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Dimensions, shape, mass and
permissible variations of hot rolled
steel plates, sheets and strips

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In the event of any doubts arising as to the contents,
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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 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 3193**:2008 is replaced with this Standard.

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Dimensions, shape, mass and permissible variations of hot rolled steel plates, sheets and strips

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 7452:2013**, Edition 3, with some modifications of the technical contents to reflect transactional practices.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies requirements for the appearance and shapes of the hot rolled steel plates, steel sheets (including cut lengths from steel strips), steel strips and their permissible variations as well as the dimensions, mass and their tolerances. This Standard is not applicable to flat bars.

The application of this Standard is specified in the relevant product standards.

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

ISO 7452:2013 *Hot-rolled steel plates—Tolerances on dimensions and shape (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 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 Z 8401 *Guide to the rounding of numbers*

3 Expression of dimensions

The dimensions of steel plates, sheets and strips shall be expressed as follows.

- a) The dimensions of steel plates and sheets shall be expressed by thickness, width and length in millimetres.
- b) The dimensions of steel strips shall be expressed by thickness and width in millimetres.

4 Standard dimensions

The standard dimensions shall be as follows.

- a) The standard thickness of steel plates, sheets and strips shall be as given in Table 1.

Table 1 Standard thickness^{a)}

Unit: mm

1.2	1.4	1.6	1.8	2.0	2.3	2.5	(2.6)	2.8	(2.9)	3.2
3.6	4.0	4.5	5.0	5.6	6.0	6.3	7.0	8.0	9.0	10.0
11.0	12.0	12.7	13.0	14.0	15.0	16.0	(17.0)	18.0	19.0	20.0
22.0	25.0	25.4	28.0	(30.0)	32.0	36.0	38.0	40.0	45.0	50.0

For steel strips and cut lengths from steel strips, the thickness 12.7 mm or under shall be applied.

Note ^{a)} The standard thickness values not in parentheses should be applied.

- b) The standard width of steel plates, sheets and strips shall be as given in Table 2.

Table 2 Standard width

Unit: mm

600	630	670	710	750	800	850	900	914	950
1 000	1 060	1 100	1 120	1 180	1 200	1 219	1 250	1 300	1 320
1 400	1 500	1 524	1 600	1 700	1 800	1 829	1 900	2 000	2 100
2 134	2 438	2 500	2 600	2 800	3 000	3 048			

For steel strips and cut lengths from steel strips, the thickness 2 000 mm or under shall be applied.
For steel plates and sheets (excluding cut lengths from steel strips), the widths 914 mm, 1 219 mm and 1 400 mm or over shall be applied.

- c) The standard length of steel plates and sheets shall be as given in Table 3.

Table 3 Standard length of steel plates and sheets

Unit: mm

1 829	2 438	3 048	6 000	6 096	7 000	8 000	9 000	9 144
10 000	12 000	12 192						

Values in this table are not applicable to cut lengths from steel strips.

5 Shape and dimensional tolerances

The shape and dimensional tolerances of steel plates, sheets and strips shall be as follows. In the case of steel strips, the tolerances do not apply to the tip and end of the rolled steel strips.

- a) Tolerances on thickness of steel plates, sheets and strips shall be as given in Table 4 and Table 5. Table 6 may be applied instead of Table 5 upon the agreement between the purchaser and the manufacturer.

Thickness shall be measured at any position not less than 25 mm from the side edge in the case of mill-edged steel strips and cut lengths from steel strips, and not less than 15 mm from the side edge in the case of cut-edged steel strips and cut lengths from steel strips.

Thickness shall also be measured at any position inside the scheduled cutting line concerning the width in the case of as-rolled mill-edged steel plates and sheets, and at any position not less than 15 mm from the side edge in the case of cut-edged steel plates and sheets.

- b) The tolerances on width of steel plates, sheets and strips shall be as given in Table 7.

Table 4 Tolerances on thickness (thickness: under 4 mm)

Unit: mm

Thickness	Width		
	Under 1 600	1 600 or over to and excl. 2 000	2 000 or over up to and incl. 2 300
Under 1.25	± 0.16	—	—
1.25 or over to and excl. 1.60	± 0.18	—	—
1.60 or over to and excl. 2.00	± 0.19	± 0.23	—
2.00 or over to and excl. 2.50	± 0.20	± 0.25	—
2.50 or over to and excl. 3.15	± 0.22	± 0.29	± 0.29
3.15 or over to and excl. 4.00	± 0.24	± 0.34	± 0.34
Either plus side (+) or minus side (−) of thickness tolerances given in this table may be limited upon the agreement between the purchaser and the manufacturer. In all cases, the total tolerance range shall be equal to that given in this table.			