

Methods of test for dense shaped refractory products —

Part 19: Determination of thermal expansion by a differential method

The European Standard EN 993-19:2004 has the status of a
British Standard

ICS 81.080

National foreword

This British Standard is the UK implementation of EN 993-19:2004. It supersedes BS 1902-5.4:1989 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee RPI/1, Refractories.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English version

Methods of test for dense shaped refractory products - Part 19: Determination of thermal expansion by a differential method

Méthodes d'essai des produits réfractaires denses
façonnés - Partie 19: Détermination de la dilatation
thermique

Prüfverfahren für dichte geformte feuerfeste Erzeugnisse -
Teil 19: Bestimmung der Wärmeausdehnung nach einem
Differentialverfahren

This European Standard was approved by CEN on 24 March 2004.

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

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

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Foreword

This document (EN 993-19:2004) has been prepared by Technical Committee CEN/TC 187 “Refractory products and materials”, 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of an identical text or by endorsement, at the latest by November 2004, and conflicting national standards shall be withdrawn at the latest by November 2004.

This document includes a Bibliography.

EN 993 with the general title “*Methods of test for dense shaped refractory products*” consists of 20 Parts:

- Part 1: Determination of bulk density, apparent porosity and true porosity
- Part 2: Determination of true density
- Part 3: Test methods for carbon-containing refractories
- Part 4: Determination of permeability to gases
- Part 5: Determination of cold crushing strength
- Part 6: Determination of modulus of rupture at ambient temperature
- Part 7: Determination of modulus of rupture at elevated temperatures
- Part 8: Determination of refractoriness-under-load
- Part 9: Determination of creep in compression
- Part 10: Determination of permanent change in dimensions on heating
- Part 11: Determination of resistance to thermal shock¹
- Part 12: Determination of pyrometric cone equivalent (refractoriness)
- Part 13: Specification for pyrometric reference cones for laboratory use
- Part 14: Determination of thermal conductivity by the hot-wire (cross-array) method
- Part 15: Determination of thermal conductivity by the hot-wire (parallel) method
- Part 16: Determination of resistance to sulphuric acid
- Part 17: Determination of bulk density of granular materials by the mercury method with vacuum
- Part 18: Determination of bulk density of granular materials by the water method with vacuum
- Part 19: Determination of thermal expansion by a differential method
- Part 20: Determination of resistance to abrasion at ambient temperature

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