

Amendment to the Construction Code for Pressure Vessels about Class-1 and Class-2 Pressure Vessels

The Ministry of Health, Labor and Welfare (MHLW) of Japan will amend the Construction Code for Pressure Vessels (Notification No.196 of the Ministry of Health, Labour and Welfare, 2003), which aims to (1) delete corrosion allowance (the additional thickness required for corrosion and mechanical abrasion resistance) from the minimum thickness of the Class-1 and Class-2 pressure vessels and (2) harmonize to the latest revision of relevant Japan Industrial Standards.

1. Deletion of “corrosion allowance.”

- (a) Delete Article 11 of the code which prescribes corrosion allowance. In item (2) of Article 10, require 1.5mm or more for the thickness of high alloy steel and nonferrous metal plates, regardless corrosion is expected or not.
- (b) In Article 12, 13, 22 and 26, delete corrosion allowance from the minimum thickness of plates for the cylindrical shells, etc. of pressure vessels.

N.B. In Article 12, the minimum thickness of plates of the cylindrical shells, etc. was defined as the summation of;

- (a) the thickness in which the stress generated in the said plate when it is subject to exposure to the maximum allowable working pressure becomes equal to the allowable tensile stress of the plate and;
- (b) the corrosion allowance.

2. Amendment for harmonization with the latest Japan Industrial Standards (JIS)

- (a) As a reference of sight glasses for pressure vessels in paragraph 2 of Article 32, replace JIS R3202 (Tempered glass) with JISB 8286 (Sight glasses for pressure vessels) which is newly established exclusively for sight glasses for pressure vessels. Also, delete a formula to calculate the minimum thickness of glass plates in paragraph 3 of article 32, because the formula is prescribed in JIS B8286.
- (b) Put JIS B2241 (Aluminium alloy pipe flanges) as a new reference standard for flanges of pressure vessels in paragraph 1 and 3 of Article 36.
- (c) Make necessary amendments such as harmonization with the titles of the latest version of JIS.

The Act and related ordinances and codes are available at the following website.

http://www.japaneselawtranslation.go.jp/law/detail_main?re=01&ia=03&vm=&id=1926

http://www.japaneselawtranslation.go.jp/law/detail_main?re=01&ia=03&vm=&id=2245

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