

SLOVENSKI STANDARD

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Nadomešča:

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Cinkove prevleke - Smernice in priporočila za zaščito železnih in jeklenih konstrukcij proti koroziji - 3. del: Šerardiranje (ISO 14713-3:2017)

Zinc coatings - Guidelines and recommendations for the protection against corrosion of iron and steel in structures - Part 3: Sherardizing (ISO 14713-3:2017)

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Zinküberzüge - Leitfäden und Empfehlungen zum Schutz von Eisen- und Stahlkonstruktionen vor Korrosion - Teil 3: Sherardisieren (ISO 14713-3:2017)

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Revêtements de zinc - Lignes directrices et recommandations pour la protection contre la corrosion du fer et de l'acier dans les constructions - Partie 3: Shérardisation (ISO 14713-3:2017)

Ta slovenski standard je istoveten z: EN ISO 14713-3:2017

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25.220.40	Kovinske prevleke	Metallic coatings
91.080.10	Kovinske konstrukcije	Metal structures
91.080.13	Jeklene konstrukcije	Steel structures

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en

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EUROPEAN STANDARD
 NORME EUROPÉENNE
 EUROPÄISCHE NORM

EN ISO 14713-3

May 2017

ICS 25.220.40

Supersedes EN ISO 14713-3:2009

English Version

**Zinc coatings - Guidelines and recommendations for the
 protection against corrosion of iron and steel in structures
 - Part 3: Sherardizing (ISO 14713-3:2017)**

Revêtements de zinc - Lignes directrices et
 recommandations pour la protection contre la
 corrosion du fer et de l'acier dans les constructions -
 Partie 3: Shérardisation (ISO 14713-3:2017)

Zinküberzüge - Leitfäden und Empfehlungen zum
 Schutz von Eisen- und Stahlkonstruktionen vor
 Korrosion - Teil 3: Sherardisieren (ISO 14713-3:2017)

This European Standard was approved by CEN on 3 May 2017.

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 COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN ISO 14713-3:2017) has been prepared by Technical Committee ISO/TC 107 “Metallic and other inorganic coatings” in collaboration with Technical Committee CEN/TC 262 “Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys” the secretariat of which is held by BSI.

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.

This document supersedes EN ISO 14713-3:2009.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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The text of ISO 14713-3:2017 has been approved by CEN as EN ISO 14713-3:2017 without any modification.

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INTERNATIONAL
STANDARD

ISO
14713-3

Second edition
2017-04

**Zinc coatings — Guidelines and
recommendations for the protection
against corrosion of iron and steel in
structures —**

Part 3:
Sherardizing

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*Revêtements de zinc — Lignes directrices et recommandations
pour la protection contre la corrosion du fer et de l'acier dans les
constructions —*

SIST EN ISO 14713-3:2017

Partie 3: Shérardisation

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
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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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html. (standards.iteh.ai)

This document was prepared by Technical Committee ISO/TC 107, *Metallic and other inorganic coatings*, Subcommittee SC 4, *Hot dip coatings (galvanized, etc.)*.

This second edition cancels and replaces the first edition (ISO 14713-3:2009), of which it constitutes a minor revision following the publication of ISO 17668 with the following changes:

- ISO 17668 has replaced EN 13811;
- [Table 1](#) has been amended to align coating classes with ISO 17668.

A list of all parts in the ISO 14713 series can be found on the ISO website.

Introduction

Sherardizing is a thermal diffusion process in which articles are heated in the presence of a sherardizing mixture consisting of zinc dust with or without an inert material.

The process is carried out in a slowly rotating closed container at temperatures ranging from about 300 °C to 500 °C. The normal processing temperature is below the melting point of zinc (419 °C).

During the process, zinc/iron alloys are built up on the surface of the ferrous articles. A coating thickness of 10 µm to 75 µm (and higher if required) can be achieved. The coating thickness is accurately controlled by the amount of zinc dust, the processing time and temperature. The coating closely follows the contours of the basis material, and uniform coatings are produced on articles, including those of irregular shape.

After sherardizing, the containers are cooled down. A screening process separates the sherardized articles from the unused sherardizing mixture. The articles, with the zinc/iron-alloyed layer, are normally post-treated by phosphating, chromating or another suitable passivation process (conversion coating) resulting in a dust-free and clean passivated surface.

Most steel and iron articles can be sherardized.

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