SLOVENSKI STANDARD
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Neoblikovani ognjevzdržni izdelki - 6. del: Merjenje fizikalnih lastnosti (ISO 1927-6:2012)

Unshaped refractory materials - Part 6: Measurement of physical properties (ISO 1927-6:2012)

Ungeformte feuerfeste Erzeugnisse - Teil 6: Bestimmung der physikalischen Eigenschaften (ISO 1927-6:2012)

Produits réfractaires non façonnés - Partie 6: Détermination des propriétés physiques (ISO 1927-6:2012)

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Monolithic (unshaped) refractory products - Part 6: Measurement of physical properties (ISO 1927-6:2012)

Produits réfractaires monolithiques (non façonnés) - Partie 6: Détermination des propriétés physiques (ISO 1927-6:2012)

Ungeformte (monolithische) feuerfeste Erzeugnisse - Teil 6: Bestimmung der physikalischen Eigenschaften (ISO 1927-6:2012)

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Foreword

This document (EN ISO 1927-6:2012) has been prepared by Technical Committee ISO/TC 33 "Refractories" in collaboration with 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of an identical text or by endorsement, at the latest by June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

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INTERNATIONAL STANDARD

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Monolithic (unshaped) refractory products —

Part 6: Measurement of physical properties

Produits réfractaires monolithiques (non façonnés) —
Partie 6: Détermination des propriétés physiques

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 1927-6 was prepared by Technical Committee ISO/TC 33, *Refractories*.

ISO 1927 consists of the following parts, under the general title *Monolithic (unshaped) refractory products*:

— *Part 1: Introduction and classification*

— *Part 2: Sampling for testing*

— *Part 3: Characterization as received*

— *Part 4: Determination of consistency of castables*

— *Part 5: Preparation and treatment of test pieces*

— *Part 6: Measurement of physical properties*

— *Part 7: Tests on pre-formed shapes*

— *Part 8: Determination of complementary properties*

Monolithic (unshaped) refractory products —

Part 6:
Measurement of physical properties

1 Scope

This part of ISO 1927 specifies methods for the determination of properties of unshaped materials from test pieces prepared and stored according to ISO 1927-5.

The methods are applicable to dense and insulating castables and to ramming materials (including plastics) as defined in ISO 1927-1 before and after firing.

2 Normative references

The following referenced documents are indispensable for the application 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 1893, *Refractory products — Determination of refractoriness under load — Differential method with rising temperature*

ISO 1927-5, *Monolithic (unshaped) refractory products — Part 5: Preparation and treatment of test pieces*

ISO 3187 *Refractory products — Determination of creep in compression*

ISO 5013 *Refractory products — Determination of modulus of rupture at elevated temperatures*

ISO 5014: *Dense and insulating shaped refractory products — Determination of modulus of rupture at ambient temperature*

ISO 5017, *Dense shaped refractory products — Determination of bulk density, apparent porosity and true porosity*

ISO 5018, *Refractory materials — Determination of true density*

ISO 8895, *Shaped insulating refractory products — Determination of cold crushing strength*

ISO 10059-1, *Dense, shaped refractory products — Determination of cold compressive strength — Part 1: Referee test without packing*

ISO 10059-2, *Dense, shaped refractory products — Determination of cold compressive strength — Part 2: Test with packing*

3 Determination of geometric bulk density

3.1 Principle

This determination is carried out according to a geometric method. It can be applied to green, dried or fired test pieces. The condition of the test pieces shall be stated in the test report.