# Gaaskuumutusega toitlustusettevõtteseadmed. Osa 1: Üldised ohutusnõuded KONSOLIDEERITUD TEKST

Gas heated catering equipment - Part 1: General safety rules CONSOLIDATED TEXT



### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 203-1:2005+A1:2008 sisaldab Euroopa standardi EN 203-1:2005+A1:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 20.06.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 07.05.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 203-1:2005+A1:2008 consists of the English text of the European standard EN 203-1:2005+A1:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 20.06.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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ICS 97.040.20

Võtmesõnad: katsetamine, märgistamine, nõuded, ohutus, toitlustusettevõtteseadmed

# Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

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# **EUROPEAN STANDARD**

# NORME EUROPÉENNE

# **EUROPÄISCHE NORM**

May 2008

EN 203-1:2005+A1

ICS 97.040.20

Supersedes EN 203-1:2005

### **English Version**

# Gas heated catering equipment - Part 1: General safety rules

Appareils de cuisine professionnelle utilisant les combustibles gazeux - Partie 1: Règles générales de sécurité

Großküchengeräte für gasförmige Brennstoffe - Teil 1: Allgemeine Sicherheitsanforderungen

This European Standard was approved by CEN on 21 April 2005 and includes Amendment 1 approved by CEN on 5 March 2008.

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

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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## **Foreword**

This document (EN 203-1:2005+A1:2008) has been prepared by Technical Committee CEN/TC 106 "Gas heated catering equipment", 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 November 2008 and conflicting national standards shall be withdrawn at the latest by December 2008.

This document includes Amendment 1, approved by CEN on 2008-03-05.

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 A EN 203-1:2005 A.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

Questions relating to quality assurance systems, manufacturing tests and certificates of conformity of ancillary devices in particular, are not covered by this document.

This European Standard constitutes Part 1 of EN 203 "Gas heated catering equipment". It states the definitions, the requirements of construction and performance, the test requirements, the requirements of marking applicable to all professional catering equipment mainly on matters of safety. The particular requirements relative to safety and rational use of energy for each specific type of appliance is the subject of Part 2: *Rational use of energy*.

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 United Kingdom.

### 1 Scope

This document specifies the general requirements and the constructional and operating characteristics relating to safety<sup>1)</sup>, marking, and the associated test methods for gas heated commercial catering and bakery appliances.

The specific requirements are given in Part 2.

Only appliances of types A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub>, B<sub>1</sub> and B<sub>2</sub>, as defined in Clause 4, are considered in this document.

This document applies to all professional cooking and bakery appliances using gas for preparing food and drink.

This document covers type tests only, and only the net calorific value  $(H_i)$  and net Wobbe number  $(W_i)$  are used.

Annex C, informative, lists the main types of equipment entering into the field of application of this document.

NOTE This document does not really deal with rational use of energy. This aspect is mentioned in 6.10 only for the coherency with associated Part 2 (clauses numbering) and to remind that in case of not any Part 2 exist for a specific product, rational use of energy has however to be considered.

### 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.

A EN 88 (all parts), Pressure regulators and associated safety devices for gas appliances

EN 125, Flame supervision devices for gas burning appliances – Thermo-electric flame supervision devices

EN 126, Multifunctional controls for gas burning appliances

EN 161, Automatic A shut-off valves (4) for gas burners and gas appliances

EN 257, Mechanical thermostats for gas burning appliances

EN 297, Gas-fired central heating boilers – Type  $B_{11}$  and  $B_{11BS}$  boilers fitted with atmospheric burners of nominal heat input not exceeding 70 kW

EN 298, Automatic gas burner control systems for gas burners and gas appliances with or without fans

EN 437:2003, Test gases - Test pressures - Appliance categories

EN 1106, Manually operated taps for gas burning appliances

EN 12067-1, Gas/air ratio controls for gas burners and gas burning appliances - Part 1: Pneumatic types

EN 50165, Electrical equipment of non-electric appliances for household and similar purposes – Safety requirements

EN 60335-1:2002, Safety of household and similar electrical appliances – Part 1: General requirements (IEC 60335-1:2001, modified)

1) The term "safety" includes not only the safety of the appliance gas line but also that of the overall cooking appliance during its normal use in catering.

EN 60730-2-1, Automatic electrical controls for household and similar use – Part 2-1: Particular requirements for electrical controls for electrical household appliances (IEC 60730-2-1:1989, modified)

EN 60730-2-9, Automatic electrical controls for household and similar use – Part 2-9: Particular requirements for temperature sensing controls (IEC 60730-2-9:2000, modified)

EN ISO 228-1, Pipe threads where pressure-tight joints are not made on the threads – Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)

EN ISO 3166-1, Codes for the representation of names of countries and their subdivision – Part 1: Country codes (ISO 3166-1:2006) (A)

ISO 7-1, Pipe threads where pressure-tight joints are made on the threads – Part 1: Dimensions, tolerances and designation

ISO 301, Zinc alloy ingots intended for casting

### 3 Terms and definitions

### 3.1 General

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

### 3.2 Terminology referring to gases and pressures

### 3.2.1

### reference conditions

15 °C, 1 013,25 mbar

### 3.2.2

### units

calorific value and Wobbe number: (MJ/m<sup>3</sup>);

test pressures: 1 mbar = 10<sup>2</sup> Pa

### 3.2.3

### gas supply pressure

р

difference between the static pressure measured at the inlet connection of the appliance, with the appliance in operation, and atmospheric pressure

NOTE Gas supply pressure is expressed in millibars (mbar).

### 3.2.4

### relative density

d

ratio of the masses of equal volumes of dry gas and dry air under the same conditions of temperature and pressure: 15 °C or 0 °C and 1 013,25 mbar

[EN 437:2003]

### 3.2.5

### calorific value

quantity of heat produced by the complete combustion, at a constant pressure equal to 1 013,25 mbar, of a unit volume or mass of gas, the constituents of the combustible mixture being taken at reference conditions and the products of combustion being brought back to the same conditions.