

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