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Rolled steel bars for building structure

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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 3138:1996 is replaced with this Standard.

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In the event of any doubts arising as to the contents,
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Rolled steel bars for building structure

1 Scope This Japanese Industrial Standard specifies the hot-rolled steel bars ⁽¹⁾ (hereafter referred to as “steel bars”) mainly used for structural members for buildings.

Note (1) The “steel bars” cover round steel bars, square steel bars and steel bars in coil form.

2 Normative references The standards listed in attached table 1 contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) shall be applied.

3 Grade and symbol The steel bars shall be classified into three categories, and their symbols shall be as given in table 1.

Table 1 Symbol of grade

Unit : mm

Symbol of grade	Applicable diameter or width across flats
SNR 400A	6 and over, up to and incl. 100
SNR 400B	
SNR 490B	

4 Chemical composition The steel bars shall be tested in accordance with 10.1 and the cast analysis values thereof shall be as given in table 2.

Table 2 Chemical composition

Unit : %

Symbol of grade	Diameter or width across flats	C	Si	Mn	P	S
SNR 400A	6 mm and over, up to and incl. 100 mm	0.24 max.	—	—	0.050 max.	0.050 max.
SNR 400B	6 mm and over, up to and incl. 50 mm	0.20 max.	0.35 max.	0.60 to 1.40	0.030 max.	0.030 max.
	Over 50 mm, up to and incl. 100 mm	0.22 max.				
SNR 490B	6 mm and over, up to and incl. 50 mm	0.18 max.	0.55 max.	1.60 max	0.030 max.	0.030 max.
	Over 50 mm, up to and incl. 100 mm	0.20 max.				

Remarks 1 An alloying element(s) other than those given in table 2 may be added, as necessary.

2 The chemical compositions other than those given in table 2 which are involved in the formula in clause 5 for calculation of the carbon