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

GB/T 24810.2-2021

Limiting and indicating devices - Part 2: Mobile 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"

Drafting.

This document is the second part of GB/T 24810 "Crane Limiters and Indicators". GB/T 24810 has released the following

section.

---Part 1. General Provisions;

---Part 2. Mobile crane;

---Part 3. Tower crane;

---Part 4. Boom crane;

---Part 5. Bridge and gantry cranes.

This document replaces GB/T 24810.2-2009 "Crane Limiters and Indicators Part 2. Mobile Cranes", and

Compared with GB/T 24810.2-2009, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the.2009 edition);
- b) The normative references have been changed (see Chapter 2, Chapter 2 of the.2009 edition);
- c) The terms and definitions of rated lifting capacity have been changed (see 3.1, 3.1 in the.2009 edition);
- d) The terms and definitions of mobile cranes have been added (see 3.4);

- e) The expression of inspection requirements when parts are changed in the General Regulations has been changed (see 4.1, 4.1 in the.2009 edition);
- f) The general requirements of the rated lifting weight limiter have been changed and refined (see 5.1, 5.1 of the.2009 edition);
- g) The setting of the rated lifting weight limiter is changed and refined (see 5.2, 5.2 of the.2009 edition);
- h) The range of rated lifting capacity when the rated lifting capacity indicator sends out visual and audible alarm signals is changed (see 6.1,.2009 edition 6.1);
- i) The requirements for the alarm mode of the rated lifting weight indicator when the load of the crane exceeds the set value (see 6.2,.2009 edition 6.2);
- j) The special requirements of the rated lifting capacity indicator during the test, assembly or disassembly, calibration, test and lock assembly process of the crane have been added. Seek (see 6.3);
- k) Added the requirement that the rated lifting capacity indicator should be able to check the operation of the crane without applying load to the crane (see 6.4);
- l) The requirements for the load indicator to measure and display the load type are changed (see 7.1, 7.1 of the.2009 edition);
- m) The load range required by the accuracy of the load indicating system has been added (see 7.3, 7.3 of the.2009 edition);
- n) The working requirements of the motion limiter are changed, and the standard clauses of GB/T 24810.1-2009 (see 8.1,.2009 Version 8.1);
- o) The lifting height limiter is changed, the lifting height limiter is modified to the lifting limiter, and its requirements are refined (see 8.2, 8.2 of the.2009 edition);
- p) The descent depth limiter is changed, the descent depth limiter is modified to the descent limiter, and its requirements are refined (see 8.3, 8.3 of the.2009 edition);
- q) The anti-boom backward tilting device is changed, and the preconditions under the

maximum allowable wind speed are added (see 8.5, 8.5 in the.2009 edition);

r) Added other mandatory limiters (see Chapter 9);

s) Changed the allowable range of amplitude indicator deviation (see 10.4, 9.4 in the.2009 edition);

t) The level gauge has been changed and its requirements have been refined (see 10.6, 9.6 in the.2009 edition);

u) The rotation indicator has been changed, its applicable prerequisites have been added, and the functional requirements of the audible and/or visual alarm signals accompanying the rotation movement have been deleted.

Seek (see 10.7, 9.7 of the.2009 edition);

v) The requirements for anemometers have been changed [see 10.8.2b), 9.8 of the.2009 edition];

w) Added other mandatory indicators (see 10.8);

x) The strength limits and requirements have been changed to design coefficients and corresponding requirements (see Chapter 11, Chapter 10 of the.2009 edition);

y) The inspection requirements for limiters and indicators are changed, and the content of ISO 9927-1 is directly quoted (see Chapter 12,.2009 edition).

Chapter 11);

z) Added event recorder (see Chapter 15);

aa) Added data logger (see Chapter 16);

bb) Table 1 is changed, event recorder and data recorder columns are added. In the crane type, the lifting crane is changed to carry goods and fixed

The boom is changed to a fixed-length boom, the lifting height limit indicator is changed to a lifting limit indicator, and the lifting height limiter is changed to a lifting limiter.

The descending depth limiter was changed to descending limiter, and the descending limiter and the level gauge column were changed to be installed (see Table 1,.2009 version of the

Table 1).

This document uses the translation method equivalent to ISO 10245-2.2014 "Crane Limiters and Indicators Part 2.Mobile Crane machine".

This document incorporates the amendments to ISO 10245-2.2014/Amd1.2015, and the

clauses involved in these amendments have been adopted in its

The vertical double line (||) of the outer margin position is marked.

The Chinese documents that have consistent correspondence with the normatively cited international documents in this document are as follows.

---GB/T 783-2013 The maximum lifting capacity series of the basic type of hoisting machinery (ISO 2374.1983, IDT)

---GB/T 6974.2-2017 Crane Terminology Part 2.Mobile Cranes (ISO 4306-2.2012, IDT)

---GB/T 23720.1-2009 Crane Driver Training Part 1.General Rules (ISO 9926-1.1990, IDT)

---GB/T 23724.1-2016 Crane Inspection Part 1.General (ISO 9927-1.2013, IDT)

---GB/T 24810.1-2009 Crane limiters and indicators Part 1.General (ISO 10245-1.2008, IDT)

For ease of use, this document has made the following editorial changes.

---The reference to the ISO 4306-1.2007 corresponding standard has been deleted from the normative reference documents, which is consistent with the main text;

--- Changed table 1, "descent limiter" and "level" should be installed instead, consistent with the text;

--- The first line of table note in Table 1 is deleted, and the meaning of "R, O, NR, NA" is directly converted into the main body of Table 1;

---Added references.

This document was proposed by China Machinery Industry Federation.

This document is under the jurisdiction of the National Hoisting Machinery Standardization Technical Committee (SAC/TC227).

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Introduction

Crane limiters and indicators are the core system of crane safety work. Both international and domestic pay great attention to the research and development of corresponding standards.

optimization. GB/T 24810 aims to specify the safety requirements for domestic crane limiters and indicators, and consists of five parts.

---Part 1.General Provisions. The purpose is to specify the general requirements for crane limiters and indicators.