



**SLOVENSKI STANDARD**  
**SIST EN ISO 16282:2008**

01-oktober-2008

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**SIST EN 993-20:2004**

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Methods of test for dense shaped refractory products - Determination of resistance to abrasion at ambient temperature (ISO 16282:2007)

**iteh STANDARD PREVIEW**

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Prüfverfahren für dichte geformte feuerfeste Erzeugnisse - Bestimmung der Beständigkeit gegen Abrieb bei Umgebungstemperatur (ISO 16282:2007)

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Méthodes d'essai des produits réfractaires façonnés denses - Détermination de la résistance à l'abrasion à température ambiante (ISO 16282:2007)

**Ta slovenski standard je istoveten z: EN ISO 16282:2008**

**ICS:**

81.080 Ognjevzdržni materiali Refractories

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EUROPEAN STANDARD

EN ISO 16282

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2008

ICS 81.080

Supersedes EN 993-20:2004

English Version

Methods of test for dense shaped refractory products -  
Determination of resistance to abrasion at ambient temperature  
(ISO 16282:2007)

Méthodes d'essai des produits réfractaires façonnés  
denses - Détermination de la résistance à l'abrasion à  
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Prüfverfahren für dichte geformte feuerfeste Erzeugnisse -  
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Umgebungstemperatur (ISO 16282:2007)

This European Standard was approved by CEN on 17 April 2008.

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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 CEN Management Centre has the same status as the official versions.

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**Contents**

Page

Foreword.....3

**iTeh STANDARD PREVIEW  
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[SIST EN ISO 16282:2008](https://standards.iteh.ai/catalog/standards/sist/f2008b00-b7cf-455f-b2e1-797863b2210f/sist-en-iso-16282-2008)

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## Foreword

The text of ISO 16282:2007 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 16282:2008 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 2008, and conflicting national standards shall be withdrawn at the latest by November 2008.

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.

This document supersedes EN 993-20:2004.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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Endorsement notice

The text of ISO 16282:2007 has been approved by CEN as a EN ISO 16282:2008 without any modification.

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INTERNATIONAL  
STANDARD

ISO  
16282

First edition  
2007-10-01

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**Methods of test for dense shaped  
refractory products — Determination of  
resistance to abrasion at ambient  
temperature**

*Méthodes d'essai des produits réfractaires façonnés denses —  
Détermination de la résistance à l'abrasion à température ambiante*

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Reference number  
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## ISO 16282:2007(E)

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Published in Switzerland



**Contents**

	Page
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions .....</b>	<b>1</b>
<b>4 Principle .....</b>	<b>1</b>
<b>5 Apparatus .....</b>	<b>2</b>
<b>6 Test pieces .....</b>	<b>7</b>
<b>7 Procedure .....</b>	<b>7</b>
<b>8 Calculation .....</b>	<b>8</b>
<b>9 Precision .....</b>	<b>8</b>
<b>10 Test report .....</b>	<b>9</b>
<b>Bibliography .....</b>	<b>10</b>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 16282:2008](https://standards.iteh.ai/catalog/standards/sist/f2008b00-b7cf-455f-b2e1-797863b2210f/sist-en-iso-16282-2008)

<https://standards.iteh.ai/catalog/standards/sist/f2008b00-b7cf-455f-b2e1-797863b2210f/sist-en-iso-16282-2008>

## 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.

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

ISO 16282 was prepared by Technical Committee ISO/TC 33, *Refractories*.

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# Methods of test for dense shaped refractory products — Determination of resistance to abrasion at ambient temperature

## 1 Scope

This International Standard specifies a method intended primarily for the determination of the abrasion resistance of shaped refractory materials at ambient temperature. It can also be used for unshaped refractory materials. It provides an indication of the suitability of the material for service in abrasive or erosive conditions.

NOTE This International Standard is based on and technically identical to EN 993-20, published by the European Committee for Standardization.

## 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*

[SIST EN ISO 16282:2008](https://standards.iteh.ai/catalog/standards/sist/f2008b00-b7cf-455f-b2e1-797620202020/iso-565-2007)

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ISO 5017, *Dense shaped refractory products — Determination of bulk density, apparent porosity and true porosity<sup>1)</sup>*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **resistance to abrasion**

resistance of refractory test pieces to the surface wear caused by the mechanical action of moving solids

### 3.2

#### **resistance to erosion**

resistance of refractory test pieces to the surface wear caused by the mechanical action of a fluid, which may or may not contain solid material

## 4 Principle

The method determines the volume of material abraded from a flat surface of a test piece placed at right angles to a nozzle through which 1 000 g of size-graded silicon carbide is blasted by compressed air at 450 kPa.

1) EN 993-1, which is referred to in the text of EN 993-20, is closely based on ISO 5017.