

ICS 77.080.01

CCS H 11



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 20124-2006

**Steel and iron -- Determination of nitrogen content -- Thermal
conductimetric method after fusion in a current of inert gas
(English Translation)**

Issued on: March 2, 2006

Implemented on: September 1, 2006

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine**

Table of Contents

Foreword...	3
1 Scope...	4
2 Normative references...	4
3 Principle...	5
4 Reagents and materials...	5
5 Apparatus...	6
6 Sampling...	7
7 Procedure...	7
8 Expression of results...	9
9 Test report...	10
Annex A (Informative) Examples of diagram for analytical principles...	12

Foreword

This Standard identically uses ISO 15351.1999 Steel and iron - Determination of nitrogen content - Thermal conductimetric method after fusion in a current of inert gas (Routine method).

This Standard is an identical translation of ISO 15351.1999.

For easy use, this Standard made the following editorial modifications.

- a) modified "this International Standard" to "this Standard";
- b) used decimal point "." to replace "," used as decimal point in ISO 15350.2000;
- c) deleted the foreword of ISO 15351.1999.

Annex A, Annex B and Annex C of this Standard are informative.

This Standard was proposed by China Iron and Steel Industry Association.

This Standard shall be under the jurisdiction of National Technical Committee on Steel of Standardization Administration of China.

Main drafting organization of this Standard. Iron and Steel Research Institute.

Main drafter of this Standard. Hu Luofei.

Steel and iron - Determination of nitrogen content -

Thermal conductimetric method after fusion in a

current of inert gas (Routine method)

1 Scope

This Standard specifies a thermal conductimetric method after fusion under inert gas for the determination of nitrogen in steel and iron.

The method is applicable to nitrogen contents between 0.002% (m/m) and 0.6% (m/m).

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

ISO Guide 31 .1981, Contents of certificates of reference materials.

ISO Guide 35.1989, Certification of reference materials - General and statistical principles.

ISO 385-1.1984, Laboratory glassware - Burettes - Part 1. General requirements

ISO 648. 1977, Laboratory glassware - One-mark pipettes.

ISO 1042.1998, Laboratory glassware - One-mark volumetric flasks.

ISO 3696.1987, Water for analytical laboratory use - Specification and test methods.

ISO 5725-1.1994, Accuracy (trueness and precision) of measurement methods and results - Part 1. General principles and definitions.

ISO 5725-2.1994, Accuracy (trueness and precision) of measurement

.....