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**Metallid ja sulamid.
Atmosfäärikorrosiooni katsetamine.
Välikatsete üldnõuded**

Metals and alloys - Atmospheric corrosion testing -
General requirements for field tests

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 8565:2000 sisaldab Euroopa standardi EN ISO 8565:1995 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 8565:2000 consists of the English text of the European standard EN ISO 8565:1995.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: Standard kehtestab üldnõuded metallide ja metalliliste pinnakatete statsionaarse korrosioonikatse kohta välisõhu käes, kusjuures katse tehakse lahtise taeva all või varjualuses.</p>	<p>Scope:</p>
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ICS 77.060

Võtmesõnad: atmosfäärikorrosioonikatsed, katsed, katsetingimused, korrosioon, korrosioonikatsed, korrosioonikatsed välitingimustes, metallid, proovikehad, sulamid

ICS 77.060

Descriptors: Metal coatings, corrosion tests, requirements.

English version

Metals and alloys

Atmospheric corrosion testing

General requirements for field tests

(ISO 8565:1992)

Métaux et alliages; essais de corrosion
atmosphérique; prescriptions générales
de l'essai in situ (ISO 8565:1992)

Metalle und Legierungen; Korrosions-
versuche in der Atmosphäre; allgemeine
Anforderungen an Freibewitterungs-
versuche (ISO 8565:1992)

This European Standard was approved by CEN on 1995-10-03 and is identical to the ISO Standard as referred to.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 8565:1992 Metals and alloys; atmospheric corrosion testing; general requirements for field tests

which was prepared by ISO/TC 107 'Metallic and other inorganic coatings' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 262 'Protection of metallic materials against corrosion' as a European Standard.

This document was submitted for Formal Vote and adopted as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by July 1995 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of the International Standard ISO 8565:1992 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

Introduction

Corrosion testing under atmospheric exposure conditions is carried out in order to

- obtain data on the corrosion resistance of metals, alloys¹⁾ and other inorganic metallic coatings¹⁾ in atmospheric environments;
- evaluate the relationship between the results under given laboratory conditions and in an atmospheric environment;
- evaluate the type of corrosion of particular metals.

It involves exposure of the specimens to the action of atmospheric environments at the test sites and periodic checking of the test specimens. It does not cover service corrosion testing.

The corrosion rate of the specified metal depends on the environment of the atmospheric corrosion test site. The relationship between corrosion rates for metals and atmospheric variables is complex. Therefore the results of field tests cannot be used to predict service performance exactly, but do provide an approximate guidance to service performance.

1) Hereinafter referred to as "metals".

1 Scope

This International Standard establishes general requirements for stationary corrosion testing of metals and metallic coatings under atmospheric conditions carried out in the open air or under shelters.

It may also be applied for indoor testing.

2 Normative references

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

ISO 4221:1980, *Air quality — Determination of mass concentration of sulphur dioxide in ambient air — Thorin spectrophotometric method.*

ISO 4226:1980, *Air quality — General aspects — Units of measurement.*

ISO 4540:1980, *Metallic coatings — Coatings cathodic to the substrate — Rating of electroplated test specimens subjected to corrosion tests.*

ISO 4543:1981, *Metallic and other non-organic coatings — General rules for corrosion tests applicable for storage conditions.*

ISO 6879:1983, *Air quality — Performance characteristics and related concepts for air quality measuring methods.*

2) To be published.

ISO 8403:1991, *Metallic coatings — Coatings anodic to the substrate — Rating of test specimens subjected to corrosion tests.*

ISO 8407:1991, *Corrosion of metals and alloys — Removal of corrosion products from corrosion test specimens.*

ISO 9225:—²⁾, *Corrosion of metals and alloys — Corrosivity of atmospheres — Measurement of pollution.*

ISO 9226:—²⁾, *Corrosion of metals and alloys — Corrosivity of atmospheres — Determination of corrosion rate of standard specimens for the evaluation of corrosivity.*

3 Requirements for test specimens

3.1 Types of specimen

3.1.1 Flat sheet specimens

Rectangular specimens in the form of flat sheets are the preferred type as they can be readily weighed and measured and their simple shape facilitates attachment to test frames. A convenient specimen size is 150 mm × 100 mm. Specimens may be larger provided that they can be accurately evaluated. The specimen thickness shall be adequate to ensure that the specimens will survive the intended test period. The specimen thickness shall also take into account the possibility of mechanical effects and of intergranular corrosion in some materials. The most convenient thickness is 1 mm to 3 mm.

For specimens with metallic coatings the surface area of the test specimens should be as large as possible, in any case not less than 50 cm² (5 cm × 10 cm). If the coated articles used are smaller than 50 cm² in area, specimens of the same kind may be combined to total the required mini-