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

GB/T 14736-2009

Replacing GB 14736-1993

**Specification for the operation of the hanging ring used in the
port for cargo handling**

港口装卸用吊环使用技术条件

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Foreword

This standard replaces GB 14736-1993 "Technical conditions for the use of harness for port loading and unloading". This standard compared with GB 14736-1993, the main differences are as follows:

- The strength of the rings is changed from the original four grades to M (4), S (6), T (8) and three intensities (Eg 5.1) for the average stress value under the rated working load under the load test load;
- The requirements for the material of the rings increase the different requirements for the phosphorus and sulfur components of the three strength grades (see 7.1.1);
- process requirements to increase the ring manufacturing can be used for the overall hot forging process and the ring after the heat treatment on the surface of the ring to the hardness (See 7.2.2 and 7.2.7);
- Ring welding according to GB/T 5118 use bar material to adapt to the electrode (see 7.2.3);
- Revise the strength requirements of the rings, increasing the average of all rings whose strength should meet the rated operating ratings under the corresponding strength level Stress, testability under the load of the average stress and the minimum breaking force under the test load under the average stress requirements (see 7.3.1);
- Revise the appearance requirements, increase the lifting ring should not be longitudinal bending and local twisting requirements, increasing the weld at the ring shape in any section Shall not be less than the nominal diameter of the ring material (see 7.4.1 and 7.4.2); In the test method, the test load table under different rated working loads is added (see 8.2.1); - increase the inspection report and quality certificate (see 8.3) of the strength test prior to use of the rings; - increase the annulus storage requirements (see 9.2);
- Added inspection requirements during use of the rings (see

10.12 and 10.13). Appendix B to this standard is a normative appendix, Appendix A is an informative appendix. This standard is proposed by the Ministry of Transport of the People's Republic of China. The standard by the Ministry of Transport port machine standard focal point. The drafting unit of this standard. Shanghai International Port (Group) Co., Ltd. The main drafters of this standard. Bao Sifan, Wen Jun, Xu Delin, Ge Zhongxiong, Gao Yongxiang, Dong Tinglong. This standard replaced the previous version of the standard release.

--- GB 14736-1993. Technical conditions for use of harness for port loading and unloading

1 Scope

GB/T 14736-2009 is the Chinese national standard on specification for the operation of the hanging ring used in the port for cargo handling, in the field of services and company organization. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 30 September 2009 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 November 2009. Classification: ICS 03.220.40, CCS R46. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the structure type, strength grade, load grade, technical requirement, test method of the port lifting ring (hereinafter referred to as the lifting ring) Methods, marking and storage, the use of requirements, inspection and scrapping the use of technical conditions. This standard applies to the port with the use of rigging components of the cross section of the circular welding rings, but also for circular cross-section hot forging rings, not Applicable to non-circular cross-section of the rings and casting rings.

2 Normative reference documents

The terms of the following documents are hereby incorporated by reference into this standard. Whichever is the date of the reference file, which is followed by all (Excluding corrigenda) or revisions do not apply to this standard, however, encourage the parties to reach an agreement under this standard Whether you can use the latest version of these files. For undated references, the latest edition applies to this standard.

GB/T 699 high quality carbon structural steel

GB/T 985.1 Recommended welding of gas welding, electrode arc welding, gas shielded welding and high energy beam welding (GB/T 985.1-2008,

ISO 9692-1..2003, Welding and allied processes-Recommendations for joint preparation-Part 1. Manual metal arc welding, gas-shield arc welding, gas welding, TIG welding and beam welding of steels, MOD)

GB/T 1591 low alloy high strength structural steel

GB/T 3077 alloy structural steel (

GB/T 3077-1999, neq DIN EN 10083-1..1991)

GB/T 5118 low alloy steel electrode (

GB/T 5118-1995, neq ANSI/AWS A5.5. 1981) Technical specification for the use of sling for port loading and unloading GB/T

3 Terms and definitions

The following terms and definitions apply to this standard.

3.1 Port assembly with harness assembly, divided into main ring and connecting ring.

3.2 The upper part of the lifting rig is connected to the spreader on the crane.

3.3 Lifting rigging in the connection accessories. For the main ring, chain, cable, hook and other components between the connection. For chain sling, according to the connecting ring In the chain slings in the position is divided into. the middle of the main ring, the middle ring, connecting ring.

3.4 Lifting rigging in the connection accessories. A connecting ring fitted with parts.

3.5 Under vertical conditions, the maximum allowable load of a single ring.