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☞ JIS G 2302 : 1998

Ferrosilicon

ICS 77.100

Descriptors : ferrosilicon, ferro-alloys, silicon-containing alloys

Reference number : JIS G 2302 : 1998 (E)

G 2302:1998

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS G 2302:1986** is replaced with **JIS G 2302:1998**.

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Ferrosilicon

Introduction This revision is carried out for the purpose of being adjusted to the corresponding International Standard.

The Annex in this Standard is prepared based on **ISO 5445 Ferrosilicon — Specification and conditions of delivery** issued as the first edition in 1980 without changing the technical contents and the style of Standard, and can be applied in place of the provisions of this Standard text.

Further, “Informative reference” to which the dotted underline is applied in this Annex is the items which do not exist in the original International Standard.

1 Scope This Japanese Industrial Standard specifies the ferrosilicon to be used mainly as reducing agent, deoxidizer, slag making agent or additive of alloy composition for manufacturing of iron and steel.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards indicated below shall be applied.

JIS G 1301 *General rules for chemical analysis of ferroalloys*

JIS G 1312 *Method for chemical analysis of ferrosilicon*

JIS G 1351 *Method for X-ray fluorescence spectrometric analysis of ferroalloys*

JIS G 1501 *General rules for sampling of ferroalloys*

JIS G 1601 *Methods of sampling for chemical analysis of ferroalloys (Part 1: Ferromanganese, ferrosilicon, ferrochromium, ferrosilicomanganese and ferrosilicochromium)*

JIS G 1641 *Methods of sampling for size analysis of ferroalloys and size determination*

3 Classification and symbol The class and symbol shall be as given in Table 1.

Table 1 Class and symbol

Class		Symbol
Ferrosilicon	No.1	FSi1
	No.2	FSi2
	No.3	FSi3
	No.6	FSi6

4 Method of lot formation

4.1 The lot formation shall be made by either the grade-lot method or the blend-lot method.

4.2 When the grade-lot method is applied, silicon content shall be employed for grade divisions and the divisional intervals of grade shall be not more than 3 %.

4.3 The lot size shall be as given in Table 2.

Table 2 Lot size

Lot formation	Grade-lot method	Blend-lot method
Lot size	1 500 t max.	35 t max.

5 Quality

5.1 Chemical composition The chemical composition shall be as specified in Table 3. However, it may be designated as given in Table 4.

Table 3 Chemical composition

Class		Symbol	Chemical composition % <i>(m/m)</i>			
			Si	C	P	S
Ferrosilicon	No.1	FSi1	88 to 93	0.2 max.	0.05 max.	0.02 max.
	No.2	FSi2	75 to 80	0.2 max.	0.05 max.	0.02 max.
	No.3	FSi3	40 to 45	0.2 max.	0.05 max.	0.02 max.
	No.6	FSi6	14 to 20	1.3 max.	0.05 max.	0.06 max.

Table 4 Designated chemical composition

Class		Chemical composition % <i>(m/m)</i>		
		C	P	Al
Ferrosilicon	No.2	0.1 max.	0.04 max.	1.0 max.
		0.05 max.	0.03 max.	0.5 max.

5.2 Particle size The particle size shall be as given in Table 5.

Table 5 Particle size

Class	Symbol	Particle size mm
General size	g	10 to 150
Fine size	f	15 max.
Small size	s	3.15 to 60
Medium size	m	10 to 100

6 Tests

6.1 Sampling The sampling and sample preparation for the determination of the average quality of one lot shall be made as described in the following standards:

JIS G 1501, JIS G 1601