Metallid ja sulamid. Atmosfäärikorrosiooni katsetamine. Välikatsete üldnõuded (ISO 8565:2011)

Metals and alloys - Atmospheric corrosion testing - General requirements (ISO 8565:2011)

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

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Standard on kinnitatud Eesti Standardikeskuse 29.07.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 29.07.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
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Metals and alloys - Atmospheric corrosion testing - General requirements (ISO 8565:2011)

Métaux et alliages - Essais de corrosion atmosphérique - Exigences générales (ISO 8565:2011)

Metalle und Legierungen - Korrosionsversuche in der Atmosphäre - Allgemeine Anforderungen (ISO 8565:2011)

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Foreword

This document (EN ISO 8565:2011) has been prepared by Technical Committee ISO/TC 156 "Corrosion of metals and alloys" in collaboration with Technical Committee CEN/TC 262 “Metallic and other inorganic coatings” the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2012, and conflicting national standards shall be withdrawn at the latest by January 2012.

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Endorsement notice

The text of ISO 8565:2011 has been approved by CEN as a EN ISO 8565:2011 without any modification.

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Introduction

Corrosion testing under atmospheric exposure conditions is carried out in order

— to obtain data on the corrosion resistance of metals, alloys[1)], metallic and other inorganic coatings in atmospheric environments,

— to evaluate the type of corrosion of particular metals, and

— to obtain data for corrosivity determination and estimation.

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”.

Metals and alloys — Atmospheric corrosion testing — General requirements

1 Scope

This International Standard establishes general requirements for stationary corrosion testing of metals and metallic and other inorganic coatings under atmospheric conditions carried out in the open air or under shelters. It can also be applied for testing of complex specimens and assemblies of metallic materials.

2 Normative references

The following referenced documents are indispensable for the application 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.

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

ISO 8044, *Corrosion of metals and alloys — Basic terms and definitions*

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

ISO 9169, *Air quality — Definition and determination of performance characteristics of an automatic measuring system*

ISO 9223, *Corrosion of metals and alloys — Corrosivity of atmospheres — Classification, determination and estimation*

ISO 9225, *Corrosion of metals and alloys — Corrosivity of atmospheres — Measurement of environmental parameters affecting corrosivity of atmospheres*

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

ISO 10289, *Methods for corrosion testing of metallic and other inorganic coatings on metallic substrates — Rating of test specimens and manufactured articles subjected to corrosion tests*

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 of different size 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