SLOVENSKI STANDARD
oSIST prEN 1860-1:2023

01-september-2023

Naprave, trdna goriva in naprave za vžiganje žara - 1. del: Žari na trdna goriva - Zahteve in preskusne metode

Appliances, solid fuels and firelighters for barbecueing - Part 1: Barbecues burning solid fuels - Requirements and test methods

Geräte, feste Brennstoffe und Anzündhilfen zum Grillen - Teil 1: Grillgeräte für feste Brennstoffe - Anforderungen und Prüfverfahren

Appareils, combustibles solides et allume-feu pour la cuisson au barbecue - Partie 1: Barbecues utilisant les combustibles solides - Exigences et méthodes d'essai

Ta slovenski standard je istoveten z: **prEN 1860-1**

ICS:

75.160.10	Trda goriva	Solid fuels
97.040.20	Štedilniki, delovni pulti, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances

oSIST prEN 1860-1:2023 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 1860-1

July 2023

ICS

Will supersede EN 1860-1:2013+A1:2017

English Version

Appliances, solid fuels and firelighters for barbecueing - Part 1: Barbecues burning solid fuels - Requirements and test methods

Appareils, combustibles solides et allume-feu pour la cuisson au barbecue - Partie 1: Barbecues utilisant les combustibles solides - Exigences et méthodes d?essai

Geräte, feste Brennstoffe und Anzündhilfen zum Grillen - Teil 1: Grillgeräte für feste Brennstoffe - Anforderungen und Prüfverfahren

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 281.

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

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European foreword

This document (prEN 1860-1:2023) has been prepared by Technical Committee CEN/TC 281 “Appliances, solid fuels and firelighters for barbecuing”, the secretariat of which is held by UNE.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 1860-1:2013+A1:2017.

prEN 1860-1:2023 includes the following significant technical changes with respect to EN 1860-1:2013+A1:2017:

a) the normative references have been updated;

b) the terms and definitions have been updated for clarification purposes and a definition for « insert barbecue » has been added;

c) in 4.1 and 4.2.4, the thickness requirement for parts made from metal sheet or tubes has been reduced from 0,7 mm to 0,65 mm;

d) in 4.2.3.1, the notion of multiple fuel compartments has been added;

e) in 5.2.2.2, a further test has been added for the case that the barbecue may be used as open barbecue or closed barbecue according to the user instructions;

f) in Clauses 6 and 8 it has been clarified that the graphical symbols shall be positioned adjacent to each other on the product or on the packaging, respectively;

g) throughout the document several expressions have been revised editorially for clarification.

A list of all parts in the EN 1860 series, published under the general title *Appliances, solid fuels and firelighters for barbecueing*, can be found on the CEN website.

Introduction

This document is part 1 of the European Standard series for appliances, solid fuels and firelighters for barbecuing, which is intended to reduce the risks which can occur during and through barbecuing with solid fuels.

This part should be read in conjunction with parts 2 and 3.

1 Scope

This document specifies requirements for barbecues that burn solid fuels with regard to materials, construction, design, test methods, markings and instructions relating to them.

This document also applies to barbecues originally burning non-solid fuels that have been converted to burn solid fuels.

This document does not apply to single use barbecues. Single use barbecues are covered by EN 1860-4.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 71-1:2014+A1:2018, *Safety of toys - Part 1: Mechanical and physical properties*

EN 1860-2:2023, *Appliances, solid fuels and firelighters for barbecuing — Part 2: Barbecue charcoal and barbecue charcoal briquettes — Requirements and test methods*

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/

3.1
barbecue
appliance designed only for outdoor cooking in the open air

Note 1 to entry: The cooking support can be a grid, a griddle or a spit.

3.2
Barbecue categories

3.2.1
portable barbecue
appliance that can be carried with one hand without parts falling off when dismantled or folded

Note 1 to entry: It can be classified as either closed (see 3.2.2) or open (see 3.2.3).

3.2.2
closed barbecue
appliance designed for cooking outdoors by means of radiant and convection heat with a lid which may have air vents and consisting at least of a fuel compartment, a cooking grid and/or a rotisserie

3.2.3
open barbecue
appliance designed for cooking outdoors by means of radiant heat consisting at least of a fuel compartment, a cooking grid and/or a rotisserie

3.2.4
permanent barbecue
outdoor appliance designed to be permanently installed

Note 1 to entry: It may consist of pre-fabricated elements fitted together. It may include a pre-fabricated hood and removable parts.

Note 2 to entry: It can be classified as either closed (see 3.2.2) or open (see 3.2.3).

3.2.5
insert barbecue
outdoor appliance which can be installed in an enclose or to put on trolley/support

Note 1 to entry: It can be classified as either closed (see 3.2.2) or open (see 3.2.3).

3.3
fuel compartment
part of the barbecue where the fuel is burnt

Note 1 to entry: It may have, or be a fuel grate and may have air vents.

Note 2 to entry: In closed barbecues the fuel compartment is the fuel grate or the fuel grate with fuel rails or baskets or a fuel tray.

3.4
fuel grate
perforated part of the barbecue on which the fuel is placed

3.5
ash compartment or catcher
part of the barbecue intended to catch any ash or embers which may fall from the fuel compartment or fuel grate

3.6
barbecue accessory
part of the barbecue which hold the food to be barbecued during cooking

3.7
Barbecue accessories

3.7.1
cooking grid
part of the barbecue on which the food to be cooked is placed and/or which can take on the function of the fuel grate

3.7.2
rotisserie spit
metal rod suitable for skewering the food to be cooked via the truncated cone on one side and which can be rotated by hand and/or via a motor in a suitable support

3.7.3
rotisserie meat fork
clamping device on the rotisserie spit that can be slid onto and fixed in any position on which the food to be cooked can be secured

3.7.4
gravy tray
device to collect juices and drippings to be consumed

3.8
removable part
part of a barbecue which can be removed without the use of a tool

3.9
usable area
usable length
any area/length or part of a barbecue component and accessories intended to come into contact with the food to be barbecued during cooking is regarded as being usable

3.10
drip pan
device to collect waste drippings not to be consumed

3.11
stand
support structure of a barbecue onto which the functional parts of the barbecue are located

3.12
silk paper
thin, soft, relatively hard to tear paper

3.13
windshield
component of the barbecue used to minimise undesirable effect of the wind during the use of the barbecue

4 Requirements

4.1 General requirements

When testing as described in 5.2, the coatings of the barbecue accessories shall not liberate any solid substance nor ignite. Also, any solid substance coming from other parts of the barbecue shall not ignite nor fall into the usable area.

NOTE Requirements on materials and articles intended to come into contact with food can be found in applicable legislation, e.g. Regulation (EC) No 1935/2004. Extra requirements can exist in some EU countries.

It shall be possible to assemble and dismantle portable barbecues as described in the instructions for use either without the aid of a tool or using the tool that is supplied. Components shall be fixed in such a way that they cannot fall off during transportation.

When assembling, operating and manipulating the barbecue, accessible edges and corners shall be free from burr. Barbecues or parts of barbecues shall not have any rough surfaces, sharp edges or corners that can cause an injury. In case of doubt to determine whether rough surface, sharp edges or corners can cause an injury a test shall be done in accordance with EN 71-1:2014+A1:2018, 8.11. For the bars of the cooking grids and charcoal grids, the test in EN 71-1:2014+A1:2018 is not applicable. General requirements as described above shall be satisfied.

All accessible parts of the barbecue components made of metal sheet or tubes of thickness less than 0,65 mm coating excluded shall be as shown in Figures 1, 2, 3 or 4. Excluding coating, a thickness

between 0,5 mm and 0,65 mm is also acceptable, provided they are glass or porcelain enamelled on both sides and a test shall be carried out in accordance with EN 71-1:2014+A1:2018, 8.11.

For fuel compartment and ash compartment, see 4.2.3.1 and 4.2.4 for thickness requirements.

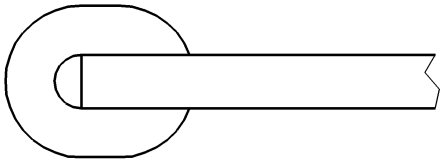

Figure 1 — Fully edged

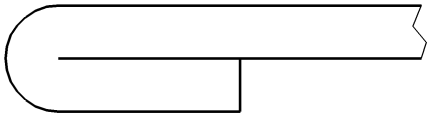

Figure 2 — Folded and flattened

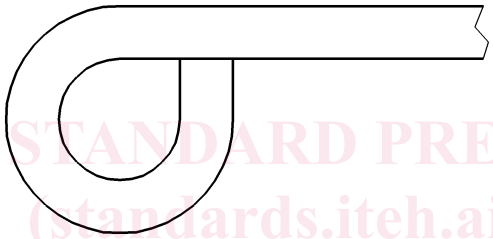

Figure 3 — Rolled and closed

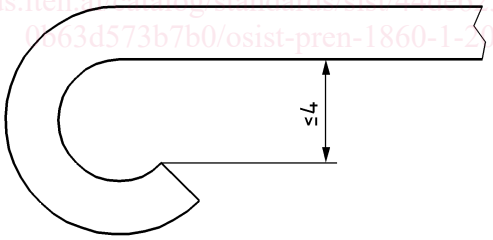

Figure 4 — Rolled and half closed

The construction of the barbecue shall be such that when placed horizontally the change of the fuel compartment position, according to the instruction for use and the insertion and removal of barbecue accessories with the cooking grid and/or rotisserie spit loaded as described in 5.5, shall be possible without the barbecue tipping over or components becoming detached or moved in such a way that they are no longer capable of fulfilling their functions. The last sentence's requirements shall be also satisfied when testing the barbecue as described in 5.2.

When tested in accordance with the test methods specified in Clause 5, a barbecue shall not:

a) show any deformation of a component that compromises the use and safety of the barbecue;

b) have any component showing cracks and/or fractures;

NOTE A permanent barbecue may show cracks and/or fractures which do not influence the safety.

c) have any components falling off;

d) show any deviations from the temperature and safety requirements mentioned in the test descriptions.

4.2 Requirements for parts of barbecues

4.2.1 Cooking grid

The clear distance between the bars of the cooking grid shall not exceed 20 mm before, during and after testing according to 5.2 and 5.6. This requirement relates to the usable area of the grid, which shall be at least 80 % of the horizontal area of the fuel compartment, vertically projected.

If the cooking grid has the function of a fuel grate, the clear distance between the bars of the grate and also, in the case of vertical fuel compartment, of those between the grate and the edges of the fuel container shall not exceed 20 mm before, during and after testing according to 5.2 and 5.6.

The cooking grid shall rest on its supporting points in the most unfavourable position when loaded as described in 5.5. When the load has been removed the deformation of each grid bar shall not exceed 5 % relative to the length of the bar when tested according to 5.6.

Manually adjustable cooking grids up to 400 mm diameter or longest side measurement shall be fitted with one handle minimum, cooking grids over 400 mm diameter or longest side measurement shall be fitted with two handles. If the cooking grid position is adjustable, this adjustment shall be possible without the operator's hand coming into direct contact with the cooking grid.

Removable or movable handles shall be attached to the cooking grid in such a way that tipping to the side or forwards when loaded as described in 5.5 shall not be possible.

Handle is not required when the height of the cooking grid can be adjusted through a mechanical device.

The barbecue shall be designed in such a way that when the fuel compartment is uniformly loaded to 75 % of its capacity according to 5.2, the cooking grid in its most unfavourable position shall not come into contact with the fuel.

4.2.2 Rotisserie spit

The end of the rotisserie spit shall have the shape of a truncated cone of minimum diameter not less than 1,5 mm and not exceeding 3 mm and a taper angle between 60° and 90°.

The rotisserie spit shall have a permanent or removable handle of at least 100 mm usable length.

The handle for any motor supplied with it shall be 80 mm minimum length.

If the distance between the support points of the rotisserie spit exceeds 800 mm a second handle shall be provided unless the motor has the function of a handle.

The handle (or handles) shall be fitted to the rotisserie spit in such a way that when tested in accordance with 5.2.2 the surface temperatures shall not exceed the values specified in Table 3.

The rotisserie spit shall have a minimum of two adjustable and fixable rotisserie meat forks.

When loading the rotisserie spit with 0,5 kg per 100 mm usable length according to 5.5 it shall rest on all its supporting points.

The other components of the barbecue or the fuel load following the instructions for use shall not come into contact with a cylinder 200 mm in diameter and of a length equivalent to at least 60 % of the usable rotisserie spit length placed centrally around the rotisserie spit and in the centre of the rotisserie spit. If several rotisserie spit positions are possible, this requirement shall be met for at least one position.

4.2.3 Fuel compartment

4.2.3.1 General

All fuel compartments made of steel sheet, whether multiple or single, shall:

— be considered separately;

— respect a minimum thickness (coating excluded) as specified in Table 1.

A compartmentalized fuel compartment shall be considered as a single fuel compartment.

The thickness shall be measured in three different points:

— one to be in the centre of the bottom;

— two on the opposite sides at minimum 150 mm from each other;

If one side of the fuel compartment is a grate, only two sides are measured.

The thickness shall be considered the average of the measurements.

NOTE On finished products ready to be commercialized:

1) Measure the total thickness "T_t" in the three points of the fuel compartment.

2) Measure at these same points on both sides the thickness of the coating C_{ext} and C_{int}.

3) Calculate by subtraction the thickness of the uncoated steel sheet in each. $T = T_t - (C_{ext} + C_{int})$.

4) Calculate the average from them.

Table 1 — Minimum thickness of steel sheet for fuel compartments

Grid size diameter or longest side measurement relative to the fuel compartments **[mm]**	Thickness **[mm]**
≤ 400	0,7
> 400	0,8

The measuring equipment used shall be selected so that the uncertainty requirements of 1/100 mm measured is met.

For fuel compartments with a grid size diameter or longest side measurement ≤ 400 mm, a thickness (coating excluded) between 0,5 mm and 0,7 mm is acceptable, provided they are glass or porcelain enamelled on both sides and withstand the tests according to:

a) 5.2.2 one time and 5.2.3 two times consecutively; and

b) 5.7.

Fuel compartments made of cast metal require a minimum thickness coating excluded of 2,5 mm.

Fuel compartments made of materials other than steel sheet or cast material (excluding permanent barbecues) shall withstand the tests according to:

a) 5.2.2 one time and 5.2.3 two times consecutively; and