

ISO/TS 21364-21:2021 (E)

Domestic gas cooking appliances — Safety — Part 21: Particular requirements for gas hobs, gas grills and gas griddles

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
3.1	Definitions relating to components
4	Components in gas cooking appliances
4.1	General
4.2	Manual gas shut-off valves (Taps)
4.2.1	Taps for multi-ring burners
4.3	Knobs
4.3.1	Design of knobs
4.3.1.1	Multi-ring burner knobs
4.4	Multifunctional controls
4.5	Thermoelectric flame supervision controls
4.6	Thermostats
4.7	Pressure regulators
4.8	Automatic shut-off valves
4.9	Injectors and adjusters
4.10	Ignition systems
4.11	Thermal cut-outs
4.12	Multi-ring burners
4.13	Overheating safety devices
4.13.1	Requirement
4.13.2	Test
5	General conditions of test
6	Heat input
6.1	General
6.2	Obtaining the nominal heat input
6.2.1	Test of hob burner
6.2.2	Test of multi-ring hob burner
6.2.3	Test of surface grill and griddle without a thermostat
6.2.4	Test of surface grill and griddle with a thermostat
6.3	Measurements and calculations
6.4	Obtaining the reduced heat input
6.4.1	Requirement
6.4.2	Test
6.4.3	Test of hob burner, surface grill and griddle burner
6.5	Total heat input
7	Heating
7.1	General
7.2	Operating conditions
7.3	Heating tests
7.4	Abnormal operation
7.4.1	Hob burner

7.4.1.1	Requirement
7.4.1.2	Test
7.4.2	Gas griddles
7.4.2.1	Requirement
7.4.2.2	Test
8	Combustion
8.1	Measurement of all burners simultaneously
8.2	Blocked combustion products outlet
8.3	Analysis of the combustion products
8.4	Single burner
8.4.1	General requirement
8.4.2	Hob burner, surface grill burner and griddle burner
8.4.2.1	General
8.4.2.2	Tests
8.4.2.2.1	Test number 1
8.4.2.2.2	Test number 2
8.4.2.2.3	Test number 3
8.4.2.2.4	Test number 4
8.4.3	Tests of multi-ring burner
8.4.4	Additional test of Type II and Type V multi-ring burners
8.4.4.1	Requirement
8.4.4.2	Test
8.4.5	Sampling the combustion products
8.5	Sooting
8.5.1	Requirement
8.5.2	Test
9	Ignition, cross-lighting and flame stability
9.1	General
9.2	Movement of oven/grill door or cabinet door
9.3	Hob burner, surface grill burner and griddle burner
9.3.1	General
9.3.2	Cold conditions
9.3.2.1	General
9.3.2.2	Ignition
9.3.2.2.1	Requirement
9.3.2.2.2	Test
9.3.2.3	Light back
9.3.2.3.1	Requirement
9.3.2.3.2	Test
9.3.2.4	Flame lift
9.3.2.4.1	Requirement
9.3.2.4.2	Test
9.3.3	Hot conditions
9.3.3.1	Light back
9.3.3.1.1	Requirement
9.3.3.1.2	Test
9.4	Multi-ring hob burner
9.4.1	Requirement
9.4.2	Additional test for Type I multi-ring burners
9.4.3	Additional test for Type II and Type V multi-ring burners
9.4.4	Resistance to draught
10	Accumulation of unburnt gas and leak tightness
11	Construction
11.1	General
11.2	Materials
11.2.1	General
11.2.2	Burner material test
11.2.3	Sealings
11.2.4	Resistance for non-metallic feet of pan supports
11.2.4.1	Requirement

- 11.2.4.2 Test
- 11.3 Gas inlet connections
- 11.4 Conversion to different gases
- 11.5 Pull forces of knobs for manual gas shut-off valves (taps)
- 11.6 Appliances that enable the user to program the start or the end of the cooking cycle
- 11.7 Compartment for one gas cylinder
- 11.8 Touch controls
- 11.8.1 Requirement
- 11.8.2 Test
- 11.9 Resistance to spillage
- 11.9.1 Requirement
- 11.9.2 Test
- 11.10 Specific hob parts and hob accessories
- 11.10.1 Pan supports
- 11.10.2 Removable devices for small pans
- 11.10.3 Special supports for convex-based pans
- 11.10.4 Covered burners
- 11.11 Shut down lids
- 11.11.1 Requirement
- 11.11.2 Test
- 11.11.3 Glass shut down lids
- 11.11.4 Shut-off device
- 11.11.4.1 Requirement
- 11.11.4.2 Test
- 12 Mechanical strength
- 12.1 Parts made of glass and glass-ceramic
- 12.1.1 General
- 12.1.2 Spring hammer test
- 12.1.3 Punch test
- 12.1.4 Thermal stress resistance for glass and glass-ceramic hob surfaces
- 12.1.4.1 Requirement
- 12.1.4.2 Test
- 12.2 Pan support
- 12.2.1 Requirement
- 12.2.2 Test
- 12.3 Pan support in contact with the glass or glass ceramic of the hob
- 13 Electrical safety
- 14 Marking and instructions
- Annex A (informative) National deviations in various countries
- A.1 China
- A.2 Japan

Page count: 24