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Methods for chemical analysis of cements

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Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 General requirements for testing	2
4.1 Number of tests	2
4.2 Tolerance	3
4.3 Expression of masses, volumes, factors, amounts of chemical components in sample solution, and analysis results	3
4.4 Ignition	3
4.5 Taking aliquots	4
4.6 Reagents	4
4.7 Desiccator	4
4.8 Glassware	4
4.9 Other general requirements	4
5 Preparation of a test sample of cement	4
6 Determination of loss on ignition	5
6.1 Summary	5
6.2 For other materials than Portland blast-furnace slag cement and blast-furnace slag	5
6.3 For Portland blast-furnace slag cement and blast-furnace slag	5
6.4 Tolerance	7
7 Determination of residue insoluble in hydrochloric acid and sodium carbonate	7
7.1 Summary	7
7.2 Reagents	7
7.3 Sampling amount	7
7.4 Procedure	7
7.5 Calculation	8
7.6 Tolerance	8
8 Determination of silicon dioxide	8
8.1 Summary	8
8.2 Reagents	8
8.3 Sampling amount	9
8.4 Procedure	9
8.5 Calculation	9

8.6	Tolerance	9
9	Determination of aluminium oxide	10
9.1	Summary	10
9.2	Reagents	10
9.3	Photometric titration apparatus	11
9.4	Procedure	11
9.5	Blank test	12
9.6	Calculation	12
9.7	Tolerance	13
10	Determination of iron(III) oxide	13
10.1	Atomic absorption spectrometry	13
10.2	Absorptiometry	14
10.3	ICP atomic emission spectrometry	16
11	Determination of calcium oxide	19
11.1	Determination using calcium indicator	19
11.2	Determination using calcein indicator or calcein-PPC indicator	22
12	Determination of magnesium oxide	24
12.1	Atomic absorption spectrometry	24
12.2	ICP atomic emission spectrometry	26
13	Determination of sulfur trioxide	29
13.1	Summary	29
13.2	Reagents	29
13.3	Procedure	30
13.4	Calculation	30
13.5	Tolerance	30
14	Determination of sodium oxide and potassium oxide	31
14.1	Atomic absorption spectrometry	31
14.2	Flame photometry	33
14.3	ICP atomic emission spectrometry	35
15	Determination of titanium(IV) oxide	39
15.1	Absorptiometry	39
15.2	ICP atomic emission spectrometry	40
16	Determination of phosphorus(V) oxide	44
16.1	Absorptiometry	44
16.2	ICP atomic emission spectrometry	45
17	Determination of manganese(II) oxide	49
17.1	Atomic absorption spectrometry	49
17.2	Absorptiometry	50
17.3	ICP atomic emission spectrometry	53
18	Determination of sulfide sulfur	56
18.1	Summary	56

18.2	Direct titration using potassium iodate standard solution	56
18.3	Back titration using sodium thiosulfate standard solution	58
18.4	Tolerance	60
19	Determination of chlorine	60
19.1	Potentiometric titration	60
19.2	Absorptiometry by mercury(II) thiocyanate	63
19.3	Back titration using ammonium thiocyanate solution	65
Annex JA (informative)	Chemical analysis of major elements of cement by complete analysis	68
Annex JB (informative)	Determination of residue insoluble in hydrochloric acid and potassium hydroxide	93
Annex JC (informative)	Comparison table between JIS and corresponding International Standard	95
Annex JD (informative)	List of technically significant revisions from the previous edition	102

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 Japan Cement Association (JCA) 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 R 5202 : 2015**), which has been technically revised.

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Methods for chemical analysis of cements

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 29581-1** : 2009, Edition 1, with some modifications of the technical contents to bring them into alignment with quality requirements of cement product standards in Japan.

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 JC. Furthermore, the chemical analysis of the major elements of cement by complete analysis method is provided in Annex JA, the method for determination of residue insoluble in hydrochloric acid and potassium hydroxide, in Annex JB, and a list of technically significant revisions from the previous edition, in Annex JD.

1 Scope

This Standard specifies the methods for the analysis of cement by wet chemistry.

Cement covered by this Standard includes Portland cement specified in **JIS R 5210**, Portland blast-furnace slag cement specified in **JIS R 5211**, Portland pozzolan cement specified in **JIS R 5212**, Portland fly-ash cement specified in **JIS R 5213**, and Eco-cement specified in **JIS R 5214**.

This Standard applies to the chemical analysis of blast-furnace slag used in the manufacture of clinker and Portland blast-furnace slag cement.

NOTE 1 See Annex JA for the chemical analysis of the major elements of cement by complete analysis method, and Annex JB for the method for determination of residue insoluble in hydrochloric acid and potassium hydroxide.

NOTE 2 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 29581-1 : 2009 *Cement — Test methods — Part 1: Analysis by wet chemistry* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

Part or all of the provisions of the following standards, 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 K 0050 *General rules for chemical analysis*