



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

**GB 6067.5-2014**

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**Safety rules for lifting appliances - Part 5: Bridge and gantry  
cranes**

起重机械安全规程 第5部分：桥式和门式起重机

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## Foreword

This part of the 3.2,3.4,3.6.1 ~ 3.6.4,3.6.6,3.6.7,3.7.1 ~ 3.7.4,3.7.6 ~ 3.7.10,4.2,4.3.1.2 ~ 4.3.1.5, 4.3.2,4.3.3.1,4.3.3.3,4.3.4,4.3.5.1 4.3.5.5,4.3.5.7 ~ ~ 4.3.5.9,4.3.6,4.3.7,4.3.8.1,6.1.2,6.2. 1,6.2.2, 6.2.3.1,6.2.4 ~ 6.2.9,6.3,7.2,7.3b), 7.4, Chapter 8, Chapter 9,

10.2 mandatory provisions; Where reference GB 6067.1 bar Models, according to the provisions of GB 6067.1; the other provisions of the recommended provisions. GB 6067 "crane safety regulations," consists of the following seven components.

--- Part 1. General;

--- Part 2. Mobile cranes;

--- Part 3. Tower cranes;

--- Part 4. jib cranes;

--- Part 5. Bridge and gantry crane;

--- Part 6. cable cranes;

--- Part 7. small light lifting equipment. This section GB 6067 "crane safety regulations" in Section 5. This section drafted in accordance with GB/T 1.1-2009 given rules. This part is proposed by China Machinery Industry Federation. This part of the National Standardization Technical Committee crane (SAC/TC227) centralized. This section is responsible for drafting. Dalian Huarui Heavy Industry Group Co., Ltd., Beijing Materials Handling Design and Research Institute, National Crane Transport machinery for Quality Supervision and Inspection Center. Participated in the drafting of this section. Shanghai SCCW Ltd., Dalian Heavy Industries Co., Ltd. Brilliant, Demag Cranes & Components (on Sea) Limited, Konecranes (Shanghai) Co., Ltd., Guangzhou Lifting Machinery Co., Weihua Group Co., Ltd., Nanjing Hoisting Machinery Plant Co., Shanqi Heavy Machinery Co., Ltd., Zhejiang public Qingqi Heavy Machinery Manufacturing Co., Ltd., as Wang Heavy Industries Co. Shares The company, a limited liability company Chongqing crane factory, Sany Group Co., Ltd., Jiangxi Hua Wu Brake Co., Ltd., Yichang City micro electronic Equipment Co., Ltd. The main drafters of this section. Wu Gang, Wang Shunting, Li Xiuling, Zhao Chunhui, Zhang Yan whole, Chenrui Ming, Zhao Yi, Zhang Yi, Liu Yuanli shall be mine, Gao Ning, Kwong Jian, Sun Mingyao, Lee Hong, Wang Fengshun, Ruanshu Feng, Li Hongwei, Luo Zhen Li, Zhang Han, Nie Chunhua, high Yu Min. Crane safety regulations Part 5. Bridge and gantry cranes

## 1 Scope

GB 6067.5-2014 is the Chinese safety code for bridge and gantry cranes, the part of the lifting appliance series covering the overhead cranes that run on rails in a workshop or a yard. It is a mandatory standard and it governs a machine that is both ubiquitous in Chinese industry and responsible for a steady toll of serious accidents, most of them from load fall, from collision at the end of travel, or from a person on the crane bridge when it moves. The standard sets the safety requirements across the whole life of the machine: on the design and the structure, on the mechanisms and the brakes, on the ropes, hooks and lifting attachments, on the electrical equipment and the earthing, on the limiting and indicating devices, the overload protection, the travel and hoist limits and the anti-collision devices, on the access, the walkways and the cab, on the installation and commissioning, on the operation, the inspection and the maintenance, and on the marking and the documentation. For a crane builder, a works operating cranes or an inspection body in China, this is the mandatory text.

GB 6067 of the provisions of this part of the bridge and gantry cranes (hereinafter referred to as the crane) the design, manufacture, installation, alteration, repair, make By check, the essential safety requirements and other aspects of retirement. This section applies to the bridge crane GB/T 20776 identified. As special problems do not involve basic security, this section is also available for other lifting machines by reference.

## 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 1591-2008 High strength low alloy structural steel

GB 2970-2004 thick steel plate ultrasonic inspection

GB/T 3323 metal fusion welded joints radiography

GB/T 3805-2008 extra low voltage (ELV) limits

GB/T 3811-2008 crane design specifications

GB 3836.1 explosive atmospheres - Part 1. General requirements for equipment

GB 3836.15 Electrical apparatus for explosive gas atmospheres - Part 15. Electrical installations in hazardous locations (except coal mines)

GB 6067.1-2010 crane safety regulations - Part 1. General

GB 8918 important uses rope

GB 12476.1 combustible dust electrical equipment - Part 1. enclosures and surface temperature limitation protection of electrical equipment Technical requirements for electrical equipment. Section 1

GB 12476.2 combustible dust electrical equipment - Part 2. Selection and installation

GB 15052 Safety signs and hazard pictorials - General symbols

GB/T 20303.5 crane cab - Part 5. Bridge and gantry cranes

## 3 Metal structure

3.1 Basic requirements Shall comply with the relevant provisions of GB 6067.1-2010 in Chapter 3.

3.2 Metal Structure When lower flange bearing structure as a crane trolley track, the thickness of the flange thickness to 10% of design value, if not repaired, should scrapped.

3.3 Materials Crane bearing structural members, steel selection should meet the

requirements GB/T 3811-2008 in 5.3.

3.4 channel platform Measures should be taken to prevent water crane, channels and platforms

3.4.1 outdoor work.

3.4.2 Channel platform tread should have anti-slip properties.

3.5 LADDER When inclined ladder height greater than 10m, every 5m ~ 10m platform should be set to rest.

### **3.6 Thermal radiation device and Firewood**

3.6.1 The bottom of the cab crane lifting molten metal or hot objects should be fortified direct heat radiation heat radiation plate.

3.6.2 crane lifting molten metal or hot items (except as hereinafter flange crane orbit) directly affected by the radiant heat of the primary Beams, lifting beams should be located at the bottom of the heat radiation device. , Lifting the molten metal or hot items as cranes

3.6.3 The following flange orbits, radiation heat should be located at the bottom of the lifting trolley Means.

3.6.4 heat radiating plate should be provided with a reliable fall protection measures.

3.6.5 directly affected by the fire crane (such as feed mills across the casting crane), should be in the direct flame burning main structural parts of the anti-setting Fire board.

3.6.6 crane lifting molten metal or hot items directly affected by the radiant heat of the wiring portion channels and platforms should be set insulation.

3.6.7 crane lifting molten metal or hot items, respond directly affected by the radiant heat of the electrical equipment to take protective measures.

### **3.7 Cab**

3.7.1 cab shall comply with GB/T 20303.5 of.

3.7.2 shall be so arranged cab driver easy to operate, should ensure that the driver in the service area for the spreader or cab to go for a row direction, Handle all operations are within the scope of control of the driver.

3.7.3 cab arrangement should ensure that the spreader in the service area can be seen anywhere in the driver. If the driver can not see at a particular When the spreader design position, supplementary measures should be taken to allow the driver to see or understand the indirect spreader position.

3.7.4 cab shall be provided with locks, fire extinguishers and bell (or alarm), set up the