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STANDARD

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JIS B 8265 : 2008

(JSA)

**Construction of pressure vessel—General
principles**

(Amendment 2)

JIS B 8265 : 2006 has been revised under date of November 25, 2008. The revised items are included in this Amendment 2 and use this in combination with JIS B 8265 : 2003 and JIS B 8265 : 2006 (Amendment 1).

ICS 23.020.30

Reference number : JIS B 8265 : 2008 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard 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 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 8265:2006** is partially replaced with this Amendment.

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Construction of pressure vessel—General principles (Amendment 2)

JIS B 8265 : 2006 is revised as follows.

Introduction (Amendment as 2008 version)

ISO 16528-1 *Boilers and pressure vessels—Part 1: Performance requirements* has been established as the International Standard relating to pressure vessel on August 15, 2007. This ISO 16528-1 specifies performance requirements for boilers and pressure vessels, and national standards of each country shall be identified as satisfying the performance requirements of ISO 16528-1 by being based on ISO 16528-2 *Boilers and pressure vessels—Part 2: Procedures for fulfilling the requirements of ISO 16528-1*. Therefore, this Amendment has added necessary specifications to conform with ISO 16528-1, further, reviewed by revising or withdrawing normative references.

5 Design

Between 5.1 and 5.1.1, insert the following.

"5.1.0A **Loadings** Loadings to be considered in design of pressure vessels includes as appropriate, the following loads in addition to pressure (internal pressure or external pressure).

- a) Empty weight and weight of internal fluid
- b) Load by pipes and fittings to be attached on pressure vessel directly
- c) Wind, snow accumulation, earthquake loadings
- d) Loadings by heat (temperature)
- e) Repetitive loading and dynamic loading
- f) Handling, transportation and installation loads".

5.1.1 Minimum restricted thickness

Next to b), add the following.

- "c) Materials to be used for pressure-resistant part of pressure vessels shall be provided with adequate allowance against foreseeable corrosion or erosion".

5.1.3 Holes provided in pressure vessels

Next to b), add the following.

- "c) When necessary, holes for drainage or venting shall be provided".

6.7 Heat processing

Replace "Heat processing after the welding shall be carried out in an appropriate manner." by " For the welded section of pressure vessels, heat processing after the welding shall be carried out in accordance with Annex S to **JIS B 8267**".

6 Welding

After 6.7, add the following.

"**6.8 Welder** Welders shall be confirmed they reach a certain level of performance and qualified by the test designated by law, or specified in **JIS Z 3801**, or other test. Welders engaged in welding shall be recorded for the confirmation."

7 Manufacturing

Between 7 and 7.1, insert the following.

"7.0A General

- a) Identification of materials used for pressure vessels shall be ensured through matching to mill certificates even at the time of completion of pressure vessels.
- b) Manufacturing methods shall be appropriate for all aspects of the fabrication process, considering degradation of materials from fabrication.

When there is a risk that the fabrication process can cause unacceptable changes in the properties of the material, suitable measures for recovery may be applied after the fabrication.

- c) Appropriate methods for cutting, forming and other processing of materials shall be selected to assure that detrimental changes in the characteristics and defects detrimental to use are avoided. When detrimental parts in characteristics or defects are caused through processing, they may be recovered or removed."

8.3 Method of nondestructive test and the judgment of the results

In c) 2), replace "JIS G 0565" by "JIS Z 2320-1 to JIS Z 2320-3".

8.3 Method of nondestructive test and the judgment of the results

Next to d), add the following.

- "e) **Nondestructive test personnel** Nondestructive test personnel shall be qualified based on **JIS Z 2305** or standards identified to be at least equivalent thereto".

8 Test and inspection

Next to 8.6, add the following.

"**8.7 Final inspection** The final inspection shall be as follows.

- a) **Material confirmation inspection** Materials used for pressure vessels shall undergo a final inspection to assess by review of the accompanying mill certificates com-