
**Metode preskušanja cementa - 21. del: Določanje količine kloridov,
ogljikovega dioksida in alkalij v cementu
(prevzet standard EN 196-21:1989 z metodo platnice)**

Methods of testing cement - Part 21: Determination of the chloride,
carbon dioxide and alkali content of cement

Méthodes d'essais des ciments - Partie 21: Détermination de la teneur en
chlorures, en dioxyde de carbone et en alcalins dans les ciments

SIST EN 196-21:1995

Prüfverfahren für Zement - Teil 21: Bestimmung des Chlorid-,
Kohlenstoffdioxid- und Alkalianteils von Zement

Deskriptorji: cement, metode, kemijska analiza, določanje sestavin, klorid, ogljikov
dioksid, alkalije

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Referenčna številka
SIST EN 196-21:1995 (en)

Nadaljevanje na straneh od II do V in 1 do 28

UVOD

Standard SIST EN 196-21 (en), Metode preskušanja cementa - 21. del: Določanje količine kloridov, ogljikovega dioksida in alkalij v cementu, prva izdaja, 1995, ima status slovenskega standarda in je z metodo platnice prevzet evropski standard EN 196-21, Methods of testing cement - Part 21: Determination of the chloride, carbon dioxide and alkali content of cement, 1989, v angleškem jeziku.

NACIONALNI PREDGOVOR

Evropski standard EN 196-21:1989 je pripravil tehnični odbor Evropske organizacije za standardizacijo CEN/TC 51 Cement in apno.

Odločitev za prevzem tega standarda po metodi platnice je sprejela delovna skupina USM/TC CAA/WG 1 Cement, potrdil pa tehnični odbor USM/TC CAA Cement, apno in vlaknatocementni izdelki.

Ta slovenski standard je dne 1995-08-29 odobril direktor USM.

SLOVENSKI STANDARD SIST EN 196 ZA PRESKUŠANJE CEMENTA OBSEGA NASLEDNJE DELE:

| | |
|--------------------------|--|
| SIST EN 196-1:1995 (en) | Metode preskušanja cementa - 1. del: Določanje trdnosti |
| SIST EN 196-2:1995 (en) | Metode preskušanja cementa - 2. del: Kemijska analiza cementa |
| SIST EN 196-3:1995 (en) | Metode preskušanja cementa - 3. del: Določanje časa vezanja in prostorninske obstojnosti |
| SIST ENV 196-4:1995 (en) | Metode preskušanja cementa - 4. del: Kvantitativno določanje sestavin |
| SIST EN 196-5:1995 (en) | Metode preskušanja cementa - 5. del: Določanje pucolanske aktivnosti za pucolanske cemente |
| SIST EN 196-6:1995 (en) | Metode preskušanja cementa - 6. del: Določanje finosti |
| SIST EN 196-7:1995 (en) | Metode preskušanja cementa - 7. del: Metode odvzemanja in priprave vzorcev cementa |
| SIST EN 196-21:1995 (en) | Metode preskušanja cementa - 21. del: Določanje količine kloridov, ogljikovega dioksida in alkalij v cementu |

PREDHODNA IZDAJA

- JUS B.C8.020:1975 (sh) Cementi - Metode hemijskog ispitivanja cementata proizvedenih na bazi portland klinkera

OSNOVA ZA IZDAJO STANDARDARDA

- Prevzem standarda EN 196-21:1989

OPOMBI

- Povsod, kjer se v besedilu standarda uporablja izraz "evropski standard", v SIST EN 196-21:1995 to pomeni "slovenski standard".
- Uvod in nacionalni predgovor nista sestavni del standarda.

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EUROPEAN STANDARD
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EN 196
Part 21

December 1989

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Key words: Cements, tests, chemical analysis, determination of content, chlorides, carbon dioxide, alkali

English version

Methods of testing cement; Determination of the chloride, carbon dioxide and alkali content of cement.

Méthodes d'essais des ciments;
Détermination de la teneur en
chlorures, en dioxyde de carbone et en
alcalis dans les ciments.

Prüfverfahren für Zement; Bestimmung
des Chlorid-, Kohlenstoffdioxid- und
Alkalianteils von Zement.

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This European Standard was accepted by CEN on 1989-06-16. CEN members are bound to comply with the requirements of the CEN/CENELEC Common Rules which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Central Secretariat or to any CEN member.

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 CEN Central Secretariat has the same status as the official versions.

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European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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BRIEF HISTORY

This European Standard was prepared by Technical Committee CEN/TC 51 'Cement', the Secretariat of which is held by IBN.

It is intended, in a revision of European Standard EN 196: Part 2, to adopt the methods of test presented for final vote in this draft standard into EN 196: Part 2, so that this standard will then contain all methods of test required for the chemical analysis of cement.

In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom

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Foreword

The standard EN 196 on methods of testing cement consists of the following parts:

- Part 1. Determination of strength
- Part 2. Chemical analysis of cement
- Part 3. Determination of setting time and soundness
- Part 4. Quantative determination of constituents
- Part 5. Pozzolanicity test for pozzolanic cements
- Part 6. Determination of fineness
- Part 7. Methods of taking and preparing samples of cement
- Part 21. Determination of the chloride, carbon dioxide and alkali content of cement.

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1 Object and field of application

This European Standard lays down the methods for the determination of the chloride, carbon dioxide and alkali content of cement.

The standard describes the reference methods and, in certain cases, an alternative method which can be considered as giving equivalent results.

If other methods are used, their results shall be shown to be equivalent to the results given by the reference methods. In the case of a dispute, only the reference methods are applicable.

This standard applies to cements and also to their constituent materials, such as clinker and blastfurnace slag.

2 References

- EN 196-2 Methods of testing cement - Chemical analysis of cement
- EN 196-7 Methods of testing cement - Methods of taking and preparing samples of cement
- ISO 3534-1977 Statistics - Vocabulary and symbols

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3 General requirements for testing

3.1 Number of tests

The number of tests for the various determinations (clauses 4 to 8) shall be two (see also 3.3).

3.2 Repeatability and reproducibility

The standard deviation of repeatability gives the closeness of agreement between successive results obtained with the same method on identical test material, under the same conditions (same operator, same apparatus, same laboratory and short time interval¹⁾).

The standard deviation of reproducibility gives the closeness of agreement between individual results obtained with the same method on identical test material but under different conditions (different operators, different apparatus, different laboratories and/or different times¹⁾).

The standard deviations of repeatability and reproducibility are expressed in absolute percent.

3.3 Expression of masses, volumes and results

State masses in grams to the nearest 0,0001 g and volumes from burettes in millilitres to the nearest 0,05 mL.

Express the results, given by the mean of two determinations, as a percentage generally to two decimal places.

If the results of two determinations differ by more than twice the standard deviation for repeatability, repeat the test and take the mean of the two closest values as the result.

3.4 Determination of constant mass

Determine constant mass by making successive 15 min ignitions followed each time by cooling and then weighing. Constant mass is reached when the difference between two successive weighings is less than 0,0005 g.

1) As defined in ISO 3534.