



National Standards Authority of Ireland

RECOMMENDATION

**I.S. CEN/TS 1071-10:2004**

ICS 17.040.20  
25.220.99  
81.060.30

**ADVANCED TECHNICAL CERAMICS -  
METHODS OF TEST FOR CERAMIC  
COATINGS - PART 10: DETERMINATION OF  
COATING THICKNESS BY CROSS  
SECTIONING**

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July 2004

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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.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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**CEN/TS 1071-10:2004 (E)****Contents**

Page

<b>Foreword .....</b>	<b>4</b>
<b>Introduction .....</b>	<b>5</b>
<b>1 Scope.....</b>	<b>6</b>
<b>2 Normative references .....</b>	<b>6</b>
<b>3 Terms and definitions.....</b>	<b>6</b>
<b>4 Principle .....</b>	<b>6</b>
<b>5 Apparatus .....</b>	<b>6</b>
5.1 Scanning electron microscope (SEM) .....	6
5.2 Optical microscope.....	6
<b>6 Sample preparation.....</b>	<b>7</b>
6.1 Cross-section preparation .....	7
6.2 Surface roughness.....	7
6.3 Taper of cross-section.....	7
6.4 Specimen tilt.....	7
6.5 Coating damage .....	7
6.6 Rounding of edges of the coating .....	7
6.7 Overplating .....	8
6.8 Etching .....	8
6.9 Smearing.....	8
<b>7 Calibration of instruments .....</b>	<b>8</b>
7.1 Procedure .....	8
7.2 Photography.....	8
7.3 Measurement .....	8
7.4 Calculation of magnification.....	8
7.5 Poor contrast.....	9
7.6 Magnification .....	9
7.7 Uniformity of magnification .....	9
7.8 Stability of magnification .....	9
<b>8 Test procedure .....</b>	<b>9</b>
8.1 General.....	9
8.2 Preparation of images .....	10
8.2.1 General.....	10
8.2.2 Conventional photographic micrograph .....	10
8.2.3 Digital images.....	10
8.3 Measurement .....	10
8.4 Thickness calculation.....	10
8.5 Correction procedures .....	11
<b>9 Measurement uncertainty .....</b>	<b>11</b>
<b>10 Expression of results.....</b>	<b>11</b>
<b>11 Reporting of results .....</b>	<b>11</b>
<b>Annex A (informative) General guidance on the preparation and measurement of cross-</b>	
<b>sections.....</b>	<b>13</b>
A.1 Introduction .....	13
A.2 Cutting.....	13
A.3 Mounting .....	13

<b>A.4</b>	<b>Grinding and polishing.....</b>	<b>14</b>
<b>A.5</b>	<b>Use of the scanning electron microscope.....</b>	<b>14</b>
	<b>Bibliography .....</b>	<b>15</b>

## CEN/TS 1071-10:2004 (E)

### 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 adhesion<sup>1)</sup>*
- Part 9: *Determination of fracture strain*
- Part 10: *Determination of coating thickness by cross sectioning*
- Part 11: *Measurement of internal stress with the Stoney formula<sup>1)</sup>*

Parts 7 to 11 are Technical Specifications.

This document includes a bibliography.

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

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