This is a preview of "ISO 16773-3:2016". Click here to purchase the full version from the ANSI store.

Second edition 2016-04-01

ISU

Electrochemical impedance spectroscopy (EIS) on coated and uncoated metallic specimens —

Part 3: Processing and analysis of data from dummy cells

Spectroscopie d'impédance électrochimique (SIE) sur des éprouvettes métalliques revêtues et non revêtues —

Partie 3: Traitement et analyse des données obtenues à partir de cellules test



Reference number ISO 16773-3:2016(E) This is a preview of "ISO 16773-3:2016". Click here to purchase the full version from the ANSI store.



© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Page

This is a preview of "ISO 16773-3:2016". Click here to purchase the full version from the ANSI store.

Contents

Foreword	
1	Scope 1
2	Description of the dummy cells12.1General12.2Components of the dummy cells12.3Accuracy requirements for the components22.4Circuit description2
3	Procedure 3
4	Data analysis3
5	Presentation of the results
6	Acceptance criteria for the measurement system
7	Test report 5
8	Repeatability and reproducibility
Biblio	graphy11

This is a preview of "ISO 16773-3:2016". Click here to purchase the full version from the ANSI store.

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 16773-3:2009), which has been technically revised. The main changes are the following:

- a) the introductory element of the title, *Paints and varnishes*, has been omitted, because the scope is broadened to include metals and alloys and the main element of the title has been changed to: *Electrochemical impedance spectroscopy (EIS) on coated and uncoated metallic specimens*;
- b) a reference to ISO/TR 16208 for dummy cells with low impedance values (10 Ω to 1 000 Ω) has been added;
- c) a reference to ASTM G106 for the precision data of low impedance measurements has been added;
- d) a test report has been added.

ISO 16773 consists of the following parts, under the general title *Electrochemical impedance spectroscopy (EIS) on coated and uncoated metallic specimens*:

- Part 1: Terms and definitions
- Part 2: Collection of data
- Part 3: Processing and analysis of data from dummy cells
- Part 4: Examples of spectra of polymer-coated and uncoated specimens