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IS 13834-4 (1993): Cranes - Classification, Part 4: Jib cranes [MED 14: Cranes, Lifting Chains and Related Equipment]



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“Knowledge is such a treasure which cannot be stolen”

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भारतीय मानक

क्रेन - वर्गीकरण

भाग 4 जिब क्रेन

Indian Standard

CRANES — CLASSIFICATION

PART 4 JIB CRANES

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BUREAU OF INDIAN STANDARDS
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Price Group 1

NATIONAL FOREWORD

This Indian Standard which is identical with ISO 4301-4 : 1989 'Cranes and related equipment— Classification — Part 4 Jib cranes', issued by International Organization for Standardization (ISO), was adopted by Bureau of Indian Standards on the recommendations of Cranes, Lifting Chains and Its Related Equipment Sectional Committee and approval of the Heavy Mechanical Engineering Division Council.

This standard is being published in five parts. Other parts of this standard are as follows:

- Part 1 General principles
- Part 2 Mobile cranes
- Part 3 Tower cranes
- Part 5 Overhead travelling and portal bridge cranes

The text of ISO Standard has been approved for publication as Indian Standard without deviations. Certain terminology and conventions are however not identical to those used in Indian Standards. Accordingly wherever the words 'International Standards' appear referring to this standard, they should be read as 'Indian Standard'.

In this adopted standard, reference appears to certain International Standards, for which Indian Standards also exist. The corresponding Indian Standards which are to be substituted in their place are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 4301-1 : 1986	IS 13834 (Part 1) : 1993 Cranes— Classification: Part 1 General	Identical

Indian Standard
CRANES — 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

No.	Type of crane	Service conditions	Group classification of the equipment as a whole	Group classification of the mechanism as a whole				
				Hoist	Luff	Crab traverse	Slew	Travel
1	Manually operated crane		A1	M1	M1	M1	M1	M1
2	Workshop crane for assembly duties		A2	M2	M1	M1	M2	M2
3 a)	Deck crane with hook		A4	M3	M3	—	M3	—
3 b)	Deck crane with grab or magnet		A6	M5	M3	—	M3	—
4	Shipbuilding cranes		A4	M5	M4	M4	M4	M5
5 a)	Cranes in a storage yard with hook	Regular intermittent use ¹⁾ Intensive use ¹⁾	A4	M4	M3	M4	M4	M4
5 b)	Cranes in a storage yard with grab or magnet		A6	M6	M6	M6	M6	M5
5 c)	Cranes in a storage yard with grab or magnet		A8	M8	M7	M7	M7	M6
6 a)	Port crane for loading vessels with hook	Regular intermittent use ¹⁾ Intensive use ¹⁾	A6	M5	M4	—	M5	M3
6 b)	Port crane for loading vessels with hook		A7	M7	M5	—	M6	M4
6 c)	Port crane for loading vessels with grab or magnet	Regular intermittent use ¹⁾ Intensive use ¹⁾	A7	M7	M6	—	M6	M4
6 d)	Port crane for loading vessels with grab or magnet		A8	M8	M7	—	M7	M4

1) Reference should be made to ISO 4301-1 for the definitions of "regular intermittent use" and "intensive use".

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