



# SLOVENSKI STANDARD SIST EN ISO 17475:2008

01-julij-2008

Corrosion of metals and alloys - Electrochemical test methods - Guidelines for conducting potentiostatic and potentiodynamic polarization measurements (ISO 17475:2005)

## iTeh STANDARD PREVIEW (standards.iteh.ai)

Corrosion des métaux et alliages - Méthodes d'essais électrochimiques - Lignes directrices pour la réalisation de mesures de polarisations potentiostatique et potentiodynamique (ISO 17475:2005)

Ta slovenski standard je istoveten z: EN ISO 17475:2008

**ICS:**

77.060            Korozija kovin                            Corrosion of metals

**SIST EN ISO 17475:2008**                            en

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 17475:2008

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80fl-4d12c3dd6d34/sist-en-iso-17475-2008>

ICS 77.060

English Version

Corrosion of metals and alloys - Electrochemical test methods -  
Guidelines for conducting potentiostatic and potentiodynamic  
polarization measurements (ISO 17475:2005/Cor 1:2006)

Corrosion des métaux et alliages - Méthodes d'essais  
électrochimiques - Lignes directrices pour la réalisation de  
mesures de polarisations potentiostatique et  
potentiodynamique (ISO 17475:2005/Cor 1:2006)

Korrosion von Metallen und Legierungen -  
Elektrochemische Prüfverfahren - Leitfaden für die  
Durchführung potentiostatischer und potentiodynamischer  
Polarisationsmessungen (ISO 17475:2005/Cor 1:2006)

This European Standard was approved by CEN on 21 March 2008.

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

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

**Contents**

Page

Foreword.....3

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

SIST EN ISO 17475:2008

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80f1-4d12c3dd6d34/sist-en-iso-17475-2008>

## Foreword

The text of ISO 17475:2005/Cor 1:2006 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 17475:2008 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 October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**iTeh STANDARD PREVIEW**  
Endorsement notice  
(standards.iteh.ai)

The text of ISO 17475:2005/Cor 1:2006 has been approved by CEN as a EN ISO 17475:2008 without any modification.

[SIST EN ISO 17475:2008](https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80fl-4d12c3dd6d34/sist-en-iso-17475-2008)

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80fl-4d12c3dd6d34/sist-en-iso-17475-2008>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 17475:2008

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80f1-4d12c3dd6d34/sist-en-iso-17475-2008>

---

---

**Corrosion of metals and alloys —  
Electrochemical test methods —  
Guidelines for conducting potentiostatic  
and potentiodynamic polarization  
measurements**

**iTeh STANDARD PREVIEW**  
*Corrosion des métaux et alliages — Méthodes d'essais  
électrochimiques — Lignes directrices pour la réalisation de mesures de  
polarisations potentiostatique et potentiodynamique*  
(standards.iteh.ai)

[SIST EN ISO 17475:2008](https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80f1-4d12c3dd6d34/sist-en-iso-17475-2008)

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80f1-4d12c3dd6d34/sist-en-iso-17475-2008>



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17475:2008](https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80fl-4d12c3dd6d34/sist-en-iso-17475-2008)

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80fl-4d12c3dd6d34/sist-en-iso-17475-2008>

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland



**Contents**

Page

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Principle</b> .....	<b>1</b>
<b>4 Apparatus</b> .....	<b>4</b>
<b>5 Procedure</b> .....	<b>7</b>
<b>6 Test report</b> .....	<b>9</b>
<b>Annex A (informative) Method of preventing a crevice attack for certain applications</b> .....	<b>10</b>
<b>Annex B (informative) Potential of selected reference electrodes at 25 °C with respect to the standard hydrogen electrode (SHE)</b> .....	<b>12</b>
<b>Bibliography</b> .....	<b>13</b>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17475:2008](https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80f1-4d12c3dd6d34/sist-en-iso-17475-2008)

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80f1-4d12c3dd6d34/sist-en-iso-17475-2008>

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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

ISO 17475 was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*, in collaboration with the Korea Research Institute of Standards and Science.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17475:2008](https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80f1-4d12c3dd6d34/sist-en-iso-17475-2008)

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80f1-4d12c3dd6d34/sist-en-iso-17475-2008>

## Introduction

Corrosion of metals and alloys in aqueous solutions is generally caused by an electrochemical mechanism. Therefore, one can measure or analyse corrosion phenomena, utilizing a variety of electrochemical techniques. This International Standard, based on ASTM G5<sup>[1]</sup> and ASTM G150<sup>[2]</sup>, defines basic guidelines for potentiostatic potentiodynamic polarization measurements to characterize an electrochemical kinetics of anodic and cathodic reactions.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 17475:2008](https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80fl-4d12c3dd6d34/sist-en-iso-17475-2008)

<https://standards.iteh.ai/catalog/standards/sist/065cbba1-b595-48cb-80fl-4d12c3dd6d34/sist-en-iso-17475-2008>