# Norsk Standard

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## Avanserte tekniske keramer Prøvingsmetoder for keramiske belegg

Del 9:

## Bestemmelse av bruddforlengelse

Advanced technical ceramics Methods of test for ceramic coatings

Part 9: Determination of fracture strain



Referansenummer: NS-EN 1071-9:2009 (en)

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#### **English Version**

# Advanced technical ceramics - Methods of test for ceramic coatings - Part 9: Determination of fracture strain

Céramiques techniques avancées - Méthodes d'essai pour revêtements céramiques - Partie 9 : Détermination de la déformation à la rupture

Hochleistungskeramik - Verfahren zur Prüfung keramischer Schichten - Teil 9: Bestimmung der Bruchdehnung

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## **Foreword**

This document (EN 1071-9:2009) has been prepared by Technical Committee CEN/TC 184 "Advanced technical ceramics", 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of an identical text or by endorsement, at the latest by January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TS 1071-9:2004.

EN 1071 Advanced technical ceramics – Methods of test for ceramic coatings consists of the following 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 by electron probe microanalysis (EPMA)
- Part 5: Determination of porosity [withdrawn]
- 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- Part 7: Determination of hardness and Young's modulus by instrumented indentation testing [withdrawn]
- Part 8: Rockwell indentation test for evaluation of adhesion
- Part 9: Determination of fracture strain
- Part 10: Determination of coating thickness by cross sectioning
- Part 11: Determination of internal stress by the Stoney formula
- Part 12: Reciprocating wear test <sup>1)</sup>
- Part 13: Determination of wear rate by the pin-on-disk method <sup>1)</sup>

Parts 7, 8 and 11 are Technical Specifications. Part 7 was withdrawn shortly after publication of EN ISO 14577-4:2007.

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<sup>1)</sup> In preparation at the time of publication of this European Standard.