



International

This is a preview of ISO 14344:2024. [Click here to purchase the full version from the ANSI store.](#)

ISO 14344

**Welding consumables —
Procurement of filler materials
and fluxes**

*Produits consommables pour le soudage — Approvisionnement
en matériaux d'apport et flux*

**Third edition
2024-09**

This is a preview of ISO 14344:2024. Click [here](#) to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2024

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
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of ISO 14344:2024. [Click here to purchase the full version from the ANSI store.](#)

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Lot classification	3
4.1 General.....	3
4.2 Solid welding consumables.....	4
4.2.1 Lot class S1.....	4
4.2.2 Lot class S2.....	4
4.2.3 Lot class S3.....	4
4.2.4 Lot class S4.....	4
4.2.5 Lot Class S5.....	4
4.3 Tubular cored electrodes and rods.....	4
4.3.1 Lot Class T1.....	4
4.3.2 Lot Class T2.....	5
4.3.3 Lot Class T3.....	5
4.3.4 Lot Class T4.....	5
4.4 Covered electrodes.....	5
4.4.1 Lot Class C1.....	5
4.4.2 Lot Class C2.....	5
4.4.3 Lot Class C3.....	6
4.4.4 Lot Class C4.....	6
4.4.5 Lot Class C5.....	6
4.5 Fluxes for electrosag and submerged arc welding.....	6
4.5.1 Lot Class F1.....	6
4.5.2 Lot Class F2.....	6
5 Testing schedule	6
5.1 General.....	6
5.2 Schedule 1 or F.....	7
5.3 Schedule 2 or G.....	7
5.4 Schedule 3 or H.....	7
5.5 Schedule 4 or I.....	7
5.6 Schedule 5 or J.....	8
5.7 Schedule 6 or K.....	8
6 Certification	8
6.1 General.....	8
6.2 Certificates.....	9
6.2.1 Certificate of compliance.....	9
6.2.2 Certificate of conformance.....	9
6.2.3 Certified material test report (CMTR).....	9
6.3 Inspection documents.....	9
Annex A (informative) Examples of how to apply the 24 h limitation	10
Bibliography	12

This is a preview of ISO 14344:2024. [Click here to purchase the full version from the ANSI store.](#)

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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.

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 3, *Welding consumables*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 121, *Welding and allied processes*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 14344:2010), which has been technically revised.

The main changes are as follows:

- content from scope has been moved to the introduction;
- in [Clause 2](#), reference is made to ISO 544, ISO 10474 and EN 10204;
- in [Clause 3](#), terms and definitions have been revised and the list expanded;
- [Clause 5](#) has been significantly revised.

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. Official interpretations, where they exist, are available from this page: <https://committee.iso.org/sites/tc44/home/interpretation.html>. Official interpretations, where they exist, are available from this page: <https://committee.iso.org/sites/tc44/home/interpretation.html>.

This is a preview of ISO 14344:2024. [Click here to purchase the full version from the ANSI store.](#)

In production, the components of welding consumables are divided into discrete, predetermined quantities so that satisfactory tests with a sample from that quantity will establish that the entire quantity meets specification requirements. These quantities, known by such terms as heats, lots, blends, batches and mixes, vary in size according to the manufacturer. For identification purposes, each manufacturer assigns a unique designation to each quantity. This designation usually consists of a series of numbers or letters, or combinations thereof, which will enable the manufacturer to determine the date and time (or shift) of manufacture, the raw materials used, and the details of the procedures used in producing the welding consumable. This designation stays with the welding consumable and can be used to identify the material later, in those cases in which identification is necessary.