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Dense and insulating shaped refractory products - Determination of modulus of rupture at ambient temperature (ISO 5014:2025)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Dense and insulating shaped refractory products - Determination of modulus of rupture at ambient temperature (ISO 5014:2025)

Produits réfractaires façonnés denses et isolants - Détermination du module de rupture à température ambiante (ISO 5014:2025)

Dichte und wärmedämmende, geformte feuerfeste Erzeugnisse - Bestimmung der Biegefestigkeit bei Raumtemperatur (ISO 5014:2025)

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Contents

Page

European foreword..... 3

European foreword

The text of ISO 5014:2025 has been prepared by Technical Committee ISO/TC 33 "Refractories" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 5014:2025 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of an identical text or by endorsement, at the latest by June 2026, and conflicting national standards shall be withdrawn at the latest by June 2026.

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

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The text of ISO 5014:2025 has been approved by CEN as EN ISO 5014:2025 without any modification.

International Standard

ISO 5014

Dense and insulating shaped refractory products — Determination of modulus of rupture at ambient temperature

Produits réfractaires façonnés denses et isolants — Détermination du module de rupture à température ambiante

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Contents

Page

Foreword ..... **iv**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Significance and use **2**

5 Principle **2**

6 Apparatus **3**

7 Test pieces **4**

7.1 Number of test pieces 4

7.2 Shape and size 5

7.3 Preparation 5

8 Procedure **6**

9 Expression of results **7**

10 Test report **8**

Annex A (informative) **Precision and bias** **9**

Bibliography **11**

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 33, *Refractories*.

This fourth edition cancels and replaces the third edition (ISO 5014:1997), which has been technically revised.

The main changes are as follows:

— revised definitions;

— addition of a clause on significance and use;

— addition of an informative annex on precision and bias.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

International Standard **ISO 5014:2025(en)**

Dense and insulating shaped refractory products — Determination of modulus of rupture at ambient temperature

1 Scope

This document specifies a method for the determination of the modulus of rupture of dense and insulating shaped refractory products at ambient temperature, under conditions of a constant rate of increase of stress.

Shaped refractories are those which have fixed geometry and dimensions when delivered to the user. This document is accordingly applicable to standard shape refractory bricks, but also special shapes refractory products and pre-cast products.

This document is also applicable to unshaped refractories (see ISO 1927-6) after preparation of test specimens according to ISO 1927-5.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 13385-1, *Geometrical product specifications (GPS) — Dimensional measuring equipment — Part 1: Design and metrological characteristics of callipers*

ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system*