Irish Standard
I.S. EN ISO 14713-2:2009

Zinc coatings - Guidelines and recommendations for the protection against corrosion of iron and steel in structures - Part 2: Hot dip galvanizing (ISO 14713-2:2009)

I.S. EN ISO 141713-2:2009

Incorporating amendments/corrigenda issued since publication:

This document replaces:	*This document is based on:*	*Published:*
EN ISO 14713:1999	EN ISO 14713-2:2009 EN ISO 14713:1999	15 December, 2009 18 June, 1999

This document was published
under the authority of the NSAI
and comes into effect on:
29 January, 2010

ICS number:
25.220.40
91.080.10

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I.S. EN ISO 14713-2:2009

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 14713-2

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 2: Hot dip galvanizing (ISO 14713-2:2009)

Revêtements de zinc - Lignes directrices et recommandations pour la protection contre la corrosion du fer et de l'acier dans les constructions - Partie 2: Galvanisation à chaud (ISO 14713-2:2009)

Zinküberzüge - Leitfäden und Empfehlungen zum Schutz von Eisen- und Stahlkonstruktionen vor Korrosion - Teil 2: Schmelztauchverzinken (ISO 14713-2:2009)

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Ref. No. EN ISO 14713-2:2009: E

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Foreword

This document (EN ISO 14713-2:2009) 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of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.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.

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Endorsement notice

The text of ISO 14713-2:2009 has been approved by CEN as a EN ISO 14713-2:2009 without any modification.

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I.S. EN ISO 14713-2:2009

INTERNATIONAL STANDARD

ISO 14713-2

First edition
2009-12-15

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

Part 2: Hot dip galvanizing

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

Partie 2: Galvanisation à chaud

Reference number
ISO 14713-2:2009(E)

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Published in Switzerland

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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.

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.

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ISO 14713-2 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 14713-1 and ISO 14713-3, cancels and replaces ISO 14713:1999, which has been technically revised

ISO 14713 consists of the following parts, under the general title *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*

— *Part 2: Hot dip galvanizing*

— *Part 3: Sherardizing*

The principal changes to this part of ISO 14713 compared to ISO 14713:1999 are the following.

— This part of ISO 14713 only provides design guidance for hot dip galvanizing of articles.

— The normative references (Clause 2) have been updated to take into account the very latest standards available to readers.

— Additional guidance on the effect of the iron/steel surface composition has been provided (6.1.1, Table 1).

— Additional information has been provided on the effect of thermal cutting processes (6.4) and the influence of internal stresses in the basis steel during hot dip galvanizing (6.5).

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

Part 2: Hot dip galvanizing

1 Scope

This part of ISO 14713 provides guidelines and recommendations regarding the general principles of design which are appropriate for articles to be hot dip galvanized for corrosion protection.

The protection afforded by the hot dip galvanized coating to the article will depend upon the method of application of the coating, the design of the article and the specific environment to which the article is exposed. The hot dip galvanized article can be further protected by application of additional coatings (outside the scope of this part of ISO 14713), such as organic coatings (paints or powder coatings). When applied to hot dip galvanized articles, this combination of coatings is often known as a “duplex system”.

The guidelines and recommendations in this part of ISO 14713 do not deal with the maintenance of corrosion protection in service for steel with hot dip galvanized coatings. Guidance on this subject can be found in ISO 12944-5.

Specific product-related requirements (e.g. for hot dip galvanized coatings on tubes or fasteners, etc.) 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*

ISO 4964, *Steel — Hardness conversions*

ISO 8044, *Corrosion of metals and alloys — Basic terms and definitions*

ISO 10684, *Fasteners — Hot dip galvanized coatings*

ISO 12944-5, *Paints and varnishes — Corrosion protection of steel structures by protective paint systems — Part 5: Protective paint systems*

EN 10210-1, *Hot finished structural hollow sections of non-alloy and fine grain steels — Part 1: Technical delivery requirements*

EN 10219-1, *Cold formed welded structural hollow sections of non-alloy and fine grain steels — Part 1: Technical delivery requirements*