

BS 7371-3:2009



BSI Standards Publication

Coatings on metal fasteners – Part 3: Specifications for electroplated zinc coatings

bsi.

...making excellence a habit.
AVA Documents™
Document Sharing Hub

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© BSI 2009

ISBN 978 0 580 55383 7

ICS 21.060.01, 25.220.40

The following BSI references relate to the work on this standard:

Committee reference FME/9

Draft for comment 08/30133820

Publication history

First published September 1993

Second edition August 2009

Amendments issued since publication

Date	Text affected
------	---------------

Contents

Foreword *iii*

Introduction 1

1 Scope 2

2 Normative references 2

3 Terms and definitions 3

4 Application and type of coating 3

5 Coating 3

6 Chromate treatment or topcoat 6

7 Suitability of coatings for components with parallel threads 6

8 Information to be documented and supplied to the coater 7

9 Identification 7

Annexes

Annex A (normative) Coating thickness for threaded parts 8

Annex B (normative) Measurement of coating thickness 9

Annex C (informative) Guidance on procedures that may be adopted to accommodate thick coatings 11

Bibliography 12

List of figures

Figure B.1 – Measuring area for local coating thickness measurement on fasteners 9

List of tables

Table 1 – Nominal coating thicknesses 4

Table 2 – Coating designation and corrosion resistance 5

Table 3 – Designation of chromate treatments 6

Table 4 – Designation of tri-valent based treatments 6

Table A.1 – Upper limits of nominal coating thickness 8

Table C.1 – Minimum fundamental deviation required to accommodate coatings too thick to be applied to standard threads, metric threads 11

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 12, an inside back cover and a back cover.

Foreword

Publishing information

This part of BS 7371 is published by BSI and came into effect on 31 August 2009. It was prepared by Subcommittee FME/9/1, *Mechanical properties of fasteners*, under the authority of Technical Committee FME/9, *Fasteners*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This part of BS 7371 supersedes BS 7371-3:1993, which is withdrawn.

Relationship with other publications

Other published Parts of BS 7371 are as follows:

- BS 7371-1, *Coatings on metal fasteners – Specification for general requirements and selection guidelines*
- BS 7371-2, *Coatings on metal fasteners – Part 2: Specification for torque/clamping force relationship*
- BS 7371-4, *Coating on metal fasteners – Part 4: Specification for electroplated nickel, nickel/chromium and copper/nickel/chromium coatings*
- BS 7371-6, *Coatings on metal fasteners – Part 6: Specification for hot dipped galvanized coatings*
- BS 7371-7, *Coatings on metal fasteners – Part 7: Specification for mechanically applied zinc and zinc based coatings*
- BS 7371-8, *Coatings on metal fasteners – Part 8: Specification for sherardized coatings*
- BS 7371-9, *Coatings on metal fasteners – Part 9: Specification for phosphate or phosphate and oil coatings*
- BS 7371-10, *Coatings on metal fastenings – Part 10: Specification for phosphate or phosphate and oil coatings.*
- BS 7371-11, *Coatings on metal fasteners – Part 11: Specification for zinc flake non-electrolytically applied cured coatings*¹⁾
- BS 7371-12, *Coatings on metal fasteners – Part 12: Requirements for imperial fasteners*

Information about this document

This is a full revision of the standard, and introduces the following principal changes:

- the option of specifying non-hexavalent chromium containing conversion coatings;
- details concerning cadmium have been deleted from this British Standard due to the restrictions below.

Assessed capability. Users of this British Standard are advised to consider the desirability of quality system assessment and registration against the appropriate standard in the BS EN ISO 9000 series by an accredited third-party certification body.

¹⁾ Obsolete, replaced by BS EN ISO 10683 but remains current.

Hazard warnings

WARNING. This British Standard calls for the use of substances and/or procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

The attention of the user of this Part of BS 7371 is drawn to the restrictions placed on the marketing and use of cadmium and its compounds contained in the Environmental Protection (Controls on Injurious Substances) (No 4) Regulations 1992 [1]. Cadmium is excluded from this Standard.

The attention of the user of this Part of BS 7371 is drawn to the restrictions placed on the use and supply of hexavalent chromium containing substances by ECC Directive 2000/53/EC on End of Life Vehicles [2] and amendment of Annex II by Commission Decision June 2002 [Document No. C(2002) 2238] [3], and non-use on Motor Vehicles marketed after July 2007.

Attention is also drawn to The Waste Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC) [4], which came into force on 31st December 2006.