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High strength chromium-molybdenum and chromium-molybdenum-vanadium alloy steel plates for pressure vessels under high-temperature service

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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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Contents

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by 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 The Japan Iron and Steel Federation (JISF) 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 G 4110**:2008 is replaced with this Standard.

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 Minister 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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Introduction

This Japanese Industrial Standard has been prepared based on the third editions of **ISO 9328-1** and **ISO 9328-2** published in 2011 with some modifications of the technical contents.

This Standard was established in 1993 based on **ASTM A542** and **ASTM A832**, but the specifications of **ASTM** have been adopted in **ISO 9328-2**. The revision at this time is made for the purpose of corresponding to the revision of **ASTM A542**, **ASTM A832** and **ISO 9328-2** in which chemical composition requirements have been modified.

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standards have been modified. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard specifies the hot-rolled high strength chromium-molybdenum and chromium-molybdenum-vanadium alloy steel plates for pressure vessels used under the high-temperature service (hereafter referred to as "steel plates").

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

ISO 9328-1 : 2011 *Steel flat products for pressure purposes — Technical delivery conditions — Part 1 : General requirements*

ISO 9328-2 : 2011 *Steel flat products for pressure purposes — Technical delivery conditions — Part 2 : Non-alloy and alloy steels with specified elevated temperature properties* (Overall evaluation : 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.

JIS G 0320 *Standard test method for heat analysis of steel products*

JIS G 0321 *Product analysis and its tolerance for wrought steel*