

Advanced technical ceramics — Methods of test for ceramic coatings —

Part 10: Determination of coating thickness by cross sectioning

ICS 17.040.20; 25.220.99; 81.060.30

National foreword

This Draft for Development is the official English language version of CEN/TS 1071-10:2004.

This publication is not be regarded as a British Standard.

It is being issued in the Draft for Development series of publications and is of a provisional nature because **it is considered that further experience is required in its application before it is converted to a European and hence British Standard.** It should be applied on the provisional basis, so that information and experience of its practical application may be obtained.

Comments arising from the use of this Draft for Development are requested so that UK experience can be reported to the European organization responsible for its conversion to a European Standard. A review of this publication will be initiated 2 years after its publication by the European organization so that a decision can be taken on its status at the end of its 3-year life. Notification of the start of the review period will be made in an announcement in the appropriate issue of *Update Standards*.

According to the replies received by the end of the review period, the responsible BSI Committee will decide whether to support the conversion into a European Standard, to extend the life of the Technical Specification or to withdraw it. Comments should be sent in writing to the Secretary of BSI Technical Committee RPI/13, Advanced technical ceramics, at 389 Chiswick High Road, London W4 4AL, giving the document reference and clause number and proposing, where possible, an appropriate revision of the text.

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 Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

Summary of pages

This document comprises a front cover, an inside front cover, the CEN/TS title page, pages 2 to 15 and a back cover.

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Amendments issued since publication

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English version

Advanced technical ceramics - Methods of test for ceramic coatings - Part 10: Determination of coating thickness by cross sectioning

Céramiques techniques avancées - Méthodes d'essai pour les revêtements céramiques - Partie 10: Détermination de l'épaisseur du revêtement par découpage transverse

Hochleistungskeramik - Verfahren zur Prüfung keramischer Schichten - Teil 10: Bestimmung der Schichtdicke mittels Querschliff

This Technical Specification (CEN/TS) was approved by CEN on 2 March 2004 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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Foreword

This document CEN/TS 1071-10:2004 has been prepared by Technical Committee CEN/TC 184 “Advanced technical ceramics”, the secretariat of which is held by BSI.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

EN 1071 *Advanced technical ceramics — Methods of test for ceramic coatings* consists of 11 parts:

- Part 1: *Determination of coating thickness by contact probe profilometer*
- Part 2: *Determination of coating thickness by the crater grinding method*
- Part 3: *Determination of adhesion and other mechanical failure modes by a scratch test*
- Part 4: *Determination of chemical composition*
- Part 5: *Determination of porosity*
- Part 6: *Determination of the abrasion resistance of coatings by a micro-abrasion wear test*
- Part 7: *Determination of hardness and Young's modulus by instrumented indentation testing*
- Part 8: *Rockwell indentation test for evaluation of adhesion¹⁾*
- Part 9: *Determination of fracture strain*
- Part 10: *Determination of coating thickness by cross sectioning*
- Part 11: *Measurement of internal stress with the Stoney formula¹⁾*

Parts 7 to 11 are Technical Specifications.

This document includes a bibliography.

1) In preparation at the time of publication of this document.