# INTERNATIONAL STANDARD

ISO 4301-4

> First edition 1989-09-01

# Cranes and related equipment — Classification — Part 4: Jib cranes

Grues et équipements correspondants — Classification — Partie 4: Grues à flèche



ISO 4301-4: 1989 (E)

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 4301-4 was prepared by Technical Committee ISO/TC 96, Cranes, lifting appliances and related equipment.

ISO 4301 will consist of the following parts, under the general title *Cranes and related equipment* — *Classification*:

- Part 1: General
- Part 2: Mobile cranes
- Part 3: Tower cranes
- Part 4: Jib cranes
- Part 5: Overhead travelling cranes and portal bridge cranes

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## Cranes and related equipment — Classification —

## Part 4: Jib cranes

#### 1 Scope

This part of ISO 4301 establishes classifications for jib cranes, other than tower cranes, mobile cranes and railway cranes, based on the number of operating cycles to be carried out during the expected life of the equipment and its mechanisms, and a load spectrum factor which represents the nominal state of loading.

### 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 4301. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 4301 are encouraged to

investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4301-1: 1986, Cranes and lifting appliances — Classification — Part 1: General.

### 3 Classification

The crane as a whole and its mechanisms shall be classified in accordance with ISO 4301-1.

General guidance as to typical classifications for jib cranes in relation to usage is given in table 1.

Where the class of utilization and state of loading are not known, the classification shall be regarded as a minimum.

Table 1 - Guidance on the classification of jib cranes and their mechanisms in relation to crane usage

|  | The second secon |  |                             |                |                |  |                |                |
|--|--|--|-----------------------------|----------------|----------------|--|----------------|----------------|
|  |  |  | Group<br>classification of  |                | Group classi   | Group classification of the mechanism as a whole | e mechanism    |                |
|  | Type of crane  | Service conditions   | the equipment<br>as a whole | Hoist          | Luff           | Crab<br>traverse                                 | Slew           | Travel         |
| Manually operated crane  | d crane  |  | A1                          | M1             | M1             | M1   | M1             | M1             |
| Workshop crane   | Workshop crane for assembly duties   | -  | A2                          | M2             | M1             | M1   | M2             | M2             |
| Deck crane with hook<br>Deck crane with grab or magnet                           | hook<br>grab or magnet   |  | A4<br>A6                    | M3<br>M5       | M3<br>M3       |  | M3<br>M3       | 1 1            |
| Shipbuilding cranes  | nes  |  | A4                          | M5             | M4             | M4   | M4             | M5             |
| Cranes in a stora<br>Cranes in a stora<br>Cranes in a stora                      | Cranes in a storage yard with hook<br>Cranes in a storage yard with grab or magnet<br>Cranes in a storage yard with grab or magnet   | Regular intermittent use <sup>1)</sup><br>Intensive use <sup>1)</sup>  | A4<br>A6<br>A8              | M6<br>M8       | M3<br>M6<br>M7 | M6<br>M6<br>M7                                   | M4<br>M6<br>M7 | M5<br>M6       |
| Port crane for lo<br>Port crane for lo<br>Port crane for lo<br>Port crane for lo | Port crane for loading vessels with hook<br>Port crane for loading vessels with hook<br>Port crane for loading vessels with grab or magnet<br>Port crane for loading vessels with grab or magnet   | Regular intermittent use <sup>1)</sup><br>Intensive use <sup>1)</sup><br>Regular intermittent use <sup>1)</sup><br>Intensive use <sup>1)</sup> | A6<br>A7<br>A7<br>A8        | M5<br>M7<br>M8 | M5<br>M6<br>M7 | 1111   | M5<br>M6<br>M7 | M3<br>M4<br>M4 |
| eference should b  | 1) Reference should be made to ISO 4301-1 for the definitions of "requiler intermittent use" and "intensive use"   | tions of "roaniar intermittent uses" as  | "bar evianetui" pu          |                |                |  |                |                |

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- Descriptors : handling equipment, lifting equipment, cranes (hoists), classification.

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