



NSAI
Standards

Irish Standard
I.S. EN ISO 1927-3:2012

Monolithic (unshaped) refractory products - Part 3: Characterization as received (ISO 1927-3:2012)

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I.S. EN ISO 1927-3:2012

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Produits réfractaires monolithiques (non façonnés) - Partie
3: Caractérisation à l'état de réception (ISO 1927-3:2012)

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Foreword

This document (EN ISO 1927-3:2012) 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of an identical text or by endorsement, at the latest by June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

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.

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INTERNATIONAL
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**Monolithic (unshaped) refractory
materials —**

Part 3:
Characterization as received

Produits réfractaires monolithiques (non façonnés) —

Partie 3: Caractérisation à l'état de réception



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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 1927-3 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 materials —

Part 3: Characterization as received

1 Scope

This part of ISO 1927 specifies the methods for the characterization of monolithic (unshaped) refractory materials as received and for checking the homogeneity of a delivery of a product. It is applicable to castables (dense and insulating), gunning materials tap hole clay, injection mixes, dry vibrating mixes, and ramming materials, as defined in ISO 1927-1.

NOTE A check list of appropriate tests is given in Annex A.

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 565, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

ISO 1927-1, *Monolithic (unshaped) refractory products — Part 1: Introduction and classification*

ISO 1927-2, *Unshaped refractory materials — Part 2: Sampling for testing*

ISO 10058-1, *Chemical analysis of magnesite and dolomite refractory products (alternative to the X-ray fluorescence method) — Part 1: Apparatus, reagents, dissolution and determination of gravimetric silica*

ISO 10058-2, *Chemical analysis of magnesite and dolomite refractory products (alternative to the X-ray fluorescence method) — Part 2: Wet chemical analysis*

ISO 10058-3, *Chemical analysis of magnesite and dolomite refractory products (alternative to the X-ray fluorescence method) — Part 3: Flame atomic absorption spectrophotometry (FAAS) and inductively coupled plasma atomic emission spectrometry (ICP-AES)*

ISO 12677, *Chemical analysis of refractory products by XRF — Fused cast bead method*

ISO 14719, *Chemical analysis of refractory material, glass and glazes — Determination of iron 2+ and iron 3+ by the spectral photometric method with 1-10 phenanthroline*

ISO 14720-1, *Testing of ceramic raw and basic materials — Determination of sulfur in powders and granules of non-oxidic ceramic raw and basic materials — Part 1: Infrared measurement methods*

ISO 14720-2, *Testing of ceramic raw and basic materials — Determination of sulfur in powders and granules of non-oxidic ceramic raw and basic materials — Part 2: Inductively coupled plasma atomic emission spectrometry (ICP/AES) or ion chromatography after burning in an oxygen flow*

EN 15979, *Testing of ceramic raw and basic materials — Direct determination of mass fractions of impurities in powders and granules of silicon carbide by OES by DC arc excitation*

EN 15991, *Testing of ceramic and basic materials — Direct determination of mass fractions of impurities in powders and granules of silicon carbide by inductively coupled plasma optical emission spectrometry (ICP OES) with electrothermal vaporisation (ETV)*

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