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Údarás um Chaighdeán Náisiúnta na hÉireann

IRISH STANDARD

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**SHERARDIZING - ZINC DIFFUSION COATINGS
ON FERROUS PRODUCTS -
SPECIFICATION**

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ICS 25.220.40

English version

Sherardizing - Zinc diffusion coatings on ferrous products - Specification

Shéardisation - Revêtements par diffusion de zinc sur les
produits ferreux - Spécifications

Sherardisieren - Zink-Diffusionsüberzüge auf
Eisenwerkstoffen - Anforderungen

This European Standard was approved by CEN on 20 February 2003.

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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 Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document EN 13811:2003 has been prepared by 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of an identical text or by endorsement, at the latest by October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

Annex A is normative. Annexes B and C are informative.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovak Republic, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies minimum thickness requirements for three classes of zinc coating applied to ferrous products by the sherardizing process for the purpose of protection against corrosion and abrasion.

It also specifies minimum requirements for the zinc dust to be used during the sherardizing process.

This standard does not specify any requirements for the surface condition (finish or roughness) of the basis material before sherardizing.

After-treatments or overcoating of sherardized articles is not covered by this standard.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 10204, *Metallic products — Types of inspection documents*.

EN ISO 1460, *Metallic coatings — Hot dip galvanized coatings on ferrous materials — Gravimetric determination of the mass per unit area (ISO 1460:1992)*.

EN ISO 2178, *Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method (ISO 2178:1982)*.

EN ISO 3549, *Zinc dust pigments for paints — Specifications and test methods (ISO 3549:1995)*.

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

3.1

sherardizing

solid diffusion process in which articles are heated in close contact with zinc dust and an inert material such as sand

3.2

sherardized coating

coating consisting of zinc/iron alloys obtained by the sherardizing process, and subsequently passivated

NOTE 'Sherardized coating' is referred to in this standard as 'coating'.

3.3

coating mass

total mass of zinc/iron alloys per unit area of surface, expressed in grams per square metre, g/m^2

3.4

coating thickness

total coating thickness of zinc/iron alloys, expressed in micrometres, μm

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