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**Cranes - Maintenance manual - Part 4: Jib cranes**

起重机 维护手册 第4部分：臂架起重机

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### Foreword

This document was issued on 23 May 2023 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 December 2023.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

It is classified under ICS 53.020.20, Chinese classification J80.

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 4 of the Crane Maintenance Manual series of standards. The following parts of this series of standards have been published.

--- Part 1. General;

--- Part 4. Jib cranes.

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

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## Introduction

Jib cranes are widely used in ports, shipyards and equipment manufacturing, hydropower construction, nuclear power construction, railways, bridges and other fields. according to

The ISO /TC96 standard system divides cranes into four categories. mobile cranes, tower cranes, jib cranes, bridge and gantry cranes.

Category, the "Crane Maintenance Manual" series standards are proposed to be composed of five parts.

--- Part 1. General. The purpose is to specify the general requirements for the presentation method and content of crane maintenance manuals.

--- Part 2. Mobile cranes. The purpose is to specify the general requirements for the expression method and content of mobile crane maintenance manuals.

--- Part 3. Tower cranes. The purpose is to specify the general requirements for the expression method and content of the tower crane maintenance manual.

--- Part 4. Jib cranes. The purpose is to specify the general requirements for the expression method and content of the jib crane maintenance manual.

--- Part 5. Bridge and gantry cranes. The purpose is to specify the expression method and content of maintenance manuals for bridge and gantry cranes

General requirements.

Crane Maintenance Manual

Part 4. Jib cranes

## 1 Scope

GB/T 18453.4-2023 is the part of the crane maintenance manual series that governs how the maintenance manual for a jib crane is put together. It fixes the way the manual presents its content, the maintenance clause itself, and the handling of lubrication and hydraulic oil, together with the safety measures that maintenance work has to follow. An informative

annex gives an example of a maintenance item, so the level of detail expected of a single entry is shown rather than left to the writer's judgement. The reason for pinning this down is that a jib crane is maintained by people who did not build it, often years later and on another site - ports, shipyards, hydropower and nuclear construction, railways and bridges. When a manual omits an interval, names a lubricant loosely, or leaves out the state the machine must be in before someone climbs to the jib, the gap is found by the fitter and not by the manufacturer. A common structure also lets an owner compare what machines from different suppliers demand of a maintenance crew. The document applies to jib cranes as defined in GB/T 6974.4 and is used by crane makers and their documentation staff, and by the fleet owners and inspection bodies who have to work from the manual once the machine is in service.

This document specifies the expression method, maintenance, lubrication and hydraulic oil, safety measures for maintenance operations, etc. of the jib crane maintenance manual

General requirements for writing.

This document applies to the preparation of maintenance manuals for jib cranes defined in GB/T 6974.4.

## 2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

GB/T 18453-2001 Crane Maintenance Manual Part 1. General Rules

GB/T 31052.1-2014 Inspection and Maintenance Procedures for Lifting Machinery Part 1. General Rules

## 3 Terms and Definitions

The following terms and definitions apply to this document.

### 3.1

maintenance

A series of work performed to maintain or restore the crane to a state capable of performing its specified functions.

Note 1. Maintenance is divided into planned maintenance and unplanned maintenance.

Note 2. Maintenance work includes maintenance and repair.

[Source. GB/T 31052.1-2014, 3.5, modified]

### 3.2

In order to ensure the normal and safe operation of the crane, the necessary work is carried out according to the plan.

Note. Maintenance includes cleaning, lubrication, fastening, adjustment, anti-corrosion, etc.

[Source. GB/T 31052.1-2014, 3.6, modified]

### 3.3

repair repair

For daily or abnormal reasons that cause equipment damage and failure that affect the normal operation of the crane, repair or replace the damaged

A series of work to restore the function of the equipment.

[Source. GB/T 31052.1-2014, 3.7]

### 3.4

planned maintenance planned maintenance

In order to reduce the probability of crane failure or performance degradation, maintenance is carried out according to the established periodic table and corresponding specifications.

[Source. GB/T 31052.1-2014, 3.8]