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Weldable hot rolled steel sheet piles

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Foreword

This Japanese Industrial Standard has been 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 a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied *mutatis mutandis* pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS A 5523:2012**), which has been technically revised.

However, **JIS A 5523: 2012** may be applied in the **JIS** mark certification based on the relevant provisions of Article 30, paragraph (1), etc. of the Industrial Standardization Act until 21 February 2022.

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Weldable hot rolled steel sheet piles

1 Scope

This Japanese Industrial Standard specifies the requirements¹⁾ for hot rolled steel sheet piles (hereafter referred to as steel sheet piles) especially excellent in weldability, which are used for sheathing, coffering, structural foundations and other similar applications.

Note¹⁾ This Standard also specifies the determination methods of carbon equivalent, free nitrogen and Charpy absorbed energy, which are not described in **JIS A 5528**.

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*

JIS G 0404 *Steel and steel products — General technical delivery requirements*

JIS G 0415 *Steel and steel products — Inspection documents*

JIS G 1201 *Iron and steel — General rules for analytical methods*

JIS G 1228 *Iron and steel — Methods for determination of nitrogen content*

JIS G 3192 *Dimensions, mass and permissible variations of hot rolled steel sections*

JIS R 6010 *Coated abrasive grain sizes*

JIS Z 2241 *Metallic materials — Tensile testing — Method of test at room temperature*

JIS Z 2242 *Method for Charpy pendulum impact test of metallic materials*

3 Term and definition

For the purpose of this Standard, the following term and definition apply.

3.1

free nitrogen

nitrogen dissolved in steel other than nitrogen in nitride (nitride type nitrogen) which is chemically combined with alloy elements having high affinity with nitrogen (aluminium, titanium, vanadium, etc.) and precipitated in steel

However, nitrogen contained in silicon nitride is to be included in free nitrogen.