JIS

JAPANESE INDUSTRIAL STANDARD

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JIS G 1256 : 1997

Iron and steel — Method for X-ray fluorescence spectrometric analysis

ICS 77.080.01

Descriptors : iron, transition metals, steels, X-ray fluorescence spectrometry, fluorimetry, X-ray analysis, spectroscopy

Reference number : **JIS G 1256 : 1997 (E)**

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 1256:1982 (former edition) is replaced with this Standard.
This revision intends not only to extend the determination range but also to improve the analytical precision with the specification of criteria on apparatus performance and of tolerance on verification and/or calibration of working curve.
Further, reference materials and calibration samples are definitely specified in this revision.

Date of Establishment: 1973-03-01

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Divisional Council on Iron and Steel

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

Iron and steel—Method for X-ray fluorescence spectrometric analysis

1 Scope This Japanese Industrial Standard specifies the method for X-ray fluorescence spectrometric analysis of iron and steel and super alloy samples of lump form or plate form, which is applied to determination of each component as given in Table 1.

Table 1 Applicable components and determination range

Constituent	Determination range % (*m*/*m*)
Silicon	0.002 or over up to and incl. 10
Manganese	0.001 or over up to and incl. 30
Phosphorus	0.001 or over up to and incl. 1
Sulfur	0.001 or over up to and incl. 0.6
Nickel	0.002 or over up to and incl. 99.5
Chromium	0.001 or over up to and incl. 50
Molybdenum	0.001 or over up to and incl. 30
Copper	0.001 or over up to and incl. 10
Tungsten	0.002 or over up to and incl. 25
Vanadium	0.001 or over up to and incl. 6
Cobalt	0.002 or over up to and incl. 60
Titanium	0.001 or over up to and incl. 10
Aluminium	0.002 or over up to and incl. 12
Arsenic	0.002 or over up to and incl. 0.3
Tin	0.002 or over up to and incl. 0.6
Lead	0.002 or over up to and incl. 0.4
Zinc	0.001 or over up to and incl. 0.1
Zirconium	0.001 or over up to and incl. 2
Niobium	0.001 or over up to and incl. 10
Magnesium	0.003 or over up to and incl. 0.2
Calcium	0.001 or over up to and incl. 0.1
Tantalum	0.002 or over up to and incl. 15
Antimony	0.002 or over up to and incl. 0.7
Selenium	0.001 or over up to and incl. 0.5
Tellurium	0.002 or over up to and incl. 0.2
Bismuth	0.001 or over up to and incl. 0.2
Iron	0.003 or over up to and incl. 50
Lanthanum	0.002 or over up to and incl. 0.2
Cerium	0.003 or over up to and incl. 0.6
Praseodymium	0.002 or over up to and incl. 0.1
Neodymium	0.003 or over up to and incl. 0.3

Remarks 1 The normative references to this Standard are as follows.

JIS G 0203 *Glossary of terms used in iron and steel (products and quality)*

JIS G 0303 *General rules for inspection of steel*