

Advanced technical ceramics — Mechanical properties of ceramic composites at high temperature under inert atmosphere — Determination of flexural strength

The European Standard EN 12788:2005 has the status of a
British Standard

ICS 81.060.99

National foreword

This British Standard was published by BSI. It is the UK implementation of EN 12788:2005. It supersedes DD ENV 12788:1998 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee RPI/13, Advanced technical ceramics.

A list of organizations represented on RPI/13 can be obtained on request to its secretary.

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.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 29 December 2006

© BSI 2006

ISBN 0 580 49862 X

Amendments issued since publication

Amd. No.	Date	Comments

English Version

Advanced technical ceramics - Mechanical properties of ceramic
composites at high temperature under inert atmosphere -
Determination of flexural strength

Céramiques techniques avancées - Propriétés mécaniques
des céramiques composites à haute température sous
atmosphère inerte - Détermination de la résistance en
flexion

Hochleistungskeramik - Mechanische Eigenschaften von
keramischen Verbundwerkstoffen bei hoher Temperatur an
inertter Atmosphäre - Bestimmung der Biegefestigkeit

This European Standard was approved by CEN on 18 July 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword	3
1 Scope	4
2 Normative references	4
3 Terms, definitions and symbols	4
4 Principle.....	5
5 Apparatus	5
5.1 Test machine	5
5.2 Test jig	5
5.3 Gastight test chamber	7
5.4 Set-up for heating	7
5.5 Temperature measurement devices	7
5.6 Data recording system	7
5.7 Micrometers.....	7
6 Test specimens	7
7 Test specimen preparation.....	8
7.1 Machining and preparation	8
7.2 Number of test specimens	8
8 Test procedures	8
8.1 Test set-up: Temperature considerations	8
8.2 Test set-up: Other considerations	9
8.3 Testing technique	9
8.4 Test validity	11
9 Calculation of results.....	11
9.1 Test specimen origin	11
9.2 Flexural strength	11
10 Test report	12

Foreword

This European Standard (EN 12788:2005) 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 February 2006, and conflicting national standards shall be withdrawn at the latest by February 2006.

This document supersedes ENV 12788:1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: 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 United Kingdom.