# Zváracie materiály Obstarávanie prídavných materiálov a tavív (ISO 14344: 2024) STN EN ISO 14344 05 5514

Welding consumables - Procurement of filler materials and fluxes (ISO 14344:2024)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/24

Obsahuje: EN ISO 14344:2024, ISO 14344:2024

Oznámením tejto normy sa ruší STN EN ISO 14344 (05 5514) z augusta 2010

#### 139622

#### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 14344** 

September 2024

ICS 25.160.20

Supersedes EN ISO 14344:2010

**English Version** 

## Welding consumables - Procurement of filler materials and fluxes (ISO 14344:2024)

Produits consommables pour le soudage -Approvisionnement en matériaux d'apport et flux (ISO 14344:2024) Schweißzusätze - Beschaffung von Schweißzusätzen (ISO 14344:2024)

This European Standard was approved by CEN on 17 May 2024.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

#### EN ISO 14344:2024 (E)

Contents	Page
European foreword	3
European Ioreworu	

EN ISO 14344:2024 (E)

#### **European foreword**

This document (EN ISO 14344:2024) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding and allied processes" the secretariat of which is held by AFNOR.

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 March 2025, and conflicting national standards shall be withdrawn at the latest by March 2025.

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

This document supersedes EN ISO 14344:2010.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

#### **Endorsement notice**

The text of ISO 14344:2024 has been approved by CEN as EN ISO 14344:2024 without any modification.



# International Standard

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



#### **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

Contents		Page	
For	eword		iv
Intr	oductio	on	v
1		pe	
	-		
2		mative references	
3	Teri	ms and definitions	
4	Lot	classification	
	4.1	General	
	4.2	Solid welding consumables	
		4.2.1 Lot class S1	
		4.2.2 Lot class S2	4
		4.2.3 Lot class \$3	4
		4.2.4 Lot class \$4	
		4.2.5 Lot Class S5	
	4.3	Tubular cored electrodes and rods	
		4.3.1 Lot Class T1	
		4.3.2 Lot Class T2	
		4.3.3 Lot Class T3	
		4.3.4 Lot Class T4	
	4.4	Covered electrodes	
		4.4.1 Lot Class C1	
		4.4.2 Lot Class C2	
		4.4.3 Lot Class C3	
		4.4.4 Lot Class C4	
		4.4.5 Lot Class C5	
	4.5	Fluxes for electroslag and submerged arc welding	6
		4.5.1 Lot Class F1	
		4.5.2 Lot Class F2	6
5		ting schedule	6
	5.1	General	
	5.2	Schedule 1 or F	
	5.3	Schedule 2 or G	
	5.4		
	5.5	Schedule 4 or I	
	5.6	Schedule 5 or J	
	5.7	Schedule 6 or K	8
6	Cert	tification	8
	6.1	General	8
	6.2	Certificates	
		6.2.1 Certificate of compliance	
		6.2.2 Certificate of conformance	
		6.2.3 Certified material test report (CMTR)	
	6.3	Inspection documents	9
Ann	nex A (ir	nformative) Examples of how to apply the 24 h limitation	10
Bib	liograp	hy	12

#### **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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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.

should Any feedback or questions this document be directed to the user's found body. complete listing these bodies be national standards Α of can 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.

#### Introduction

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.

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

#### 1 Scope

This document specifies tools for communication between a purchaser and a supplier of welding consumables within quality systems, such as those based upon ISO 9001.

This document, together with an applicable welding consumable standard (ISO or other), provides a method for preparing the specific details needed for welding consumable procurement which consists of:

- a) the welding consumable classification (selected from the applicable welding consumable standard);
- b) the lot classification (selected from <a href="Clause 4">Clause 4</a>);
- c) the testing schedule (selected from <u>Clause 5</u>).

Selection of the specific welding consumable classification, lot classification, and testing schedule depends upon the requirements of the application for which the welding consumable is being procured.

This document does not apply to non-consumable electrodes or shielding gases.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 544, Welding consumables – Technical delivery conditions for filler materials and fluxes – Type of product, dimensions, tolerances and markings

ISO 10474, Steel and steel products — Inspection documents

EN 10204, Metallic products - Types of inspection documents

#### koniec náhľadu – text ďalej pokračuje v platenej verzii STN