

ICS 01.040.53; 53.020.20
CCS J80



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

GB/T 6974.5-2023

Cranes - Vocabulary - Part 5: Bridge and gantry cranes

起重机 术语 第5部分：桥式和门式起重机

Issued on: December 28, 2023

Implemented on: July 1, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

1	Scope
2	Normative reference documents
3	Terms and definitions
29	Index

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 6974 (all parts) "Crane Terminology" and GB/T 20863 (all parts) "Crane Classification", GB/T 3811 "Code for Crane Design", GB/T 22437 "Design Principles of Crane Loads and Load Combinations", GB/T 30024 "Crane Metal Standards such as "Structural Capability Verification" and GB/T 30561 "Crane Rigid Bridge and Gantry Cranes" together constitute the basic national standards for cranes: home standard system: This document is Part 5 of GB/T 6974 "Crane Terminology": GB/T 6974 has released the following parts:

---Part 1: General terms;

---Part 2: Mobile cranes;

---Part 3: Tower cranes;

---Part 4: Jib crane;

---Part 5: Bridge and gantry cranes;

---Part 6: Railway cranes;

---Part 7: Floating cranes: This document replaces GB/T 6974:5-2008 "Crane Terminology Part 5: Bridge and Gantry Cranes", GB/T 6974:15- 1986 "Terminology for Hoisting Machinery - Suspended Monorail System", GB/T 6974:16-1986 "Terminology for Hoisting Machinery - Metallurgical Crane", GB/T 6974:17-1986 "Terminology for Hoisting Machinery - Stacking Crane", GB/T 6974:18-1986 "Terminology for Hoisting Machinery - Stacking Crane" "Port Crane" and GB/T 6974:19-1986 "Terminology for Hoisting Machinery Container Crane": This document is based on GB/T 6974:5- Mainly based on:2008, integrating GB/T 6974:15-1986, GB/T 6974:16-1986, GB/T 6974:17-1986, GB/T 6974:18-1986 Compared with the content of GB/T 6974:19-1986 and GB/T 6974:5-2008, in addition to structural adjustments and editorial changes, there are major technical changes as follows:

- Deleted the term "crane with main beam torsion" and its definition (see 2:1 of GB/T 6974:5-2008);
- Changed the definition of the term "angular trolley" (see 3:3:20, 2:2 of GB/T 6974:5-2008);
- Changed the definition of the term "rotary trolley" (see 3:3:21, 2:3 of GB/T 6974:5-2008);
- Deleted the term "gantry crane with jib crane" and its definition (see 2:5 of GB/T 6974:5-2008);
- Changed the term "quayside bridge crane" and its definition (see 3:1:32, 2:6 of GB/T 6974:5-2008);
- Changed the term "tyred gantry crane" and definition (see 3:1:34, 2:7 of GB/T 6974:5-2008);

1 Scope

GB/T 6974.5-2023 is Part 5 of the Chinese crane vocabulary and covers bridge and gantry cranes. They are the workhorses of every steelworks, port and heavy fabrication shop in China, and they come in a family of configurations - single and double girder, underslung and top running, semi-gantry, cantilever gantry, ship-to-shore - whose distinctions carry directly into the design code, the load combinations and the inspection regime, so a loose term produces a machine specified against the wrong rules. The standard defines the types of bridge and gantry crane, the general concepts applying to them, and the main components, with an informative annex giving the common terminology for the principal characteristics of these cranes. It took effect on 1 July 2024.

This document defines general terms and definitions for overhead cranes and gantry cranes: This document applies to overhead cranes and gantry cranes:

Note: Appendix A gives commonly used terminology for the main characteristics of overhead cranes and gantry cranes:

2 Normative reference documents

This document has no normative references:

3 Terms and definitions

1 Bridge and gantry crane types 3:1:1 bridge crane bridgecrane The bridge beam is supported on the track through the operating device or directly on the load-bearing surface of the crane: 3:1:

2 For general purpose bridge cranes (3:1:1) in general environments, the fetching device is one or more of hooks, grab buckets, electromagnetic chucks, etc: combination:

Note 1: Excludes overhead cranes using hoists as lifting mechanisms:

Note 2: See Figure 1 for an example diagram:

chinastandards.org - PREVIEW