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Methods for determination of fluorine compounds in flue gas

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

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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 Japan Environmental Measurement and Chemical Analysis Association (JEMCA)/Japanese Standards Association (JSA) 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 K 0105**: 1998 is replaced with this Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public or utility model right. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public or the utility model right.

Methods for determination of fluorine compounds in flue gas

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 15713** published in 2006 with some modifications of the technical contents such that items unique to **JIS** not given in the corresponding International Standard are added but some specifications in the corresponding International Standard are not adopted as **JIS**.

The portions with continuous side lines or dotted underlines are the matters either modified from or not given in the corresponding International Standard. Annex JA is not given in the corresponding International Standard. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard specifies the methods for determination of gaseous inorganic fluorine compounds in flue gas as fluoride ions and calculation of hydrogen fluoride concentration. In this Standard, the flue gas means the gas exhausted from flue, chimney, duct, etc. (hereafter referred to as "duct") in combustion of wastes, smelting process of aluminium, manufacturing process of chemical fertilizer, manufacturing process of glass, etc. The gaseous inorganic fluorine compounds are those passing through the filter having not less than 99.5 % in collection efficiency of particles of 0.3 μm. The fluoride ion is the designation of F^-.

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

ISO 15713:2006 *Stationary source emissions—Sampling and determination of gaseous fluoride content* (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

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the editions of the indicated year shall be applied and the revisions (including amendments) made thereafter shall not be applied. For those without the indication of the year, the most recent edition (including amendments) shall be applied.

JIS K 0050 *General rules for chemical analysis*

JIS K 0095 *Methods for sampling of flue gas*

JIS K 0115 *General rules for molecular absorptiometric analysis*

JIS K 0122 *General rules for ion selective electrode method*