



BSI Standards Publication

Alloyed steels - Determination of chromium content - Inductively coupled plasma optical emission spectrometric method

National foreword

This Published Document is the UK implementation of CEN/TR 10367:2019.

The UK participation in its preparation was entrusted to Technical Committee ISE/102, Methods of Chemical Analysis for Iron and Steel.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2019
Published by BSI Standards Limited 2019

ISBN 978 0 539 02919 2

ICS 77.080.20

Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 June 2019.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

TECHNICAL REPORT

CEN/TR 10367

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

June 2019

ICS 77.080.20

English Version

Alloyed steels - Determination of chromium content - Inductively coupled plasma optical emission spectrometric method

Aciers alliés - Détermination du chrome - Méthode par
spectrométrie d'émission optique avec source à plasma
induit

Stahl - Bestimmung des Chromgehaltes - Optischer
Emissionsspektrometrie mit induktiv gekoppeltem
Plasma-Verfahren

This Technical Report was approved by CEN on 19 May 2019. It has been drawn up by the Technical Committee CEN/TC 459/SC 2.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle	5
5 Reagents	5
6 Apparatus	6
7 Sampling	6
8 Procedure	7
9 Determination	9
10 Expression of the results	10
11 Test report	11
Annex A (informative) Plasma optical emission spectrometry. Suggested performance criteria to be checked	13
Annex B (informative) Composition of the samples used for the validation precision test	15
Bibliography	17

European foreword

This document (CEN/TR 10367:2019) has been prepared by Technical Committee CEN/TC 459/SC 2 “Methods of chemical analysis for iron and steel”, the secretariat of which is held by SIS.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

Currently in preview, click buy full version

1 Scope

This document specifies an inductively coupled plasma optical emission spectrometric method for the determination of the chromium content (mass fraction) between 5,0 % (m/m) and 27,0 % (m/m) in alloyed steels.

The method doesn't apply to alloyed steels having carbon contents higher than 1 % and niobium and/or tungsten contents higher than 0,1 %.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 648, *Laboratory glassware — Single-volume pipettes*

EN ISO 1042, *Laboratory glassware — One mark volumetric flasks*

EN ISO 14284, *Steel and iron — Sampling and preparation of samples for the determination of chemical composition (ISO 14284)*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>