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

GB/T 6067.5-2014

Replacing GB/T 18224-2008, GB/T 19912-2005, GB/T 21920-2008 (partially)

**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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Quarantine;
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Foreword

SAC/TC 227 is in charge of this English translation. In case of any doubt about the contents of the English translation, the Chinese original shall be considered authoritative.

GB/T 6067 consists of seven parts under the general title Safety rules for lifting appliances: Part 1: General; Part 2: Mobile cranes; Part 3: Tower cranes; Part 4: Jib cranes; Part 5: Bridge and gantry cranes; Part 6: Cable cranes; and Part 7: Series lifting equipment. This document is Part 5.

The part is drafted in accordance with the rules given in GB/T 1.1-2009 Directives for standardization - Part 1: Structure and drafting of standards. It was proposed by China Machinery Industry Federation and prepared by SAC/TC 227, the National Technical Committee on Lifting Appliances of the Standardization Administration of China.

It was issued on 3 September 2014 by the General Administration of Quality Supervision, Inspection and Quarantine together with the Standardization Administration, and has been in force since 1 February 2015. The cover records that it partially replaces GB/T 18224-2008, GB/T 19912-2005 and GB/T 21920-2008.

1 Scope

The bridge and gantry crane part of GB/T 6067, China's national safety code for lifting appliances. Bridge-type cranes are the overhead travelling cranes that run on rails along the walls of a workshop and the gantry cranes that straddle a yard or a quay on legs, and they are the machines that lift the heaviest loads over the heads of the most people. That combination is why the safety requirements for them are written nationally rather than left to each manufacturer: a failure in the girder, the hoisting rope, the brake or the travel limit is not a breakdown but a dropped load. Part 5 sets the basic safety requirements for the whole life of these cranes - design, manufacture, installation, alteration, repair, operation, inspection and discard - and it is the discard criteria that make it as useful to an owner as to a builder, since it states when a worn component must be taken out of service rather than

repaired. The general requirements common to all lifting appliances stay in Part 1, GB/T 6067.1-2010, and this part refers back to them clause by clause, adding what is specific to bridge-type cranes: the metal structures, the mechanisms and their brakes, the ropes, sheaves and drums, the electrical equipment including installations in explosive and combustible dust atmospheres, the cabin, the safety devices and the signs. It applies to the bridge-type cranes defined in GB/T 20776, and may also be referenced for other lifting appliances where no special basic safety issue arises. GB/T 6067 as a whole runs to seven parts, covering general rules, mobile cranes, tower cranes, jib cranes, bridge and gantry cranes, cable cranes and series lifting equipment.

This part of GB/T 6067 specifies the basic safety requirements for the design, manufacture, installation, alteration, repair, operation, inspection and discard of bridge and gantry cranes, referred to throughout as cranes.

It is applicable to the bridge-type cranes defined in GB/T 20776.

It may also be referenced for other lifting appliances if there is no special issue related to basic safety.

2 Normative references

The referenced documents listed in this clause are indispensable for the application of the document. For dated references only the edition cited applies; for undated references the latest edition, including any amendment, applies.

Twenty-two documents are cited. From the GB series: the structural steel standards GB/T 1591-2008 and GB/T 20878; the weld examination standards GB/T 2970-2004 and GB/T 3323; the extra-low voltage limits GB/T 3805-2008; the crane design rules GB/T 3811-2008; the explosive atmosphere standards GB 3836.1 and GB 3836.15 and the combustible dust standards GB 12476.1 and GB 12476.2; the general part GB/T 6067.1-2010; the wire rope standard GB/T 8918; the safety sign standard GB/T 15052; the crane cabin standard GB/T 20303.5; the classification standard GB/T 20776; and the sheave standard GB/T 27546. From the JB series: the brake standards JB/T 6406 and JB/T 7020-2006; the buffer standards JB/T 8110.2 and JB/T 10833; the wire rope hoist standard JB/T 9008 in all its parts; and the ultrasonic weld testing standard JB/T 10559. The full titles are listed among the normative references of this record.

3.1 Basic requirement

The basic requirement shall be as specified in GB/T 6067.1-2010, Clause 3.

3.2 Metal structures

Where the bottom flange of a load-bearing structural member serves as the trolley rail and the flange thickness is reduced by 10 per cent of its designed value, the structural member

shall be discarded if it is beyond repair.

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