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

GB/T 26473-2021

Cranes - Safety requirements for loader cranes

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents"

drafted.

This document replaces GB/T 26473-2011 "Safety Requirements for Cranes and Truck-mounted Cranes", compared with GB/T 26473-2011, except

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

a) "Hazards covered by this document" are revised (see Chapter 1, Chapter 1 of the.2011 edition);

b) Modified the truck-mounted crane, log crane, manual telescopic boom, high-level console, hazardous area, balance valve, rated lifting capacity,

- Fixed lifting capacity indicator, rated lifting capacity limiter, set terms and definitions, deleted terms and definitions of limiter, added

Scrap recycling crane, articulated movement, boom, crane inclination, fixed spreader, total lifting capacity, hoisting mechanism, maximum working mass,

Terms and Definitions of Net Lifting Moment, Dividable Spreader, Working Range, Payload, Swing (see 3.1, 3.1 of the.2011 edition);

c) Added "Keywords of jib and related accessories (see 3.2)";

d) Deleted "Major Hazardous Items" (see Chapter 4 of the.2011 edition);

e) Modified "Structural Calculation" (see 4.2, 5.2 of the.2011 edition);

f) Modified "Stress Analysis" (see 4.3, 5.3 of the.2011 edition);

g) Modified "Arrangement of Truck-mounted Cranes" (see 4.4, 5.4 of the.2011 edition);

h) Modified "Hydraulic system" (see 4.5, 5.5 of the.2011 edition);

- i) Modified "limiters and indicators" (see 4.6, 5.6 of the.2011 edition);
- j) Modified "Control Panel" (see 4.8, 5.8 of the.2011 edition);
- k) revised "installation" (see 4.10, 5.10 of the.2011 edition);
- l) Revised "Verification method of safety requirements" (see Table 4, Table 1 of the.2011 edition);
- m) Modified "Dynamic Load Test" (see 5.2.4, 6.2.4 of the.2011 edition);
- n) Added "Test load, test conditions and stability test criteria" (see 5.2.5.2, 5.2.5.3 and 5.2.5.4);
- o) Modified the "use information" (see Chapter 6, Chapter 7 of the.2011 edition);
- p) Modified "Structural form and installation example of crane" (see Appendix B, Appendix B of the.2011 edition);
- q) Modified the "Explanation" (see Appendix C, Appendix C of the.2011 edition);
- r) Modified "Example of motion to be prevented when overloaded" (see Appendix D, Appendix D of the.2011 edition);
- s) Modified "Additional requirements for wireless controllers and control systems" (see Appendix E, Appendix E of the.2011 edition);
- t) Modified "Vertically arranged ground control system" (see Appendix G, Appendix G of the.2011 edition);
- u) Modified "High Seat and Remote Control Control System" (see Appendix I, Appendix I of the.2011 edition);
- v) Modified "The crane operating room installed on the chassis with a lifting torque of 250kN m and below" (see Appendix J,.2011 edition)
of Appendix J);
- w) Added "Handrails and handles of high-level consoles, ladders and steps" (see Appendix L);
- x) Modified "Installation of truck mounted cranes" (see Appendix M, Appendix L of the.2011 edition);
- y) Added "Noise-related user information" (see Appendix N);
- z) Added "Stress History Parameters (s) and Stress History Levels (S)" (see Appendix O).

This document uses the translation method equivalent to ISO 15442.2012 "Safety Requirements for Cranes and Truck-mounted Cranes".

See Appendix NA for Chinese documents that have a consistent correspondence with the

international documents normatively cited in this document.

This document has undergone minimal editorial changes.

--- Incorporated the amendments to ISO 15442.2012/Amd.1.2015, the clauses involved in these amendments have been adopted on the outside

The vertical double line (||) in the margin position is marked;

--- Added informative appendix NA;

--- Corrected typo.

* "3.1.32" was changed to "3.1.31", and then the serial numbers were extended in turn;

* The content in formula (3) is changed to "dia. $3=1-\Delta m \times 1 \beta / m$ ";

* Changed the content of the header in "Table 3";

* In the footnote b of Table 3, the content of "lines 3 and 4" is changed to "slewing drive acceleration";

* In the first paragraph of 4.5.6.1, "3l/min" was changed to "3L/min";

* "4.6.10.1, 4.6.11" changed to "4.6.11, 4.6.12";

* All "G'b" in 5.2.5.2 are changed to "G'b";

* In 6.2.2.1 g) "see Appendix K" is changed to "see Appendix L";

* In 6.2.2.1 h) "according to Chapter 6" is replaced by "according to Chapter 5";

* The last paragraph of Appendix C "see 4.6.8" is changed to "see 4.6.10";

* In the first paragraph of E.8 of Appendix E, "provide in addition to 5.6.7" is changed to "provide in addition to 4.6.9";

* Modify the dimensioning position of 700 in Figure J.1 of Appendix J;

* In M.2.1 of Appendix M, "Ya" is changed to "Xa";

* In Figure M.1 of Appendix M, "I" in the right view is changed to "H";

* In the formula A.1 of Appendix O, "n1" is changed to "ni";

* In the eighth row of Appendix O, "Ni" is changed to "ni".

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

Machinery-related hazards, hazardous states or hazardous events are described in the Scope of this document.

The truck mounted crane installed on the chassis is regarded as a special type of mobile crane, but the current formula for mobile cranes is

In national standards, safety requirements for truck mounted cranes are rarely involved.

The purpose and basis of this document.

- a) Clarify the special safety requirements for truck-mounted cranes;
- b) refer to the current International Standard Clauses applicable to truck-mounted cranes;
- c) Improve the safety of truck-mounted cranes by specifying specific safety requirements, and apply them to the design and use of truck-mounted cranes,

To prevent or minimize injury to personnel and damage to equipment;

- d) It is convenient for relevant personnel in the truck-mounted crane industry (designers, managers and others directly or indirectly responsible for the safe use of truck-mounted cranes);

personnel who use and maintain them) check the current standards for truck-mounted cranes;

- e) Promote the internationalization of truck-mounted crane standards.

Safety requirements for crane truck-mounted cranes

1 Scope

This document specifies the minimum requirements for the design, calculation, inspection and installation on the chassis or fixed base of truck-mounted cranes.

This document applies to all new truck-mounted cranes produced one year after their release. Retrofitting of existing truck-mounted cranes is not required.

This document does not apply to truck-mounted cranes installed on ship decks or floating structures, and specially designed as special equipment (with load

An articulated jib crane that walks an integral part of the equipment).

This document deals with all major hazards, hazardous states or hazardous events other than manned hazards related to truck-mounted cranes, but does not include

Risks associated with non-compliance and mishandling foreseeable by the manufacturer. See Appendix A for a list of significant hazards.

Note. Special national regulations can be enforced when truck-mounted cranes are used to carry people.

2 Normative references