

JB

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

JB/T 1306-2008

Replacing JB/T 1306-1994

Electric single girder cranes

电动单梁起重机

(English Translation)

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1 Scope

This standard specifies the type and basic parameters, technical requirements, test methods, inspection rules, marking, packaging, transportation and storage of electric single girder cranes (hereinafter referred to as cranes).

This standard applies to the general purpose cranes using the electric hoist as the lifting mechanism; AND the cranes of other types or special purposes may also make reference to this standard.

This standard does not apply to cranes operating under the following environmental conditions:

- Explosive gas, inflammable dust and corrosive gas environment;
- Lifting of molten metal, inflammable and explosive materials.

2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For the dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard;

however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable.

For undated references, the latest edition of the referenced document applies.

GB/T 191 Packaging - Pictorial marking for handling of goods (GB/T 191-2000, eqv ISO 780:1997)

GB 755-2000 Rotating electric machines - Rating and performance (idt IEC 60034-1:1996)

GB/T 3323 Radiographic examination of fusion welded joints in metallic materials (GB/T 3323-2005, EN 1435:1997, MOD)

GB/T 3811 Design rules for cranes

GB/T 5905 Cranes - Test code and procedures (GB/T 5905 1986, idt ISO 4310:1981)

GB 6067 Safety rules for lifting appliances

GB/T 8923 Rust grades and preparation of steel surfaces before application of paints and related products (GB/T 8923-1988, eqv ISO 8501-1:1988)

GB/T 9286 Paint and varnishes - Cross cut test for films (GB/T 9286-1998, eqv ISO 2409:1992)

GB/T 10183 Cranes - Overhead travelling cranes and portal bridge cranes -

Tolerances for cranes manufacture and tracks laying (GB/T 1013-2005, ISO 8306:1985, MOD)

GB/T 13306 Plate

GB/T 13384 General specifications for packing of mechanical and electric product

GB 14048.1-2006 Low-voltage switchgear and controlgear - Part 1: General rules (IEC 60947-1:2001, MOD)

JB/T 4315 Crane electric control equipment

JB/T 5317 Electric chain hoist

JB/T 6391.1 Conductor systems - Part 1: Insulated conductor systems

JB/T 8110.2 Rubber buffer for crane

JB/T 8437 Wireless remote control unit for hoisting machinery

JB/T 9008.1 Electric wire rope hoists - Part 1: Type and basic parameters, specification

JB/T 10559 Non-destructive testing of lifting appliances - Ultrasonic testing of steel welds

JB/T 10833 The polyurethane buffer for cranes

3.1.1

Based on the position and running mode of the hoisting mechanism, it is divided into:

4.2.1

Cranes shall be designed and manufactured in accordance with the relevant provisions of GB/T 3811 and this standard.

4.2.2

The electric hoist and the hoist running trolley as equipped for the crane shall comply with the requirements of JB/T 9008.1 and JB/T 5317.

4.3.1

It shall, based on the use level and load status level of the crane, reasonably select the cranes of corresponding working levels (SEE Table 1).

4.3.2

When the crane is subjected to static load test, it shall be able to bear the test load of 1.25 times rated capacity. It shall conduct visual inspection after the test, AND each stress bearing steel structural members shall be free from cracks or permanent deformation or paint peeling; AND all connections shall be free from loose phenomenon. The actual girder camber shall not be less than

0.8S/1000.

4.3.3

The static rigidity of the crane is defined as below: when the electric hoist is located at the mid span of the main girder, the relationship between the vertical net deflection f as generated by the rated capacity and the self-weight of the electric hoist AND the crane span S is recommended as follows:

- As for the cranes with low positioning accuracy OR the cranes with stepless speed control system OR the cranes with low lifting speeds and low accelerations to achieve acceptable positioning accuracy: ;
- As for the cranes with a simple control system to achieve medium positioning accuracy: ;
- As for the cranes having high positioning accuracy requirements: required for high positioning accuracy: ;
- When the user does not put forward to the speed regulating and positioning accuracy requirements, the manufacturer may supply products or provide inspection and acceptance based on the vertical net deflection of .

4.4.1.5

After the power is turned on, it shall ensure that the action direction of crane and electric hoist matches with the indications on the button.

4.4.1.6

The crane insulation resistance at room temperature shall not be less than 1Mohm.