

This is a preview of "ISO 14993:2001". [Click here to purchase the full version from the ANSI store.](#)

First edition
2001-09-01

Corrosion of metals and alloys — Accelerated testing involving cyclic exposure to salt mist, “dry” and “wet” conditions

Corrosion des métaux et alliages — Essais accélérés comprenant des expositions cycliques à des conditions de brouillard salin, de séchage et d'humidité



Reference number
ISO 14993:2001(E)

© ISO 2001

This is a preview of "ISO 14993:2001". [Click here to purchase the full version from the ANSI store.](#)

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.

© ISO 2001

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.ch
Web www.iso.ch

Printed in Switzerland

This is a preview of "ISO 14993:2001". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
1 Scope	1
2 Normative reference	1
3 Test solution	2
4 Apparatus	2
5 Test specimens	3
6 Arrangement of the test specimens	4
7 Operating conditions	4
8 Continuity of tests	4
9 Duration of tests	4
10 Treatment of specimen after testing	5
11 Evaluation of results	5
12 Test report	6

Annexes

A Typical apparatus for cyclic salt mist, "dry" and "wet" corrosion tests.....	7
B Method for evaluation of corrosivity of test.....	8
Bibliography.....	10

This is a preview of "ISO 14993:2001". [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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14993 was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*.

Annexes A and B of this International Standard are for information only.

This is a preview of "ISO 14993:2001". [Click here to purchase the full version from the ANSI store.](#)

Introduction

Corrosion of metallic materials with or without corrosion protection is influenced by many environmental factors, the importance of which may vary depending on the type of metallic material and depending on the type of environment. It is impossible, therefore, to design accelerated laboratory corrosion tests in such a way that all environmental factors influencing the resistance to corrosion are taken into account. Laboratory tests are therefore designed to simulate the effects of the most important factors enhancing the corrosion of metallic materials.

The accelerated corrosion test method described in this International Standard is designed to simulate and enhance the environmental influence on a metallic material of exposure to an outdoor climate where exposure to salt-contaminated conditions occurs and may promote corrosion. The test method involves cyclic exposure of test specimens to a mist of salt solution, to drying conditions and to periods of high humidity. However, the method is mainly intended for comparative testing and the results obtained do not permit far-reaching conclusions on the corrosion resistance of the tested metallic material under the whole range of environmental conditions within which it may be used. Nevertheless, the method provides valuable information on the relative performance of materials exposed to salt-contaminated environments similar to those used in the test.