



# SLOVENSKI STANDARD SIST EN ISO 3580:2018

01-februar-2018

Nadomešča:  
SIST EN ISO 3580:2011

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**Dodajni materiali za varjenje - Oplaščene elektrode za obločno varjenje jekel, odpornih proti lezenju - Razvrstitev (ISO 3580:2017)**

Welding consumables - Covered electrodes for manual metal arc welding of creep-resisting steels - Classification (ISO 3580:2017)

Schweißzusätze - Umhüllte Stabelektroden zum Lichtbogenhandschweißen von warmfesten Stählen - Einteilung (ISO 3580:2017)

Produits consommables pour le soudage à l'arc - Électrodes enrobées pour le soudage manuel à l'arc des aciers résistant au fluage - Classification (ISO 3580:2017)

**Ta slovenski standard je istoveten z: EN ISO 3580:2017**

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**ICS:**

25.160.20      Potrošni material pri varjenju      Welding consumables

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**en,fr,de**

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EUROPEAN STANDARD

EN ISO 3580

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 25.160.20

Supersedes EN ISO 3580:2011

English Version

## Welding consumables - Covered electrodes for manual metal arc welding of creep-resisting steels - Classification (ISO 3580:2017)

Produits consommables pour le soudage - Électrodes enrobées pour le soudage manuel à l'arc des aciers résistant au fluage - Classification (ISO 3580:2017)

Schweißzusätze - Umhüllte Stabelektroden zum Lichtbogenhandschweißen von warmfesten Stählen - Einteilung (ISO 3580:2017)

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN ISO 3580:2017) 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of an identical text or by endorsement, at the latest by November 2017, and conflicting national standards shall be withdrawn at the latest by November 2017.

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

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INTERNATIONAL  
STANDARD

ISO  
3580

Fourth edition  
2017-04

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**Welding consumables — Covered  
electrodes for manual metal arc  
welding of creep-resisting steels —  
Classification**

*Produits consommables pour le soudage — Électrodes enrobées  
pour le soudage manuel à l'arc des aciers résistant au fluage —  
Classification*

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Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
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## ISO 3580:2017(E)

## 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)).

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For an explanation on 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 the following URL: [www.iso.org/iso/foreword.html](http://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*.

This fourth edition cancels and replaces the third edition (ISO 3580:2010), which has been technically revised with the following changes:

- the normative references have been updated;
- new classifications from the USA and Japan have been added in system B;
- revisions/corrections of chemical compositions and other values have been made in the tables;
- Footnote d) to [Table 1](#) has been revised to clarify that elements intentionally added that do not have values listed (including Co and B) are to be reported;
- the descriptions in [Table 3](#) have been revised;
- the range for nominal electrode efficiency for symbol 4 in [Table 4](#) has been corrected.

Requests for official interpretations of any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 3 via your national standards body. A complete listing of these bodies can be found at [www.iso.org](http://www.iso.org).

## Introduction

This document proposes a method for classification of covered electrodes, in terms of chemical composition of the all-weld metal (system A) and in terms of tensile strength and chemical composition (system B).

The mechanical properties of all-weld metal test specimens used to classify the electrodes vary from those obtained in production joints because of differences in welding procedure such as electrode diameter, width of weave, welding position and material composition.

The classification according to system A is mainly based on EN 1599<sup>[1]</sup>. The classification according to system B is mainly based upon standards used around the Pacific Rim.

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