



# SLOVENSKI STANDARD

SIST EN 203-2-1:2005

01-december-2005

BUXca Yý U.

SIST EN 203-2:1996

---

**Plinske naprave za gostinstvo – 2-1. del: Posebne zahteve – Odprti gorilniki in vok gorilniki**

Gas heated catering equipment - Part 2-1: Specific requirements - Open burners and wok burners

Großküchengeräte für gasförmige Brennstoffe - Teil 2-1: Spezielle Anforderungen; Offene Kochstellen-Brenner und Wok-Brenner

Appareils de cuisson professionnelle utilisant les combustibles gazeux - Partie 2-1: Exigences particulières - Brûleurs découverts et woks

<https://standards.iteh.ai/catalog/standards/sist/4b310bd3-dd7f-4926-a1b7-a4373c221780/sist-en-203-2-1-2005>

**Ta slovenski standard je istoveten z: EN 203-2-1:2005**

---

**ICS:**

97.040.20

**SIST EN 203-2-1:2005**

**en,fr,de**

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

SIST EN 203-2-1:2005

<https://standards.iteh.ai/catalog/standards/sist/4b310bd3-dd7f-4926-a1b7-a4373c221780/sist-en-203-2-1-2005>

English Version

Gas heated catering equipment - Part 2-1: Specific requirements  
- Open burners and wok burners

Appareils de cuisson professionnelle utilisant les  
combustibles gazeux - Partie 2-1: Exigences particulières -  
Brûleurs découverts et woks

Großküchengeräte für gasförmige Brennstoffe - Teil 2-1:  
Spezifische Anforderungen - Offene Brenner und Wok-  
Brenner

This European Standard was approved by CEN on 22 July 2005.

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.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

[SIST EN 203-2-1:2005](https://standards.iteh.ai/catalog/standards/sist/4b310bd3-dd7f-4926-a1b7-a4373c221780/sist-en-203-2-1-2005)

<https://standards.iteh.ai/catalog/standards/sist/4b310bd3-dd7f-4926-a1b7-a4373c221780/sist-en-203-2-1-2005>



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

## Contents

Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
5.1.6 Supply of combustion air and evacuation of combustion products.....	4
5.3.1 Food spillage.....	5
5.3.2 Stability and mechanical safety .....	5
6.10 Rational use of energy .....	5
6.10.101 Open burners .....	5
7.1.5.2 Conditions of supply and adjustment of appliances .....	5
7.4.3 Ignition - cross lighting - flame stability.....	5
7.4.3.3 Influence of wind and draught.....	5
Table 101 - Pans to be used according to the heat input of the burner.....	6
7.4.3.101 Covering of several burners.....	6
7.6.2.101 Open burners .....	6
Table 102 - Characteristics of pans required for combustion tests.....	8
Table 103 - Sampling of combustion products by rings.....	9
7.6.2.102 Wok burners and covered burners .....	9
7.6.2.103 Burners with sequential controls.....	9
7.6.2.104 Complementary tests for open burners and woks burners .....	10
7.8.101 Spillage .....	10
7.101 Rational use of energy .....	10
7.101.1 General.....	10
7.101.2 Test.....	11
9.3.2 Instructions for use and maintenance.....	12
9.3.3 Instructions for installation and adjustment.....	12
Figure 101 - Characteristics of the pans required for the tests. ....	13
Figure 102 - Sampling of combustion products by rings - Principles of design .....	14
Annex ZA .....	15
Table ZA.1 .....	15
Table ZA.1( continued) .....	16
Table ZA.1(end) .....	17

## Foreword

This European Standard (EN 203-2-1:2005) 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 April 2006, and conflicting national standards shall be withdrawn at the latest by December 2008.

This European Standard 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 European Standard.

This European Standard supersedes EN 203-2:1995, together with EN 203-2-2, EN 203-2-3, EN 203-2-4, EN 203-2-5, EN 203-2-6, EN 203-2-7, EN 203-2-8, EN 203-2-9, EN 203-2-10 and EN 203-2-11.

This European Standard specifies the safety and rational use of energy requirements for open and wok burners.

This European Standard has to be used in conjunction with EN 203-1 "Gas Heated Catering Equipment – Part 1: General safety rules".

This sub-part of part 2 supplements or modifies the corresponding clauses of EN 203-1, so as to convert it into the European Standard for Commercial Gas Heated Open and Non- Enclosed Burners.

Enclosed and solid tops are covered by EN 203-2-9.

Where a particular sub clause of EN 203-1 is not mentioned in this sub-part of part 2, that sub-clause applies as far as is reasonable. Where this European Standard states "addition", "modification" or "replacement", the relevant text of EN 203-1 is to be adapted accordingly.

Subclauses and figures which are additional to those in EN 203-1 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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## 1 Scope

### ADDITION:

This European Standard specifies requirements for the construction and operating characteristics relating to the safety, rational use of energy and marking, of atmospheric commercial gas heated open burners, covered burners, non-enclosed covered burners.

It also states test methods to check those characteristics.

This European Standard only covers type testing.

## 2 Normative references

### ADDITION:

EN 203-1:2005, *Gas Heated Catering Equipment - Part : General safety rules*

EN 631-1, *Materials and articles in contact with foodstuffs - Catering containers. Part 1: Dimensions of containers*

### 3.3.2.101

#### open burner

hot plate burner for which the pan is heated directly by the flame and the products of combustion are evacuated directly to atmosphere without following a specific way

### 3.3.2.102

#### non-enclosed covered burner

burner for which the pan or the foodstuffs being heated is screened from direct flame contact by the interposition of a surface on which they rest. All products of combustion are evacuated directly to the atmosphere, e.g. around the periphery of the plate. The burner is designed so that partial visibility of the flame is possible in normal operation. A non-enclosed burner may be:

- permanent, i.e. designed to be used only with the plate in position;
- dual purpose, i.e. designed so that it may also be used as an open burner after removal of the removable plate.

### 3.3.2.103

#### wok burner

open burner for which the environment and in particular the supports to accept the cooking utensils are specifically nominated by the manufacturer

### 3.3.101

#### working surface

surface on which the pans rest or the food is handled as well as the top horizontal surface of the appliance

## 5.1.6 Supply of combustion air and evacuation of combustion products

### ADDITION:

Appliances shall be constructed so that, under normal conditions of use and maintenance, the supply of combustion air and the evacuation of combustion products is permanently guaranteed. Obstruction of the combustion air inlets and the evacuation of the products of combustion shall be made impossible (from the pans used).

### 5.3.1 Food spillage

#### ADDITION:

After the test described in 7.8.101, the burner shall be able to be re-ignited easily.

Possible food spillage shall not be able to cause modification to the air/gas mixture of the burner.

### 5.3.2 Stability and mechanical safety

#### ADDITION:

The grills and supports shall ensure the stability of pans which are intended to be used.

### 6.10 Rational use of energy

#### REPLACEMENT:

Wok burners and covered burners are not subject to these requirements.

#### 6.10.101 Open burners

Under the test conditions of 7.101 the efficiency shall not be less than 50 %.

#### 7.1.5.2 Conditions of supply and adjustment of appliances

#### ADDITION:

For appliances fitted with a reversible grill, the tests for combustion and efficiency are carried out in both positions.

#### 7.4.3 Ignition - cross lighting - flame stability

#### ADDITION:

The tests are carried out with and without pans.

#### 7.4.3.3 Influence of wind and draught

#### ADDITION:

For open burners, the test is carried out with the hearth covered by pans described in table 101 and figure 101.

When a reduced input is provided by the manufacturer, the test shall be repeated at this reduced input.

**Table 101 - Pans to be used according to the heat input of the burner**

Internal diameter cm	Input on net calorific value kW	Mass of water to be introduced kg
22	1,79	3,7
24	2,13	4,9
26	2,50	6,1
28	2,91	7,8
30	3,33	9,4
32	3,80	11,8
34	4,28	13,6
38	5,35	18,7
42	6,53	24,9
46	7,84	32,4
50	≥9,26	41,2

**7.4.3.101 Covering of several burners**

In the case of a possible covering of several burners by the same pan, a series of tests is carried out with the largest pan recommended by the manufacturer.

**7.6.2.101 Open burners**

Each burner supplied and adjusted under the conditions of 7.6.2.1 of EN 203-1:2005, is successively covered by the largest pan which can be placed on the appliance, similar to those defined in table 102 and figure 101.

The products of combustion shall be sampled using the corresponding ring defined in table 103 and figure 102.

If in this position the flame comes in contact with the ring, it is adjusted in height to avoid disturbance of the flame, and to conserve the level of sampling of CO<sub>2</sub> similar to that defined in EN 203-1.

In the case of open burners, the burners adjoining the burner under test can be covered by pans of a diameter smaller than that corresponding to the output, however, pans with the biggest possible diameter shall be used.

Distance between the pans and between the pans and the rings shall be at least 1 cm.



If the manufacturer specifies a smaller pan support for use with smaller diameter pans, a combustion test is carried out with a pan as determined in table 102, directly greater than the pan diameter stated by the manufacturer.

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

SIST EN 203-2-1:2005

<https://standards.iteh.ai/catalog/standards/sist/4b310bd3-dd7f-4926-a1b7-a4373c221780/sist-en-203-2-1-2005>