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

GB/T 20776-2023

Classification for lifting appliances

起重机械分类

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting: GB/T 20776 "Classification of Hoisting Machinery" and GB/T 3811 "Code for Crane Design", GB/T 6974 "Crane Terminology" and other standards Together they form the basic national standard system that supports lifting machinery: This document replaces GB/T 20776-2006 "Classification of Hoisting Machinery": Compared with GB/T 20776-2006, except for structural adjustment and editing In addition to sexual changes, the main technical changes are as follows:

---Changed the scope (see Chapter 1, Chapter 1 of the:2006 edition);

---Added terms and definitions (see Chapter 3);

--- Added classification principles and methods (see Sections 4:1 and 4:2);

---Changed the categories, categories and varieties of lifting machinery (see 4:3, Chapter 3, Chapter 4, Chapter 5 and Chapter 6 of the:2006 edition);

---Added coding methods and code structure (see Chapter 5);

---Deleted the working platform (see Chapter 3 and Chapter 7 of the:2006 edition): Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents: This document is proposed by China Machinery Industry Federation: This document is under the jurisdiction of the National Lifting Machinery Standardization Technical Committee (SAC/TC227): This document was drafted by: Beijing Hoisting and Transportation Machinery Design and Research Institute Co., Ltd.; Beijing Ke Zhengping Engineering Technology Testing Research Institute Co., Ltd: Division, Water Transport Science Research Institute of the Ministry of Transport, Taiyuan Heavy Industry Co., Ltd.; Dalian Huarui Heavy Industry Crane Co., Ltd.; Henan Mining Industry Co., Ltd: Heavy Machinery Co., Ltd.; Xuzhou Heavy Machinery Co., Ltd.; Hangzhou Guodian Machinery Design and Research Institute Co.,

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---First published as GB/T 20776-2006 in:2006;

---This is the first revision: Lifting machinery classification

1 Scope

GB/T 20776-2023 classifies lifting appliances and gives them a code. In China lifting equipment is special equipment: it is registered, periodically inspected and licensed by the state, and the classification is what determines which rules a given machine falls under, so the boundary between a crane, a hoist and a lifting platform is a regulatory line and not a taxonomic convenience. The standard sets the classification principles, the method and the resulting classes, and then the coding method and the structure of the code, with an informative annex illustrating the types of lifting machinery with diagrams. Together with the crane design code and the crane vocabulary it forms the base of the Chinese lifting machinery standards system. It took effect on 1 July 2024.

This document defines the terms and definitions of lifting machinery, and stipulates the classification principles, methods and classification, coding methods and codes of lifting machinery: structure: This document applies to the classification of the main types of lifting machinery:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this

document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 6974 (all parts) Crane terminology

GB/T 26476 Mechanical parking equipment terminology

3 Terms and definitions

The following terms and definitions as defined in GB/T 6974 (all parts) and GB/T 26476 apply to this document: 3:

1 Lifting machinery lifting appliance A machine that lifts or lowers vertically in space and moves heavy objects horizontally:

Note: The lifting machinery defined in this document refers to cranes, light and small lifting equipment, lifts, and mechanical parking equipment, excluding elevators and lifting working platforms: 3:2 crane crane Hoisting machinery that uses hooks or other fetching devices to hang (or clamp, etc.) heavy objects and perform cyclic operations such as lifting, lowering, and transporting in space: [Source: GB/T 6974:1-2008, Chapter 2, with modifications] 3:

3 It is a relatively lightweight lifting machine with a compact structure and simple movements: The working range is mainly projected by points and lines: 3:

4 Lifter Hoisting machinery that only has lifting and lowering movements and can only move up and down along the guide device: 3:

5 It is a device that realizes flat or three-dimensional parking of cars through mechanical transportation: [Source: GB/T 26476-2021,3:1:1] 3:6 mobile crane mobile crane A crane with a boom that can travel along trackless roads with or without load, and relies on its own weight to remain stable: