INTERNATIONAL STANDARD

ISO 12488-4

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Cranes — Tolerances for wheels and travel and traversing tracks —

Part 4: **Jib cranes**

Appareils de levage à charge suspendue — Tolérances des roues et des voies de roulement et de déplacement des appareils de levage à charge suspendue —

Partie 4: Grues à flèche

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 12488-4 was prepared by Technical Committee ISO/TC 96, *Cranes*, Subcommittee SC 8, *Jib cranes*.

ISO 12488 consists of the following parts, under the general title *Cranes — Tolerances for wheels and travel and traversing tracks*:

— *Part 1: General*

— *Part 4: Jib cranes*

Introduction

This part of ISO 12488 establishes requirements and gives guidance and design rules that reflect the present state of art in the field of crane machine design. The rules given represent good design practice that ensures fulfilment of essential safety requirements and adequate service life of components. Deviation from these rules normally leads to increased risks or reduction of service life, but it is acknowledged that new technical innovations, materials, etc., may enable new solutions that result in equal or improved safety and durability.

Cranes — Tolerances for wheels and travel and traversing tracks —

Part 4:
Jib cranes

1 Scope

This part of ISO 12488 specifies tolerances of cranes and tracks and applies to jib cranes as defined in ISO 4306-1.

Tracks for jib cranes negotiating curves are not covered by this part of ISO 12488.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4306-1:1990, *Cranes — Vocabulary — Part 1: General*

ISO 12488-1:—[1)], *Cranes — Tolerances for wheels and travel and traversing tracks — Part 1: General*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12488-1 apply.

4 Symbols

For the purposes of this document the symbols given in ISO 12488-1 apply.

5 Classification of tolerances

Jib cranes with rigid support structures shall be designed to tolerance class 2 of ISO 12488-1:—.

For cranes with an articulated portal support structure, those parts of the crane associated with the articulation shall be designed to class 3 of ISO 12488-1:—.

NOTE Use of other tolerance classes is subject to agreement between manufacturer and purchaser.

1) To be published.

6 Tolerances

6.1 General

Tolerances shall be as given in Tables 3 to 8 of ISO 12488-1:—.

6.2 Multiple-wheel arrangements

Jib cranes often have multiple-wheel arrangements, e.g. 2 to 16 wheels per corner connected via bogies, equalizer beams and upper equalizers. The tolerances given in Tables 5 and 6 of ISO 12488-1:— shall apply and shall include tolerances associated with the bogies, equalizers and portal structure. The following basic tolerances shall be taken into account:

A applies to all wheels “in a row”;

Δe applies to the overall wheelbase e as well as to the internal wheelbases e in a bogie or equalizer;

Δh_{r} applies to the mean bottom wheel surface; it is the accumulated vertical tolerance of all wheels/bogies/equalizers, in connection with the portal.

The symbols φ_{k}, φ_{r}, τ_{k}, τ_{r} apply to all the wheels and are the accumulation of tolerances of bogies/equalizers in connection with the portal.

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