



SLOVENSKI STANDARD
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Plinski kuhalni aparati za gospodinjstvo - 1-1. del: Varnost - Splošno

Domestic cooking appliances burning gas - Part 1-1: Safety - General

Haushalt-Kochgeräte für gasförmige Brennstoffe - Teil 1-1: Sicherheit - Allgemeines

Appareils de cuisson domestiques utilisant les combustibles gazeux - Partie 1-1 :
Sécurité - Généralités

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Ta slovenski standard je istoveten z: prEN 30-1-1

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ICS:

97.040.20	Štedilniki, delovni pulti, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances
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Domestic cooking appliances burning gas - Part 1-1: Safety - General

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 49.

If this draft becomes a European Standard, 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.

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COMITÉ EUROPÉEN DE NORMALISATION
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133 European foreword

134 This document (prEN 30-1-1:2017) has been prepared by Technical Committee CEN/TC 49 “Gas
135 cooking appliances”, the secretariat of which is held by UNI.

136 This document is currently submitted to the CEN Enquiry.

137 This document will supersede EN 30-1-1:2008+A3:2013.

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

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

142 The main modification in this standard with reference to the previous edition
143 (EN 30-1-1:2008+A3:2013) are the following:

144 — Alignment with Regulation 2016/426/EU throughout the full text;

145 — Reference to the different types of gases is now given by making reference to the specific
146 EN 437:2003+A1:2009 and not by introducing its requirements in this Standard (various clauses
147 and Annex A);

148 — Reference to specific requirements for multifunctional controls is now given by making reference to
149 the specific EN 126:2012 (5.2.14);

150 — Addition of requirements for appliances that enable the user to program the end of a cooking cycle
151 (5.2.13);

152 — Removal of requirements for ovens volume calculation as reference is made to EN 15181:2017;

153 — Removal of requirements for pilot flames as they are no more used on appliances (7.3.1.3.2);

154 — Introduction of requirements on accuracy of instruments (7.4);

155 — More detailed info on types of inlets allowed for the connection of the appliances (5.2.6 and A.7).

156 EN 30 consists of the following parts:

157 — prEN 30-1-1, *Domestic cooking appliances burning gas — Part 1-1: Safety - General*;

158 — EN 30-1-2, *Domestic cooking appliances burning gas — Safety — Part 1-2: Appliances having forced-
159 convection ovens and/or grills*;

160 — EN 30-1-3, *Domestic cooking appliances burning gas — Part 1-3: Safety — Appliances having a glass
161 ceramic hotplate*;

162 — EN 30-1-4, *Domestic cooking appliances burning gas — Safety — Part 1-4: Appliances having one or
163 more burners with an automatic burner control system*;

164 — EN 30-2-1, *Domestic cooking appliances burning gas — Part 2-1: Rational use of energy — General*;

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- 165 — EN 30-2-2, *Domestic cooking appliances burning gas — Part 2-2: Rational use of energy —*
166 *Appliances having forced-convection ovens and/or grills.*
- 167 Requirements concerning the emission of NO_x are not mentioned in this European Standard; taking
168 account of the usage of the appliances and their low output, their contribution to environment pollution
169 is negligible.
- 170 This European Standard covers type testing.

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171 1 Scope

172 This European Standard specifies the construction and or characteristics as well as the requirements
 173 and methods of test for the safety and marking of freestanding and built-in domestic cooking appliances
 174 burning the combustible gases given in 4.1 according to the categories specified in 4.2, referred to in the
 175 text as “appliances”.

176 The appliances covered by this standard are intended to be used by non-expert users in a **domestic**
 177 **dwelling**.

178 This European Standard covers the following types of domestic cooking appliances, as defined in
 179 Clause 3, and belonging to the classes defined in 4.3 (see Table 1):

180 — independent freestanding hobs;

181 — independent built-in hobs;

182 — hobs and grills;

183 — table cookers;

184 — freestanding ovens;

185 — built-in ovens;

186 — freestanding or built-in grills;

187 — griddles;

188 — freestanding cookers;

189 — built-in cookers.

190 Unless specifically excluded hereafter, this European Standard applies to these appliances or their
 191 component parts, whether or not the component parts are independent or incorporated into a single
 192 appliance, even if the other heating components of the appliance use electrical energy (e.g. combined
 193 gas-electric cookers).

194 This European Standard includes requirements covering the electrical safety of equipment
 195 incorporated in the appliance that is associated with the use of gas. It does not include requirements
 196 covering the electrical safety of electrically-heated component parts or their associated equipment¹⁾.

197 For appliances intended to be used in caravans, or motorhomes/mobile homes or on board of ships or
 198 aircraft, additional requirements may be necessary.

199 This European Standard does not apply to:

200 a) outdoor appliances;

201 b) appliances connected to a combustion products evacuation duct;

202 c) appliances having a pyrolytic gas oven;

203 d) appliances having covered burners which do not comply with the constructional requirements of
 204 5.2.8.2.2;

1) See the electrical safety rules.

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- 205 e) appliances incorporating flame supervision devices and having an automatic ignition device for
206 which the duration of the ignition attempt is limited by design;
- 207 f) appliances equipped with a burner that is periodically ignited and extinguished under the control
208 of an automatic on/off device;
- 209 g) appliances equipped with an oven and/or with a grill having a fan:
- 210 1) either for the supply of combustion air or for the evacuation of the products of combustion;
- 211 2) or for the circulation of the products of combustion within the compartments;
- 212 h) appliances supplied at pressures greater than those defined in 7.1.2;
- 213 i) appliances incorporating one or more hob or grill burners that enable the user to program the
214 delayed start of the cooking cycle;
- 215 j) appliances of categories I_{2N}, I_{2R}, I_{3R}, I_{2E(S)}, I_{2E(R)}, I_{2ESi}, I_{2Er}, I_{2R} and the equivalent double and triple
216 categories which include these indices;
- 217 k) appliances of category II_{2E+3B}.

218 This European Standard does not cover the requirements relating to third family gas cylinders, their
219 pressure regulators and their connection.

220 **Table 1 — Three-language table of the names of the different types of domestic cooking**
221 **appliances**

French	German	English
- Tables de cuisson isolées	- Freistehende Kochteile	- Hobs - freestanding
- Tables de cuisson à encastrer	- Eingebaute Kochteile	- Hobs - built-in
- Tables-grilloirs	- Kochteile mit Strahlungsgrilleinrichtung	- Hobs and grill
- Réchauds-fours	- Tischherde	- Table cookers
- Fours isolés	- Freistehende Backöfen	- Ovens - freestanding
- Fours à encastrer	- Einbaubacköfen	- Ovens - built-in
- Grilloirs par rayonnement isolés	- Freistehende Strahlungsgrilleinrichtungen	- Grills - freestanding
- Grilloirs par rayonnement à encastrer	- Eingebaute Strahlungsgrilleinrichtungen	- Grills - built-in
- Grilloirs par contact	- Kontaktgrilleinrichtungen	- Griddles
- Cuisinières isolées	- Freistehende Herde	- Cookers - freestanding
- Cuisinières encastrées	- Eingebaute Herde	- Cookers - built-in

222 2 Normative references

223 The following documents, in whole or in part, are normatively referenced in this document and are
 224 indispensable for its application. For dated references, only the edition cited applies. For undated
 225 references, the latest edition of the referenced document (including any amendments) applies.

226 EN 88-1:2011+A1:2016, *Pressure regulators and associated safety devices for gas appliances — Part 1:*
 227 *Pressure regulators for inlet pressures up to and including 50 kPa*

228 EN 125:2010+A1:2015, *Flame supervision devices for gas burning appliances — Thermoelectric flame*
 229 *supervision devices*

230 EN 126:2012, *Multifunctional controls for gas burning appliances*

231 EN 257:2010, *Mechanical thermostats for gas-burning appliances*

232 EN 437:2003+A1:2009, *Test gases — Test pressures — Appliance categories*

233 EN 549:1994, *Rubber materials for seals and diaphragms for gas appliances and gas equipment*

234 EN 751-1:1996, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family*
 235 *gases and hot water — Part 1: Anaerobic jointing compounds*

236 EN 751-2:1996, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family*
 237 *gases and hot water — Part 2: Non-hardening jointing compounds*

238 EN 1106:2010, *Manually operated taps for gas burning appliances*

239 EN 1116:2004, *Kitchen furniture — Co-ordinating sizes for kitchen furniture and kitchen appliances*

240 EN 10226-1:2004, *Pipe threads where pressure tight joints are made on the threads — Part 1: Taper*
 241 *external threads and parallel internal threads - Dimensions, tolerances and designation*

242 EN 10226-2:2005, *Pipe threads where pressure tight joints are made on the threads — Part 2: Taper*
 243 *external threads and taper internal threads - Dimensions, tolerances and designation*

244 EN 15181:2017, *Measuring method of the energy consumption of gas fired ovens*

245 EN 60068-2-75:2014, *Environmental testing — Part 2-75: Tests — Test Eh: Hammer tests (IEC 60068-2-*
 246 *75:2014)*

247 EN 60335-1:2012, *Household and similar electrical appliances — Safety — Part 1: General requirements*
 248 *(IEC 60335-1:2010, modified)*

249 EN 60335-2-6:2015, *Household and similar electrical appliances — Safety — Part 2-6: Particular*
 250 *requirements for stationary cooking ranges, hobs, ovens and similar appliances (IEC 60335-2-6:2014,*
 251 *modified)*

252 EN 60335-2-102:2016, *Household and similar electrical appliances — Safety — Part 2-102: Particular*
 253 *requirements for gas, oil and solid-fuel burning appliances having electrical connections (IEC 60335-2-*
 254 *102:2004+A1:2008+A2:2012, modified)*

255 EN 60584-1:2013, *Thermocouples — Part 1: EMF specifications and tolerances (IEC 60584-1:2013)*

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256 EN 60730-1:2016, *Automatic electrical controls — Part 1: General requirements (IEC 60730-1:2013,*
257 *modified)*

258 EN 60730-2-7:2010, *Automatic electrical controls for household and similar use — Part 2-7: Particular*
259 *requirements for timers and time switches (IEC 60730-2-7:2008, modified)*

260 EN ISO 228-1:2003, *Pipe threads where pressure-tight joints are not made on the threads — Part 1:*
261 *Dimensions, tolerances and designation (ISO 228-1:2000)*

262 3 Terms and definitions

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

264 3.1 General terms and definitions:**265 3.1.1****266 conversion**

267 operation carried out by a specialist on an appliance at the time of a change of gas

268 3.1.2**269 removable**

270 can be removed without the aid of a tool

271 3.1.3**272 reference conditions**

273 15 °C, 1 013,25 mbar

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274 3.1.4**275 mechanically fastened**

276 can only be removed with the aid of a tool

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277 3.1.5**278 normal maintenance**

279 maintenance carried out by a specialist not including any replacement of parts

280 3.1.6**281 soft soldering**

282 soldering for which the lowest temperature of the melting range, after application, is less than 450 °C

283 3.1.7**284 direct country of destination**

285 intended country of destination, such that, at the time of putting the appliance on the market and/or
286 installation, the appliance needs to be capable of operating, without adjustment or modification, with
287 one of the gases distributed in the country concerned, at the appropriate supply pressure

288 Note 1 to entry: More than one country can be specified if the appliance, in its current state of adjustment, can
289 be used in each of these countries.

290 3.1.8**291 indirect country of destination**

292 country for which the appliance is intended but for which, in its present state of adjustment, it is not
293 suitable

294 Note 1 to entry: A subsequent modification or adjustment is essential so that it can be utilized safely and
295 correctly in this country.

296 **3.2 Terms and definitions relating to the appliance:**

297 **3.2.1**

298 **appliance incorporating a cylinder**

299 appliance functioning in particular with third family gases which includes a compartment for the
300 cylinder

301 **3.2.2**

302 **freestanding appliance**

303 appliance not normally having direct contact with adjacent furniture or walls

304 **3.2.3**

305 **appliance for building-in between two furniture units**

306 appliance which can have its side panels in direct contact with adjacent furniture units

307 Note 1 to entry: When installed, the appliance may only be in contact with a single furniture unit.

308 **3.2.4**

309 **appliance for building into a furniture unit**

310 appliance intended to be installed in a kitchen cabinet or unit or in a housing located in a wall or under
311 similar conditions

312 Note 1 to entry: For this reason, the appliance may not necessarily have a casing on all sides.

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313 **3.2.5**

314 **domestic cooking appliance (standards.iteh.ai)**

315 appliance bound to be used by private individuals in a domestic dwelling

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316 **3.2.6**

317 **domestic dwelling**

318 household environment in which appliances for typical housekeeping functions (e.g. cooking) are used
319 by non-expert users

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320 EXAMPLE Examples of household environment are:

321 — house or apartments;

322 — shops, offices and other similar working environments;

323 — farm houses;

324 — hotels, motels, bed and breakfast and other residential type environments where appliances are used by non-
325 expert users.

326 Note 1 to entry: This is indicated in the instructions for use and maintenance as well as in the technical
327 instructions.

328 **3.2.7**

329 **cooker**

330 cooking appliance comprising:

331 — a hob;

332 — one or more ovens with or without a thermostat, having possibly a grill;

333 — possibly a grill

prEN 30-1-1:2017 (E)334 **3.2.8**335 **table cooker**

336 cooking appliance intended to rest on a raised support or stand comprising:

337 — a hob;

338 — an oven;

339 — possibly a grill

340 **3.2.9**341 **hob**342 appliance or part of an appliance which incorporates one or more burners including a control unit and
343 which is heated by gas

344 Note 1 to entry: The hob can be free standing, built in or part of a cooker assembly.

345 **3.2.10**346 **hob and grill**

347 cooking appliance consisting of a hob and a grill

348 **3.3 Terms and definitions relating to gases and pressures:**349 **3.3.1 Terms and definitions relating to gases:**350 **3.3.1.1**351 **test gases**352 gases intended for the verification of the operational characteristics of appliances using combustible
353 gases; they consist of reference gases and limit gases354 Note 1 to entry: Table 7 in EN 437:2003+A1:2009, Clause 7 gives the characteristics of reference gases and limit
355 gases.356 **3.3.1.2**357 **reference gases**358 test gases with which appliances operate under nominal conditions when they are supplied at the
359 corresponding normal pressure360 **3.3.1.3**361 **limit gases**362 test gases representative of the extreme variations in characteristics of the gases for which the
363 appliances have been designed364 **3.3.1.4**365 **relative density**366 *d*367 ratio of the masses of equal volumes of dry gas and dry air under the same conditions of temperature
368 and pressure: 15 °C or 0 °C and 1 013,25 mbar369 **3.3.1.5**370 **calorific value**371 quantity of heat produced by complete combustion at a constant pressure of 1 013,25 mbar, of a unit
372 volume or mass of gas, the constituents of the combustible mixture being taken at reference

373 Note 1 to entry: A distinction is made between:

- 374 — the gross calorific value H_s : the water produced by combustion is assumed to be condensed;
 375 — the net calorific value H_i : the water produced by combustion is assumed to be in the vapour state.

376 Note 2 to entry: The calorific value is expressed:

- 377 — either in megajoules per cubic metre $(\text{MJ}/\text{m}^3)^{\text{TM}}$ of dry gas under the reference conditions;
 378 — or in megajoules per kilogram (MJ/kg) of dry gas.

379 Note 3 to entry: In this European Standard only the gross calorific value is used.

380 3.3.1.6

381 Wobbe index

382 gross Wobbe index W_s ; net Wobbe index W_i

383 ratio of the calorific value of a gas per unit volume and the square root of its relative density under the
 384 same reference conditions

385 Note 1 to entry: The Wobbe index is said to be gross or net according to whether the calorific value used is the
 386 gross or net calorific value.

387 Note 2 to entry: The Wobbe indices are expressed:

- 388 — either in megajoules per cubic metre (MJ/m^3) of dry gas under the reference conditions;
 389 — or in megajoules per kilogram (MJ/kg) of dry gas.

390 3.3.1.7

391 theoretical air

392 volume of air necessary for the stoichiometric combustion of a unit volume of gas

393 3.3.2 Terms and definitions relating to pressures:

394 3.3.2.1

395 gas supply pressure

396 p

397 difference between the static pressure measured at the inlet connection of the appliance in operation
 398 and the atmospheric pressure

399 Note 1 to entry: The gas supply pressure is expressed in millibar (mbar): 1 mbar = 10^2 Pa.

400 3.3.2.2

401 test pressures

402 gas pressures which are used to verify the operational characteristics of appliances using combustible
 403 gases and which consist of normal and limit pressures

404 Note 1 to entry: The gas pressures used are expressed in millibars (mbar): 1 mbar = 10^2 Pa.

405 Note 2 to entry: The test pressures are given in EN 437:2003+A1:2009, Tables 5 and 6.

406 3.3.2.3

407 normal pressure

408 p_n

409 pressure under which the appliances operate in nominal conditions, when they are supplied with the
 410 corresponding reference gas