

Corrosion protection of metals — Electrodeposited coatings of cadmium on iron or steel

The European Standard EN 12330:2000 has the status of a
British Standard

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National foreword

This British Standard is the official English language version of EN 12330:2000. BS EN 12330:2000, together with BS EN 12329:2000 supersedes BS 1706:1990 which is withdrawn.

CAUTION EN 12330 was approved as a European Standard as it received the requisite support amongst the 19 member bodies of the European Committee for Standardization (CEN). The UK therefore has an obligation to implement EN 12330 as its national standard and to withdraw BS 1706 with which it conflicts. However, your attention is drawn to the fact that the UK did not support this standard on the basis of possible safety implications, these being related to the commencement of heat treatment as described in clause 6. The UK concern is that once a sub-microscopic crack forms in the coated article, at present there is no means for its detection and it cannot be “removed”. Following the initiation of a sub-microscopic crack no subsequent heat treatment can repair the damage already sustained. It is essential therefore that the delay in applying heat treatment is as short as practicable. The UK recommendation therefore was to amend the requirement in clause 6 to “heat treatment shall commence as soon as possible, preferably within 1 h, but not later than 3 h after plating” in accordance with those conditions given in ISO 9588. The recommendation was not accepted by the CEN Technical Committee responsible for the development of EN 12330.

The UK participation in its preparation was entrusted to Technical Committee STI/33, Electrodeposited and related coatings, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 14, an inside back cover and a back cover.

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Protectoin contre la corrosion des métaux – Revêtements électrolytiques de cadmium sur fer ou acier

Korrosionsschutz von Metallen – Galvanische Cadmiumüberzüge auf Eisenwerkstoffen

This European Standard was approved by CEN on 3 February 2000.

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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 Central Secretariat has the same status as the official versions.

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Foreword

This European Standard 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 November 2000, and conflicting national standards shall be withdrawn at the latest by November 2000.

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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

WARNING Due to regulations the alteration of which is for the time being outside the competence of the CEN members, this European Standard contains A-deviations as detailed in Annex ZB (informative).

Introduction

Electrodeposited coatings of cadmium can be chromate treated in order to retard the formation of corrosion products on surfaces of coatings exposed to corrosive atmospheres. When corrosion protection is the main purpose of the coating, the usual practice is to apply a chromate conversion coating on top of the electrodeposited cadmium coating. This is particularly effective in retarding the formation of corrosion products which form on cadmium coatings under certain conditions (see Annex A).

Certain types of chromate conversion coating can be coloured in order to facilitate identification of the treated articles.