

## भारतीय मानक ब्यूरो

**DRAFT FOR WIDE CIRCULATION**

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*भारतीय मानक मसौदा*

### इस्पात और लोहा — सल्फर की मात्रा का निर्धारण — प्रेरण भट्टी में दहन के बाद इन्फ्रारेड अवशोषण पद्धति

*Draft Indian Standard*

### **Steel and Iron — Determination of Sulphur Content — Infrared Absorption Method after Combustion in an Induction Furnace**

ICS 77.080.01

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Methods of Chemical Analysis of Metals  
Sectional Committee, MTD 34

Last date of comments  
**11/09/2025**

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#### NATIONAL FOREWORD

This draft standard is identical ISO 4935 : 1989 'Steel and iron — Determination of sulphur content — Infrared absorption method after combustion in an induction furnace' issued by the International Organization for Standardization (ISO), and subject to its finalization, is to be adopted by the Bureau of Indian Standards on the recommendation of the Methods of Chemical Analysis of Metals Sectional Committee and approval of the Metallurgical Engineering Division Council.

The committee decided to adopt ISO 4935 : 1989 standard under dual numbering system.

The text of ISO standard has been approved as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical with those used in Indian Standard. Attention is especially drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, it should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exists. The corresponding Indian Standards which are to be substituted in their place are listed below along with their degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 377:2017 Steel and steel products — Location and preparation of samples and test pieces for mechanical testing	IS 3711 : 2020/ISO 377 : 2017 Steel and steel products — Location and preparation of samples and test pieces for mechanical testing ( <i>third revision</i> )	Identical
ISO 648 : 2008 Laboratory glassware — single-volume pipettes	IS 1117 : 2018/ISO 648 : 2008 Laboratory glassware — Single-volume pipettes ( <i>second revision</i> )	Identical
ISO 1042 : 1998 Laboratory glassware — One-mark volumetric flasks	IS 915 : 2012/ISO 1042 : 1998 Laboratory glassware — One-mark volumetric flasks ( <i>third revision</i> )	Identical

The Technical Committee responsible for the preparation of this standard will review the provisions of following International Standards referred in these adopted standards and will decide their acceptability for use in conjunction with this standard.

<i>International Standard</i>	<i>Title</i>
ISO 385-1 : 1984	Laboratory glassware — Burettes : Part 1 General requirements
ISO 5725 : 1986	Precision of test methods — Determination of repeatability and reproducibility for a standard test method by inter-laboratory tests

In reporting the result of a test or analysis made in accordance with this standard, if the final value; observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*).'

The scope of the standard is as follows:

## **SCOPE**

This International Standard specifies an infrared absorption method after combustion in an induction furnace for the determination of sulfur content in steel and iron.

The method is applicable to sulfur contents between 0.002 % (m/m) and 0.10 % (m/m).

**The complete document/text of ISO 4935 : 1989 'Steel and iron — Determination of sulfur content — Infrared absorption method after combustion in an induction furnace' may be made available, on request to:**

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