INTERNATIONAL STANDARD

ISO 8502-5

First edition
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Preparation of steel substrates before application of paints and related products — Tests for the assessment of surface cleanliness —

Part 5:
Measurement of chloride on steel surfaces prepared for painting (ion detection tube method)

Préparation des subjectiles d'acier avant application de peintures et de produits assimilés — Essais pour apprécier la propreté d'une surface —

Partie 5: Mesurage des chlorures sur les surfaces d'acier préparées pour la mise en peinture (méthode du tube détecteur d'ions)

Reference number
ISO 8502-5:1998(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8502-5 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 12, *Preparation of steel substrates before application of paints and related products*.

ISO 8502 consists of the following parts, under the general title *Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness:*

– *Part 1: Field test for soluble iron corrosion products* [Technical Report]

– *Part 2: Laboratory determination of chloride on cleaned surfaces*

– *Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method)*

– *Part 4: Guidance on the estimation of the probability of condensation prior to paint application*

– *Part 5: Measurement of chloride on steel surfaces prepared for painting (ion detection tube method)*

– *Part 6: Extraction of soluble contaminants for analysis – The Bresle method*

– *Part 8: Field method for refractometric determination of moisture*

– *Part 9: Field method for the conductometric determination of water-soluble salts.*

– *Part 10: Field method for the titrimetric determination of chloride*

Further parts are planned.

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Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness –

Part 5:
Measurement of chloride on steel surfaces prepared for painting (ion detection tube method)

1 Scope

This part of ISO 8502 describes a field test for the measurement of chloride ions using special detection tubes.

With suitable surface sampling techniques, the test is applicable to steel surfaces before and after cleaning, as well as to painted surfaces between applications of coats.

> NOTE – ISO 8502-2, *Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness – Part 2: Laboratory determination of chloride on cleaned surfaces,* describes a laboratory method for the determination of chloride on a surface.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 8502. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8502 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3696:1987, *Water for analytical laboratory use – Specification and test methods.*

3 Principle

A proportion of the water-soluble chlorides on the test substrate is removed by controlled washing or immersion in water. The collected washings are analysed to determine the chloride ion concentration, which is indicated by a colour change in a detection tube containing silver chromate.