Corrosion of metals and alloys - Removal of corrosion On Provide School Schoo products from corrosion test specimens (ISO 8407:2009)



#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

See Eesti standard EVS-EN ISO 8407:2014 sisaldab Euroopa standardi EN ISO 8407:2014 inglisekeelset teksti.	This Estonian standard EVS-EN ISO 8407:2014 consists of the English text of the European standard EN ISO 8407:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 12.03.2014.	Date of Availability of the European standard is 12.03.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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### EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

**EN ISO 8407** 

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#### **English Version**

## Corrosion of metals and alloys - Removal of corrosion products from corrosion test specimens (ISO 8407:2009)

Corrosion des métaux et alliages - Élimination des produits de corrosion sur les éprouvettes d'essai de corrosion (ISO 8407:2009) Korrosion von Metallen und Legierungen - Entfernen von Korrosionsprodukten von Korrosionsprobekörpern (ISO 8407:2009)

This European Standard was approved by CEN on 9 February 2014.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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#### **Foreword**

The text of ISO 8407:2009 has been prepared by Technical Committee ISO/TC 156 "Corrosion of metals and alloys" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 8407:2014 by 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 September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

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#### **Endorsement notice**

by CEN a. The text of ISO 8407:2009 has been approved by CEN as EN ISO 8407:2014 without any modification.

# Corrosion of metals and alloys — Removal of corrosion products from corrosion test specimens

WARNING — Safety rules for personnel: handling of the solutions used for removal of corrosion products must be left to skilled personnel or conducted under their control. The equipment must be used and maintained by skilled personnel, not only so that the procedures can be performed correctly, but also because of the hazards to health and safety that are involved.

#### 1 Scope

This International Standard specifies procedures for the removal of corrosion products formed on metal and alloy corrosion test specimens during their exposure in corrosive environments. For the purpose of this International Standard, the term "metals" refers to pure metals and alloys.

The specified procedures are designed to remove all corrosion products without significant removal of base metal. This allows an accurate determination of the mass loss of the metal, which occurred during exposure to the corrosive environment.

These procedures may, in some cases, also be applied to metal coatings. However, possible effects from the substrate must be considered.

#### 2 Procedures

#### 2.1 General

- **2.1.1** A light mechanical cleaning treatment by brushing with a soft bristle brush under running water should first be applied to remove lightly adherent or bulky corrosion products.
- **2.1.2** If the treatment described in 2.1.1 does not remove all corrosion products, it will be necessary to use other procedures. These are of three types:
- a) chemical;
- b) electrolytic;
- c) more vigorous mechanical treatments.

NOTE These treatments will also remove some base metal.

Whichever method is used, it might be necessary to repeat the cleaning treatment to ensure complete removal of the corrosion products. Removal shall be confirmed by visual examination. The use of a low-power microscope (i.e.  $\times 7$  to  $\times 30$ ) is particularly helpful with a pitted surface since corrosion products may accumulate in pits.

**2.1.3** An ideal procedure should remove corrosion products and not result in removal of any base metal. Two procedures can be used to confirm this point. One procedure uses a control specimen (2.1.3.1) and the other requires a certain number of cleaning cycles on the corroded specimen (2.1.3.2).

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