

ILNAS

Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN ISO 2560:2020

Welding consumables - Covered electrodes for manual metal arc welding of non-alloy and fine grain steels - Classification (ISO 2560:2020)

Produits consommables pour le soudage
- Électrodes enrobées pour le soudage
manuel à l'arc des aciers non alliés et des
aciers à grains fins - Classification (ISO

Schweißzusätze - Umhüllte
Stabelektroden zum
Lichtbogenhandschweißen von
unlegierten Stählen und Feinkornstählen

09/2020



National Foreword

This European Standard EN ISO 2560:2020 was adopted as Luxembourgish Standard ILNAS-EN ISO 2560:2020.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

<https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html>

THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

English Version

Welding consumables - Covered electrodes for manual metal arc welding of non-alloy and fine grain steels - Classification (ISO 2560:2020)

Produits consommables pour le soudage - Électrodes enrobées pour le soudage manuel à l'arc des aciers non alliés et des aciers à grains fins - Classification (ISO 2560:2020)

Schweißzusätze - Umhüllte Stabelektroden zum Lichtbogenhandschweißen von unlegierten Stählen und Feinkornstählen - Einteilung (ISO 2560:2020)

This European Standard was approved by CEN on 16 July 2020.

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, Turkey 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

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 2560:2020) 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 DIN.

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 2021, and conflicting national standards shall be withdrawn at the latest by March 2021.

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 2560:2009.

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, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 2560:2020 has been approved by CEN as EN ISO 2560:2020 without any modification.

**Welding consumables — Covered
electrodes for manual metal arc
welding of non-alloy and fine grain
steels — Classification**

*Produits consommables pour le soudage — Électrodes enrobées pour
le soudage manuel à l'arc des aciers non alliés et des aciers à grains
fins — Classification*



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

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Classification	2
5 Symbols and requirements	3
5.1 Symbol for the product/process.....	3
5.2 Symbols for strength and elongation of all-weld metal.....	3
5.3 Symbol for impact properties of all-weld metal.....	5
5.4 Symbol for the chemical composition of all-weld metal.....	5
5.5 Symbol for type of electrode covering.....	7
5.6 Symbol for condition of post-weld heat-treatment of all-weld metal.....	9
5.7 Symbol for electrode efficiency and type of current.....	10
5.8 Symbol for welding position.....	10
5.9 Symbol for diffusible hydrogen content of deposited metal.....	11
6 Mechanical tests	11
6.1 Preheating and interpass temperatures.....	12
6.2 Pass sequence.....	14
7 Chemical analysis	15
8 Fillet weld test	20
9 Rounding procedure	22
10 Retests	22
11 Technical delivery conditions	22
12 Examples of designation	23
Annex A (informative) Classification systems	25
Annex B (informative) Description of types of electrode covering — Classification by yield strength and 47 J impact energy	28
Annex C (informative) Description of types of electrode covering — Classification by tensile strength and 27 J impact energy	30
Annex D (informative) Notes on diffusible hydrogen and the avoidance of cold cracking	33
Bibliography	34