center. Participated in the drafting of this standard. Dalian Huarui Heavy Industry Group Co., Ltd., Dalian Heavy Industries Co., Ltd. Brilliant, Jiang Su Huacheng Heavy Industries have Ltd., Jiangsu Hong Kong Yi Heavy Industry Co., Qingdao Port (Group) Co., Ltd. Hong Kong Factory, Nantong COSCO Heavy Industries Co., Ltd., Tianjin, Hong Kong Limited copies. The main drafters of this standard. Yang Fan, Lin Weiguo, Zhou Qi, Cui Yuan, Yu Jinghua, Liu Yuanli, Minghai, Xie Chong, Huzhuo Hui, Xu Dong, Shen Xiaoqiang, Huang Tao, Zhang Choi, Liu meeting, easy to be strong. Gantry Crane

1 Scope

China's national standard for portal slewing cranes. It specifies the terms and definitions, the type classification and basic parameters, the technical requirements, the test methods, the inspection rules and the marking, packaging, transport and storage of portal slewing cranes of rated capacity from 3.2 t to 500 t. A portal slewing crane is the crane on the quayside of a general cargo port: a slewing jib crane mounted on a portal frame that straddles rail tracks or a roadway, so that trains and trucks pass beneath it while it works. That configuration is what the machine is for. A quay is a strip of expensive land between the ship and everything else, and a crane that occupies it exclusively blocks the transport that has to reach the ship. The portal lifts the whole machine above that traffic, and the slewing jib reaches over the ship on one side and the storage or the wagons on the other.

Unlike a container crane, it handles anything: grabs for bulk, hooks for general cargo and project loads, spreaders, magnets. The standard has to cover a machine that is simultaneously a structure, a set of mechanisms and a travelling vehicle, at capacities spanning two orders of magnitude. The structural requirements cover the portal, the slewing platform, the jib system and the luffing mechanism - the last being distinctive, because a portal crane is level-luffing: the jib geometry is arranged so that the hook moves horizontally as the jib is raised and lowered, which means the load does not have to be lifted and lowered again on every radius change. The mechanism requirements cover the hoisting, slewing, luffing and travelling drives, and the safety requirements cover the load limiters, the anemometer and the storm anchoring that a tall structure on a windy quay needs. Issued on 19 July 2013 and in force since 1 January 2014.

This standard specifies the nominal weight of 3.2t ~ 500t gantry crane (hereinafter referred to as "Crane") terms and definitions, types Classification and basic parameters, technical requirements, test methods, inspection rules, marking, packaging, transportation and storage. This standard applies to the following places in the work of portal cranes.

a) Port of groceries, bulk cargo, containers, equipment and other cargo-handling port gantry crane;

b) in the shipyards and repair docks, when shipbuilding, segmental structure and mechanical and electrical equipment installation and other operations with a shipyard portal crane;

c) Hydraulic and Electric Engineering concrete lifting, pouring, lifting hydraulic metal structure and thermal power engineering for mechanical and electrical equipment installation Industry Water & Electric gantry crane used. For the nominal weight of more than 500t gantry crane gantry crane and other similar establishments, reference may be used. This standard does not apply to the crane working in the following environments.

--- Flammable, combustible dust, flammable gases and corrosive gases (except salt spray) environment;

--- Nuclear radiation, toxic gas environment; Environment

--- lifting the molten or hot metal.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. GB/T 324 Weld notation

GB 755-2008 rotating motor fixed and performance

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

GB/T 985.2 SAW recommended groove

GB/T 1184 shape and position tolerances without individual tolerance value

GB/T 1228 high strength steel with large hexagon head bolts

GB/T 1229 steel with high strength large hexagon nuts

GB/T 1230 high-strength steel washers

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 1800.2 Geometrical product specifications (GPS) limits and fits - Part 2. Standard tolerance grades and holes and shafts limit bias Difference list (GPS) with limits and tolerances and fits select

GB/T 1801 Geometrical product specifications

GB/T 1804 General tolerances Tolerances for linear and angular dimensions without individual tolerance GB 2893 Safety colors

GB/T 3220 container spreader