# Gaaskuumutusega toitlustusettevõtteseadmed. Osa 2-11: Erinõuded. Pastavalmistusmasinad

Gas heated catering equipment - Part 2-11: Specific requirements - Pasta cookers



## EESTI STANDARDI EESSÕNA

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## NATIONAL FOREWORD

| Käesolev Eesti standard EVS-EN 203-2-                     | This Estonian standard EVS-EN 203-2-                                  |
|---|---|
| 11:2006 sisaldab Euroopa standardi EN                     | 11:2006 consists of the English text of the                           |
| 203-2-11:2006 ingliskeelset teksti.                       | European standard EN 203-2-11:2006.                                   |
| Käesolev dokument on jõustatud                            | This document is endorsed on 30.08.2006                               |
| 30.08.2006 ja selle kohta on avaldatud                    | with the notification being published in the                          |
| teade Eesti standardiorganisatsiooni                      | official publication of the Estonian national                         |
| ametlikus väljaandes.                                     | standardisation organisation.   |
| Standard on kättesaadav Eesti standardiorganisatsioonist. | The standard is available from Estonian standardisation organisation. |

| <b>Käsitlusala:</b><br>This European Standard specifies the test<br>methods and requirements for the<br>construction and operating characteristics<br>relating to the safety, rational use of<br>energy and marking of commercial gas<br>heated pasta cookers. | <b>Scope:</b><br>This European Standard specifies the test<br>methods and requirements for the<br>construction and operating characteristics<br>relating to the safety, rational use of<br>energy and marking of commercial gas<br>heated pasta cookers. |
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| <b>ICS</b> 97.040.20   |  |
| Võtmesõnad:  |  |
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# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

# EN 203-2-11

June 2006

ICS 97.040.20

Supersedes EN 203-2:1995

**English Version** 

## Gas heated catering equipment - Part 2-11: Specific requirements - Pasta cookers

Appareils de cuisson professionnelle utilisant les combustibles gazeux - Partie 2-11: Exigences particulières - Cuiseurs à pâtes

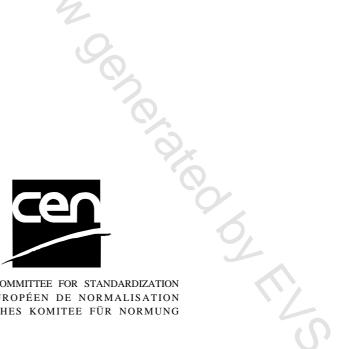
Großküchengeräte für gasförmige Brennstoffe - Teil 2-11: Spezifische Anforderungen - Nudelkocher

This European Standard was approved by CEN on 24 May 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations 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 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 the Central Secretariat has the same status as the official versions.

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# Foreword

This document (EN 203-2-11:2006) has been prepared by Technical Committee CEN/TC 106 "Large kitchen appliances using gaseous fuels", the secretariat of which is held by AFNOR.

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 December 2006, and conflicting national standards shall be withdrawn at the latest by December 2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document supersedes EN 203-2:1995.

This standard specifies the test method requirements and safety and rational use of energy requirements for pasta cookers.

This standard shall be used in conjunction with EN 203-1:2005.

This Part 2 supplements or modifies the corresponding clauses of EN 203-1:2005.

Where a particular subclause of EN 203-1:2005 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant text of EN 203-1:2005 is to be adapted accordingly.

Subclauses and figures which are additional to those in EN 203-1:2005 are numbered starting with 101.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 United Kingdom.

#### 1 Scope

Addition:

This European Standard specifies the test methods and requirements for the construction and operating characteristics relating to the safety, rational use of energy and marking of commercial gas heated pasta cookers.

### 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.

Addition:

EN 203-1:2005, Gas heated catering equipment - Part 1: General safety rules

EN 1717, Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow

#### 3.3.101

pasta cooker

appliance designed specifically for cooking pasta products

#### 3.3.102

#### indicated level

permanent mark on the appliance to indicate the maximum liquid level for correct operation

#### 3.3.103

nominal volume

#### $V_{n}$

manufacturer's declared working volume when filled to the indicated level

#### 5.3.1 Food spillage

Addition:

The appliance shall be designed in such a way that any overflow during operation shall not cause any dangerous situation to the user.

#### 5.3.2 Stability and mechanical safety

Addition:

No position of the basket shall be capable of causing any injury to the operator.

#### 6.3.2.2 Protection against burns

Addition:

The following are designated as working surfaces: internal and external surfaces of covers, draw off taps, flue outlets, pans and hobs.

The knobs of the draw off taps and of the tilting mechanism are considered as working surfaces, only the knobs for taps and cover opening shall comply with requirements of 6.3.2.2.1 of EN 203-1:2005.

#### 6.10 Rational use of energy

Addition:

The pasta cooker tests are carried out under the general conditions of 7.1 of EN 203-1:2005.

When tested in accordance with 7.101, the efficiency shall not be less than 50 %.

#### 7.4.2 Temperature limits

Addition:

For this test, the pasta cooker is filled with water to its nominal level.

#### 7.8.1 Stability and mechanical safety

Addition:

The basket is filled with the maximum nominal load and in the worst conditions.

#### 7.8.101 Lack of heat bearing fluid

Remove the heat bearing fluid and ignite the gas. When the safety devices shut down, it is checked that the surface temperature of the outside case does not exceed the ambient temperature by more than 80 K. Furthermore, there shall be no deformation of the inside of the pasta cooker nor the outside of the case.

#### 7.101 Rational use of energy

At the ambient temperature of 20 °C, the appliance is supplied with the reference gas giving the highest nominal heat input. Type  $B_{11BS}$  appliances shall be fitted with a flue 0,5 m in length after the draught diverter. Type  $B_{14}$  appliances shall be fitted with the shortest combustion products evacuation duct stated by the manufacturer. According to the specification of the manufacturer, the pan is filled with water. The control thermostat is set in the highest position. After having reached the boiling temperature, the test is carried out during the measuring time.

The efficiency is determined according to the following formula:

$$\eta = \frac{M_{\rm w} \times C_{\rm w}}{V_{\rm s} \times H_{\rm i}} \times 100$$

where:

- $M_{\rm w}$  is the amount of the evaporated water during the measuring time, in kilograms (kg),
- $C_{\rm w}$  is the evaporation heat of water, in megajoules per kilogram (2,256 MJ/kg);
- *V*<sub>g</sub> is the volume or mass of gas consumed during the measuring time, in cubic metres (m<sup>3</sup>) or kilograms (kg);

*H*<sub>i</sub> is the net caloric value of the dry reference gas at 15 °C, 1013,25 mbar, in megajoules per cubic metre (MJ/m<sup>3</sup>) or per kilogram

If  $V_c$  is measured as a volume:

$$V_{\rm c} = V_{\rm mes} \times \frac{p_{\rm a} + p - p_{\rm s}}{1 \quad 013,25} \times \frac{288,15}{273,15 + t_{\rm g}}$$

where:

 $V_{\text{mes}}$  is the volume of gas measured, in cubic metres (m<sup>3</sup>);

*p*<sub>a</sub> is the atmospheric pressure, in millibars (mbar);

- *p* is the supply pressure of the gas at the point of measurement of the heat input, in millibars (mbar);
- $p_{\rm s}$  is the partial pressure of water vapour, in millibars (mbar) (see 7.3.2.1 of EN 203-1:2005);
- $t_{\rm g}$  is the temperature of gas at the point of measurement of heat input, in degrees Celsius (°C).

#### 9.2.1 Data plates and labels

Addition:

For pressurized appliances, a data plate shall indicate the working pressure and test pressure of the appliance.

#### 9.2.2.101 Indicated level

The vessel shall carry a permanently fixed mark indicating the maximum operating level of filling and shall be located so as to be readily visible when filling.

#### 9.3.2 Instructions for use and maintenance

Addition:

— the instructions shall warn that the appliance shall not be used empty.

#### 9.3.3 Instructions for installation and adjustment

#### Addition:

— the need to install the appliance in accordance with EN 1717 and the national water regulations in force.