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

**GB/T 6974.8-2025**

Replacing GB/T 6974.14-1986

**Cranes - Vocabulary - Part 8: Cable cranes**

起重机 术语 第8部分：缆索起重机

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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 for standardization documents" Drafting.

This document is Part 8 of GB/T 6974 Crane Terminology. GB/T 6974 has been published in the following parts.

- Part 1: General terms;
- Part 2: Mobile cranes;
- Part 3: Tower cranes;
- Part 4: Jib cranes;
- Part 5: Bridge and gantry cranes;
- Part 6: Railway cranes;
- Part 7: Floating cranes;
- Part 8: Cable cranes.

This document replaces GB/T 6974.14-1986 "Terminology of lifting machinery - Cable cranes" and is consistent with GB/T 6974.14-1986.

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

as follows.

- Changed the definition of the term "cable crane" (see 3.1.1, page 1 of GB/T 6974.14-1986);
- Changed the term and definition of "swinging cable crane" (see 3.2.3, 1.1.1.1 of GB/T 6974.14-1986);
- Changed the definitions of the terms "fixed cable crane", "translational cable crane" and "radiating cable crane" (see 3.2.1, 3.2.2, 3.2.4, 1.1.1, 1.1.2, 1.1.3 of GB/T 6974.14-1986);
- Added the term and definition of "double-arc cable crane" (see 3.2.5);
- Changed the definition of the term "single-cable cable crane" (see 3.2.6, 1.2.1 of GB/T 6974.14-1986);
- Deleted the terms and definitions of "double-cable cable crane" and "four-cable cable crane" (see 1.2.2, 1.2.3);
- Added the term and definition of "multi-cable crane" (see 3.2.7);
- Added "rated lifting capacity", "span", "vertical span ratio", "abnormal working area", "tower height", "apparent slope angle", "parallel distance", "traction The terms and definitions of "initial tension of the traction rope" and "calculated tension of the traction rope" (see 3.3.1 to 3.3.10);
- Added "A-shaped tower", "swing tower", "main vehicle", "main tower", "auxiliary vehicle", "auxiliary tower", "balance vehicle", "load-carrying cable support device", "traction The techniques of "upper support rope", "horse rope", "swing tower wire rope", "traction type horse", "hoisting mechanism", "trolley traction mechanism", and "lifting trolley" Terms and definitions (see 3.4.2 to 3.4.8, 3.4.10, 3.4.12, 3.4.13, 3.4.15, 3.4.20, 3.4.26 to 3.4.28);
- Changed the "tower", "load-bearing rope", "traction rope", "knot rope", "auxiliary wire rope", "bearing horse", "fixed bearing horse", "self-propelled bearing horse", "knot Sub-type bearing horse", "load-bearing rope head", "tensioning device", "reel-type tensioning device", "weight-type tensioning device", "section sleeve", "retractor" Terms and definitions (see 3.4.1, 3.4.9, 3.4.11, 3.4.14, 3.4.16~3.4.19, 3.4.21~3.4.25, 3.4.29, 3.4.30, 2.1, 2.2, 2.4~2.7, 2.9, 2.9.1, 2.9.2.1, 2.9.2.3, 2.10~2.12, 2.12.1 of GB/T 6974.14-1986 2.12.3);
- Deleted "Lifting rope", "Mast support", "Machine tower", "Rear tower", "Swing support", "Rope turner", "Mobile rope support", "Chain The terms and definitions of "strip-type cable support" and "screw-type tensioning device" (see 2.3, 2.6.1~2.6.4, GB/T 6974.14-1986 2.8, 2.9.2, 2.9.2.2, 2.12.2);
- Deleted the term and definition of "descent depth indicator" (see 3.1 of GB/T 6974.14-1986).

Please note that some of the contents of this document may involve patents. The issuing

organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

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

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The previous versions of this document and the documents it replaces are as follows.

- First published in 1986 as GB/T 6974.14-1986;
- This is the first revision.

## Introduction

The standardization of terminology is the basis of standardization activities. GB/T 6974 is a terminology standard in the field of cranes.

standardization level, ensure the consistency and logical integrity of terminology, improve the coordination between concept systems and terminology in different languages, and promote GB/T 6974 (all parts) "Crane Terminology" and GB/T 20863 (all parts) "Crane Classification", GB/T 3811 "Crane Design Specification", GB/T 22437 "Crane Loads and Load Combinations" Design Principles", GB/T 30024 "Capacity Verification of Metal Structures of Cranes", GB/T 30561 "Crane Rigid Bridge and Gantry Cranes" The standards such as GB/T 6974 and GB/T 6974 together constitute the basic national standard system for cranes. GB/T 6974 is planned to consist of nine parts.

- Part 1: General terms. The purpose is to standardize the general terms and definitions applicable to the crane industry.
- Part 2: Mobile cranes. The purpose is to standardize the terms and definitions related to mobile cranes.
- Part 3: Tower cranes. The purpose is to standardize the terms and definitions related to tower cranes.
- Part 4: Jib cranes. The purpose is to standardize the terms and definitions related to jib cranes.

- Part 5: Bridge and gantry cranes. The purpose is to standardize the terms and definitions related to bridge and gantry cranes.
- Part 6: Railway cranes. The purpose is to standardize the terms and definitions related to railway cranes.
- Part 7: Floating cranes. The purpose is to standardize the terms and definitions related to floating cranes.
- Part 8: Cable cranes. The purpose is to standardize the terms and definitions related to cable cranes.
- Part 9: Electrical. The purpose is to standardize the terms and definitions related to crane electrical equipment.

With the continuous development of cable crane products and the continuous advancement of technology, the terminology related to cable cranes has also changed with the products.

Development and technological progress are expanding. It is necessary to standardize and unify in a timely manner to guide the application of cable crane products.

GB/T 6974.14-1986 makes it more normative and practical to meet the technical development requirements of cable cranes.

## **1 Scope**

This document defines terminology related to cable cranes.

This document applies to cable cranes.

## **2 Normative references**

This document has no normative references.

### **3.1.1 Cable Crane**

Flexible steel cables (load-bearing cables) are used as overhead supporting components, and the hoisting trolley with suspended heavy objects can travel back and forth on the load-bearing cables.

A crane with transmission (lifting) and horizontal transportation (traction) functions.

[Source. GB/T 20776-2023, 3.12]

### **3.2.1 Fixed-base cable crane**

A cable crane (3.1.1) in which the load-bearing cables (3.4.9) are fixed to two fixed supports (or ground anchors).