

SLOVENSKI STANDARD SIST EN ISO 14713-1:2010

01-marec-2010

BUXca Yý U. SIST EN ISO 14713:1999

7]b_cj Y'dfYj`Y_Y!'Ga Yfb]WY']b'df]dcfc]`UnUnUý]lc'ÿY`Ynb]\ ']b'^Y_`Yb]\
_cbglfi _W]^dfchj'_cfcn]^J''!'%'XY`.'Gd`cýbUbU Y`UnUdfc^Y_h]fUb^Y']b'_cfcn]^g_c
cXdcfbcghiflGC'%(+%!%&\$\$-\L

Zinc coatings - Guidelines and recommendations for the protection against corrosion of iron and steel in structures - Part 1: General principles of design and corrosion resistance (ISO 14713-1:2009)

iTeh STANDARD PREVIEW

Zinküberzüge - Leitfäden und Empfehlungen zum Schutz von Eisen- und Stahlkonstruktionen vor Korrosion - Teil 1: Allgemeine Konstruktionsgrundsätze und Korrosionsbeständigkeit (ISO 14713-1:2009) 14713-1:2010

https://standards.iteh.a/catalog/standards/sist/782f987a-26cb-4383-96a1-65c2e2cc0a20/sist-en-iso-14713-1-2010

Revêtements de zinc - Lignes directrices et recommandations pour la protection contre la corrosion du fer et de l'acier dans les constructions - Partie 1: Principes généraux de conception et résistance à la corrosion (ISO 14713-1:2009)

Ta slovenski standard je istoveten z: EN ISO 14713-1:2009

ICS:

25.220.40 Kovinske prevleke Metallic coatings 91.080.10 Kovinske konstrukcije Metal structures

SIST EN ISO 14713-1:2010 en

SIST EN ISO 14713-1:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 14713-1:2010

https://standards.iteh.ai/catalog/standards/sist/782f987a-26cb-4383-96a1-65c2e2cc0a20/sist-en-iso-14713-1-2010

EUROPEAN STANDARD

EN ISO 14713-1

NORME EUROPÉENNE EUROPÄISCHE NORM

December 2009

ICS 25.220.40; 91.080.10

Supersedes EN ISO 14713:1999

English Version

Zinc coatings - Guidelines and recommendations for the protection against corrosion of iron and steel in structures - Part 1: General principles of design and corrosion resistance (ISO 14713-1:2009)

Revêtements de zinc - Lignes directrices et recommandations pour la protection contre la corrosion du fer et de l'acier dans les constructions - Partie 1: Principes généraux de conception et résistance à la corrosion (ISO 14713-1:2009)

Zinküberzüge - Leitfäden und Empfehlungen zum Schutz von Eisen- und Stahlkonstruktionen vor Korrosion - Teil 1: Allgemeine Konstruktionsgrundsätze und Korrosionsbeständigkeit (ISO 14713-1:2009)

This European Standard was approved by CEN on 18 November 2009.

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 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 Management Centre has the same status as the official versions.

https://standards.iteh.ai/catalog/standards/sist/782f987a-26cb-4383-96a1-

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



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 14713-1:2009 (E)

Contents	Page
Foreword	3

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 14713-1:2010</u> https://standards.iteh.ai/catalog/standards/sist/782f987a-26cb-4383-96a1-65c2e2cc0a20/sist-en-iso-14713-1-2010

EN ISO 14713-1:2009 (E)

Foreword

This document (EN ISO 14713-1:2009) 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" 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 June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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 14713:1999.

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

iTeh STANDARD PREVIEW

(stan Endorsement notice)

The text of ISO 14713-1:2009 has been approved by CEN as a EN ISO 14713-1:2009 without any modification.

https://standards.iteh.ai/catalog/standards/sist/782f987a-26cb-4383-96a1-65c2e2cc0a20/sist-en-iso-14713-1-2010

SIST EN ISO 14713-1:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 14713-1:2010

https://standards.iteh.ai/catalog/standards/sist/782f987a-26cb-4383-96a1-65c2e2cc0a20/sist-en-iso-14713-1-2010

SIST EN ISO 14713-1:2010

INTERNATIONAL **STANDARD**

ISO 14713-1

> First edition 2009-12-15

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

Part 1:

General principles of design and iTeh STcorrosion resistance W

(standards.iteh.ai)
Revêtements de zinc — Lignes directrices et recommandations pour la protection contre la corrosion du fer et de l'acier dans les

https://standards.iteh.avcatalog/standards/sist/782f987a-26cb-4383-96a1-

65c2 Partie 1: Principes généraux de conception et résistance à la corrosion



ISO 14713-1:2009(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 14713-1:2010</u> https://standards.iteh.ai/catalog/standards/sist/782f987a-26cb-4383-96a1-65c2e2cc0a20/sist-en-iso-14713-1-2010



COPYRIGHT PROTECTED DOCUMENT

© ISO 2009

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Forewo	Forewordi	
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4 4.1 4.2	Materials	3
5	Selection of zinc coating	3
6	Design requirements	
6.1	General principles of design to avoid corrosion	4
6.2 6.3	Design for application of different zinc coating processes	
6.4	Tubes and hollow sections Connections	
6.5	Duplex systems	
6.6	Maintenance	7
7	Maintenance STANDARD PREVIEW Corrosion in different environments	7
7.1	Atmospheric exposure(standards.itch.ai) Exposure to soils	7
7.2 7.3	Exposure to soils	.10
7.3 7.4	Abrasion SIST EN ISO 14713-1:2010	.12 12
7.5	Exposure to water SIST EN ISO 14713-1:2010 Exposure to chemicals iteh ai/catalog/standards/sist/782f987a-26cb-4383-96a1-	. 12
7.6	Elevated temperatures <u>.65c2e2cc0a20/sist-en-iso-14713-1-2010</u>	.13
7.7	Contact with concrete	
7.8	Contact with wood	
7.9	Bimetallic contact	
8	Accelerated test methods applied to zinc coatings	.16
Bibliog	graphy	.17

ISO 14713-1:2009(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 14713-1 was prepared by Technical Committee ISO/TC 107, *Metallic and other inorganic coatings*, Subcommittee SC 4, *Hot dip coatings (galvanized, etc.)*.

This first edition, together with ISO 14713-2 and ISO 14713-3, cancels and replaces ISO 14713:1999, which has been technically revised. (standards.iteh.ai)

ISO 14713 consists of the following parts, under the general title *Zinc coatings*— *Guidelines and recommendations for the protection against corrosion of fron and steel in structures*:

https://standards.iteh.ai/catalog/standards/sist/782f987a-26cb-4383-96a1-

- Part 1: General principles of design and corrosion resistance 4713-1-2010
- Part 2: Hot dip galvanizing
- Part 3: Sherardizing

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

Part 1:

General principles of design and corrosion resistance

1 Scope

This part of ISO 14713 provides guidelines and recommendations regarding the general principles of design which are appropriate for articles to be zinc coated for corrosion protection and the level of corrosion resistance provided by zinc coatings applied to iron or steel articles, exposed to a variety of environments. Initial protection is covered in relation to

- available standard processes,
- design considerations, and STANDARD PREVIEW
- environments for use.(standards.iteh.ai)

This part of ISO 14713 applies to zinc coatings applied by the following processes:

https://standards.iteh.ai/catalog/standards/sist/782f987a-26cb-4383-96a1-

- a) hot dip galvanized coatings (applied after fabrication):713-1-2010
- b) hot dip galvanized coatings (applied onto continuous sheet);
- c) sherardized coatings;
- d) thermal sprayed coatings;
- e) mechanically plated coatings;
- f) electrodeposited coatings.

These guidelines and recommendations do not deal with the maintenance of corrosion protection in service for steel with zinc coatings. Guidance on this subject can be found in ISO 12944-5 and ISO 12944-8.

NOTE There are a variety of product-related standards (e.g. for nails, fasteners, ductile iron pipes, etc.) which provide specific requirements for the applied zinc coating systems which go beyond any general guidance presented in this part of ISO 14713. These specific product-related requirements will take precedence over these general recommendations.

2 Normative references

The following referenced documents are indispensable for the application 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 1461, Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods