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(JCA/JSA)

**Cranes — Stiffness — Bridge and
gantry cranes**

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Contents

	Page
Introduction	1
1 Scope	1
2 Normative reference.....	1
3 Terms and definitions	1
4 Requirements.....	2
4.1 General	2
4.2 Basic requirements for elastic deformation.....	2
5 Recommendation for pre-camber of girders.....	2
6 Recommendations on vibrational frequencies of crane girders	3
6.1 Effects on operator	3
6.2 Effects of vibration on stiffness of girder	4
6.3 Guideline for proportions of welded box girders	4
Annex A (informative) Guidance on maximum deflection of girders	6
Annex B (informative) Guidance on minimum frequencies of girders	7
Annex JA (informative) Comparison table between JIS and corresponding International Standard	9

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Health, Labour and Welfare and the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment 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.

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Cranes—Stiffness—Bridge and gantry cranes

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 22986** published in 2007 without any modification of the technical contents for the corresponding parts, while adding **JIS** original specification related to terms and definitions which is not given in the said International Standard.

The portions with dotted underlines are the matters not given in the corresponding International Standard. A list of modifications with explanations is given in Annex JA.

1 Scope

This Standard specifies the requirements for the stiffness properties of the structures for bridge and gantry cranes defined in **JIS B 0146-1** in terms of deflections and natural frequencies.

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

ISO 22986 : 2007 *Cranes—Stiffness—Bridge and gantry cranes* (MOD)

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

2 Normative reference

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

JIS B 0146-1 *Cranes—Vocabulary—Part 1 : General*

NOTE : Corresponding International Standard : **ISO 4306-1** *Cranes—Vocabulary—Part 1 : General* (MOD)

3 Terms and definitions

For the purpose of this Standard, the terms and definitions in **JIS B 0146-1** and the following apply.

3.1 pre-camber

upward camber given beforehand at the time of manufacture by estimating the deflection of the girder of a crane