

Second edition  
2020-03

---

---

## **Corrosion of metals and alloys — General principles for corrosion testing**

*Corrosion des métaux et alliages — Principes généraux des essais de corrosion*



Reference number  
ISO 11845:2020(E)

© ISO 2020



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Fax: +41 22 749 09 47  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of ISO 11845:2020. [Click here to purchase the full version from the ANSI store.](#)

<b>Contents</b>		Page
<b>Foreword</b> .....		<b>iv</b>
<b>Introduction</b> .....		<b>v</b>
<b>1</b>	<b>Scope</b> .....	<b>1</b>
<b>2</b>	<b>Normative references</b> .....	<b>1</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>1</b>
<b>4</b>	<b>General principles</b> .....	<b>1</b>
<b>5</b>	<b>Materials</b> .....	<b>2</b>
<b>6</b>	<b>Corrosive medium</b> .....	<b>3</b>
<b>7</b>	<b>Test procedure</b> .....	<b>3</b>
<b>8</b>	<b>Test report</b> .....	<b>5</b>
<b>Annex A (informative) General requirements for corrosion tests under constant immersion for a specific purpose</b> .....		<b>7</b>
<b>Bibliography</b> .....		<b>10</b>

## 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](http://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](http://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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*.

This second edition cancels and replaces the first edition (ISO 11845:1995), which has been technically revised. The main changes compared with the previous edition are as follows:

- the format has been changed;
- [Annex A](#) has been added with general requirements for corrosion tests under constant immersion.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

This is a preview of ISO 11845:2020. [Click here to purchase the full version from the ANSI store.](#)

## Introduction

The existence of a wide range of corrosion tests, partly as a function of the various materials and corrosive media in existence, calls for guidance in the general procedures that should be used. Corrosion tests, if they are to evaluate and give comparable results, are carried out in accordance with established conditions. Conditions deviating from these conditions are precisely quoted, taking into account all the details given in this document. The most relevant results on corrosion behaviour of metals can normally be obtained from long-term tests under conditions close to those obtained in practice.