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(JCA/JSA)

**Cranes—Wire ropes—Care and
maintenance, inspection and
discard**

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Health, Labour and Welfare and the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Crane Association (JCA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS B 8836**:2007 is replaced with this Standard.

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Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Ministers and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

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Cranes—Wire ropes—Care and maintenance, inspection and discard

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 4309:2017**, Edition 5, with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard establishes general principles for the care and maintenance, inspection and discard of steel wire ropes used on cranes specified in **JIS B 0146-1** (hereafter referred to as ropes).

In addition to guidance on care, maintenance and inspection, this Standard provides discard criteria for those running ropes which are subjected to multi-layer spooling, where both field experience and testing demonstrate that deterioration is significantly greater at the crossover zones on the drum than at any other section of rope in the system.

It also provides more realistic discard criteria covering decreases in rope diameter and corrosion, and gives a method for assessing the combined effect of deterioration at any position in the rope.

This Standard is applicable to those ropes used on hoists and hoist blocks.

NOTE 1 In view of the fact that when using synthetic sheaves or metal sheaves incorporating synthetic linings, wire breaks may occur internally in large numbers before there is any visible evidence of any wire breaks or signs of substantial wear on the rope, use of discard criteria for this case is not recommended.

NOTE 2 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 4309:2017 *Cranes—Wire ropes—Care and maintenance, inspection and discard* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.