



Test Report

No.SDHL2009025590GA

Date: Jan 15, 2021

Page 1 of 14

YONGKANG JIEDENG OUTDOOR PRODUCTS CO.,LTD
FENGSHAN ZUI, LONGSHAN TOWN, YONGKANG, ZHEJIANG, CHINA

Sample Description : CAMPING STOVE
Supplier Item No. : BRS-3000T
Manufacturer : YONGKANG JIEDENG OUTDOOR PRODUCTS CO.,LTD
Supplier : YONGKANG JIEDENG OUTDOOR PRODUCTS CO.,LTD
Factory (address) : FENGSHAN ZUI, LONGSHAN TOWN, YONGKANG, ZHEJIANG, CHINA
Country of Origin : CHINA
Appliance Categories : butane-propane mixture
Injector size : 0.24mm
Gas Type(s) : Butane-propane mixture
Nominal heat input : 4600BTU

As above test item and its relevant information regarding to the submission are provided and confirmed by the applicant. SGS is not liable to either the test item or its relevant information, in terms of the accuracy, suitability, reliability or/and integrity accordingly.

Sample Receiving Date : Sep 11, 2020
Test Performing Date : Sep 17, 2020 to Jan 15, 2021
Test Performed : Selected test(s) as requested by applicant

Test Result Summary

No.	Test(s) Requested	Result(s)	Comments
1	In accordance with ANSI Z21.72-2016 / CSA 11.2-2016 Portable type gas camp stoves excluding Clause 4.3.10, 4.6.4, 4.6.9, 4.6.10, 4.13, 4.14, 5.9, 5.10 & 6 according to client's requirement.	Pass	---
For further details, please refer to the following page(s)			

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Shunde Branch

Snow Zhang

Snow Zhang
Authorized Signatory

scan to see the report



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Test Conducted:

ANSI Z21.72-2016 / CSA 11.2-2016 Portable type gas camp stoves excluding Clause 4.3.10, 4.6.4, 4.6.9, 4.6.10, 4.13, 4.14, 5.9, 5.10 & 6 according to client's requirement.

Tested Result: details shown as following table.

ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
Construction			
1	Scope		
1.1	This standard applies to portable type gas camp stoves, having input ratings of 12,000 Btu/hr (3.5 kW) or less per burner for use: a. With propane, butane, liquefied petroleum gas, and any combination thereof; and b. Outdoors only.	Rated: 4600BTU/h	Pass
1.2	Stoves and components employing materials or having forms of construction differing from those detailed in these provisions may be examined and tested according to the intent of the provisions and if found to be satisfactorily equivalent, may be given recognition.		Pass
1.3	This standard applies to stoves constructed entirely of new, unused parts.		Pass
1.4	All references to psi throughout this standard are to be considered gauge pressures unless otherwise specified.		Pass
1.5	All accessories recommended by the manufacturer for use with appliances certified to this standard shall be supplied and evaluated with the appliance.		Pass
1.6	If a value for, measurement as given in this standard is followed by an equivalent value in other units, the first stated value is to be regarded as the specification, except as noted in Clause 4.13, Instructions, and Clause 4.14.1		Pass
1.7	Exhibit A, Items Unique to Canada, contains provisions that are unique to Canada.		
1.8	Clause 2, Reference publications, contains a list of standards specifically referenced in this Standard, and sources from which these standards may be obtained.		
1.9	This Standard contains SI (Metric) equivalents to the yard/pound quantities, the purpose being to allow the Standard to be used in SI (Metric) units. (IEEE/ASTM SI 10, American National Standard for Metric Practice, or ISO 80000-1:2009, Quantities and units – Part 1: General is used as a guide in making metric conversion from yard/pound quantities.) If a value for a measurement and a corresponding value in other units are stated, the first stated value is to be regarded as the requirement. The given corresponding value may be approximate. If a value for a measurement and a corresponding value in other units are both specified as a quoted marking requirement, the first stated unit, or both are to be provided.		
1.10	In this Standard, "shall" is used to express a requirement, i.e., a provision that the user shall satisfy in order to comply with the standard; "should" is used to express a recommendation or that which is advised but not required; and "may" is used to express an option or that which is permissible within the limits of the standard. Notes accompanying clauses do not include requirements or alternative requirements; the purpose		



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ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
	of a note accompanying a clause is to separate from the text explanatory or informative material. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.		
2	Reference publications		
3	Definitions		
4	Construction		
4.1	General construction and assembly		
4.1.1	Construction features and the quality of the workmanship shall be in conformity with acceptable engineering practices.		Pass
4.1.2	A gas stove shall be easy to operate without the danger of burning hands when using normal precautions. The stove shall be easy to handle without the danger of cutting hands, when using normal precautions.		Pass
4.1.2	Bolts, nuts, and screws, except sheet-metal screws, used in the general assembly of the stove shall have threads conforming to the Standard for Unified Inch Screw Threads (UN and UNR Thread Form), ASME B1.1, or the Standard for Metric Screw Threads — M Profile, ASME B1.13M.		NA
4.1.4	Pipe threads shall conform with the Standard for Pipe Threads, General Purpose (Inch), ASME B1.20.1.		NA
4.1.5	The stove shall be of such construction as to be secure against displacement, distortion, warping, or other damage, and shall be supported to maintain a fixed relationship between essential parts under normal and reasonable conditions of handling and usage so as to assure continued compliance with these provisions. Such parts not permanently secured shall be designed so that they cannot be readily incorrectly assembled and cannot be improperly located or misaligned in removing or replacing during use, cleaning or other servicing.		Pass
4.1.6	If any indication is observed during the tests prescribed herein that the appliance will not continue to meet these provisions in normal usage, such supplementary tests shall be conducted that will provide safe and satisfactory service.	No indication is observed	NA
4.1.7	In submitting an appliance for test, the manufacturer must furnish a list of manufacturing tolerances applicable thereto and may have the appliance tested for compliance with these provisions in both extremes of tolerances specified.		Pass
4.1.8	Fasteners shall be corrosion- resistant and suitable for the particular application.		Pass
4.2	Legs		



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ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
	Legs shall be so designed that the stove will not tip, tilt, or distort on a level surface, or tip and distort at an angle of 10 degrees (0.17 rad) from the horizontal during the following test:		NA
4.3	Materials		
4.3.1	Metallic structural parts of stoves shall have a minimum thickness of 0.0195 in (0.4953 mm) or alternatively constructed of materials that have known and demonstrable properties that provide the superior strength and corrosion resistance required for good design.		Pass
4.3.2	Stoves shall have a corrosion-resistant finish.		Pass
4.3.3	Thread sealing compounds used in making joints shall be listed by a nationally recognized testing agency as suitable for use with propane and butane.		NA
4.3.4	Lubricants used in valves and controls shall be of a type suitable for propane and butane service, and capable of withstanding the service conditions to which the lubricants are subjected.		Pass
4.3.5	Running threads shall not be used.		Pass
4.3.6	Aluminum tubing shall not be used as a gas conduit.		Pass
4.3.7	Piping employed as gas conduit shall comply with the Standard for Welded and Seamless Wrought Steel Pipe, ASME B36.10M, or the Standard Specification for Pipe, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless, ASTM A53.		NA
4.3.8	Resilient materials where used, shall be compatible with propane and butane at operating temperatures.		Pass
4.3.9	Stove materials shall be suitable for the fuel gas and temperatures to which the materials will normally be exposed.		Pass
4.3.10	All nonmetallic, internal parts of gas controls shall not crack, harden, swell more than 25 percent, shrink more than 1 percent, lose more than 10 percent weight, or otherwise deteriorate sufficiently to permit leakage or cause malfunction when: a. Parts made of a compound affected by aging are exposed to air for 70 hours at 212°F (100°C); and b. Parts are immersed for 70 hours in normal hexane.		NT
4.4	Burners		
4.4.1	Burners or burner heads shall be designed for easy maintenance and cleaning, without the use of special tools.		Pass
4.4.2	The design and materials used in the construction of the burner shall be such that the burner will not sag, distort, melt, exhibit appreciable corrosion or damage to any protective coating sufficient to expose the base metal, or show leakage of gas during any of the tests specified herein.		Pass



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ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
4.4.3	Burner supports shall be of rigid construction and shall be securely held in place. Burner supports shall hold the burners permanently rigid so they will not move out of their proper operating position during use or transportation.		Pass
4.4.4	Adjustable primary air control means shall not be used.		Pass
4.5	Orifices And Orifice Fittings		
4.5.1	Only fixed orifices shall be provided.		Pass
4.5.2	Orifice fittings shall be positively secured to prevent misalignment.		Pass
4.5.3	Orifice spuds and orifice spud holders shall be made of materials having melting points of not less than 1000°F (538° C).		Pass
4.6	Manually Operated Gas Valves		
4.6.1	Stoves shall be equipped with a manually operated gas valve for each burner.		Pass
4.6.2	The design of handles for taper plug and resilient seal type valves shall be such that the marking of the "OFF" position is clearly and unmistakably indicated.	The valve is needle valve.	NA
4.6.3	On needle type valves, the direction of the open to closed rotation shall be clearly and unmistakably indicated to the user.		Pass
4.6.4	The marking specified in Clauses 4.6.2 and 4.6.3 shall be Class I, II, or IIIA as specified in Clause 4.14.1.		NT
4.6.5	All valves shall close in the clockwise rotation.		Pass
4.6.6	Needle valves shall be so designed that it is impossible to withdraw completely the valve stem in the normal operation of the valve.		Pass
4.6.7	Manually operated gas valves shall be investigated for seat and external leakage at the following conditions:		
	a. Normal operating pressure at 0°F (-18°C), 23 psi (159 kPa) and 140°F (60°C), 290 psi (2000 kPa) when for use with unregulated propane;		NA
	b. Normal operating pressure at 40°F (4.4°C), 3 psi (21 kPa) and 140°F (60°C), 78 psi (538 kPa) when for use with unregulated butane;		NA
	c. Normal operating pressure at 0°F (-18°C), 40°F (4.4°C) and 140°F (60°C) when for use with unregulated propane/butane mixture, the pressures to be determined by the listing agency; and	See the annex test table 1	Pass
	d. When regulated, 20 percent and 150 percent of the normal regulator outlet pressure setting at the above ambient temperatures (as applicable for the fuel).		NA
	The leakage shall not exceed 200 cm ³ /h when corrected to standard conditions.	See the annex test table 1	Pass



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ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
4.6.8	Manually operated gas valve bodies shall have a burst strength of 550 psi (3 792 kPa) at 70°F (21.1°C).		Pass
4.6.9	Manually operated gas valves shall withstand, without leakage, 6000 cycles of operation from fully closed to fully open to fully closed at 70°F (21.1°C) and:		NT
	a. 110 psi (758 kPa) for propane		NA
	b. 17 psi (117 kPa) for butane; and		NA
	c. Normal operating pressure for propane/butane mixtures.		NT
	Post-cycling leakage tests shall be conducted at 70°F (21.1°C) at the above pressures (as applicable for the fuel). Leakage shall not exceed 200 cm ³ /h (12.2 in ³ /hr) when corrected to standard conditions.		NT
4.6.10	The torque required to shut off the control valve(s) shall not exceed 10 ft-lb times the knob turning radius in inches (1.13 N times the knob turning radius in meters).		NT
	The valve shall be cycled on and off to a torque equal to 20 ft-lb times the knob turning radius in inches (2.26 N times the knob turning radius in meters) for 10 cycles. The valve will then shut off bubble tight at a torque of 10 ft-lb times the knob turning radius in inches (1.13 N times the knob turning radius in meters).		NT
4.6.11	Manual Valves that comply with the Standard for Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves, ANSI Z21.15 • CSA 9.1, at the above temperature ranges need not comply with Clauses 4.6.7 through 4.6.9.	The valve is not under ANSI Z21.15 • CSA 9.1	NA
4.6.12	Assembly of the valve on the appliance shall not involve the disassembly of operational or critical valve parts.	No need to assembly the valve.	NA
4.7	Gas Pressure Regulators		
4.7.1	Where a stove is for use with regulated pressure, a regulator shall be supplied by the stove manufacturer, and the stove shall be marked with the identifying marking of the regulator(s). (See Clause 4.14.3-h).		NA
4.7.2	The pressure regulator shall be designed to permanently limit the outlet pressure to the designed inlet operating pressure of the stove.		NA
4.7.3	Gas pressure regulators shall be investigated for external leakage at the following conditions:		
	a. Normal operating pressure at 0°F (-18°C), 23 psi (159 kPa) and 140°F (60°C), 290 psi (2 000 kPa) when for use with unregulated propane;		NA
	b. Normal operating pressure at 40°F (4.4°C), 3 psi (21 kPa) and 140°F (60°C), 78 psi (538 kPa) when for use with unregulated butane; and		NA



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ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
	c. Normal operating pressure at 0°F (-18°C), 40°F (4.4°C) and 140°F (60°C) when for use with unregulated propane/ butane mixture, the pressures to be determined by the listing agency.		NA
	The leakage shall not exceed 200 cm ³ /h when corrected to standard conditions.		NA
4.7.4	The body of a gas pressure regulator inlet portion shall have burst strength of 550 psi (3 792 kPa) at 70°F (21.1°C).		NA
4.7.5	A regulator shall have a predictable outlet pressure. Three samples shall be tested. The regulators shall be set at their full open setting. Inlet pressures as stated in Clause 5.3.1-b shall be applied to all regulators. Pressures for propane/butane mixtures shall be determined by the certification agency. The outlet pressures measured at each regulator shall be within 20 percent of each other.		NA
4.7.8	Regulators that comply with the Standard for Gas Appliances Pressure Regulators, ANSI Z21.18 • CSA 6.3 or the Standard for Pressure Regulating Valves for LP-gas, UL 144 at the above temperature ranges need not comply with Clauses 4.7.3 through 4.7.5.		NA
4.8	Hose And Hose Fittings		
	Hose and hose fittings for use with a stove shall be supplied by the manufacturer and shall comply with the Standard for Pigtails and Flexible Hose Connectors for LP-Gas, UL 569, or with the Standard for Elastomeric Hose and Hose Couplings for Conducting Propane and Natural Gas, CSA 8.1, or the Standard for Thermoplastic Hose and Hose Couplings for Conducting Propane and Natural Gas, CSA 8.3.	No hose	NA
4.9	Cooking Tops, Top Covers And Floor Protection		
4.9.1	Top grates shall be so designed so that they cannot be improperly positioned or readily displaced laterally.	No top grates	NA
4.9.2	The design of open top grate arms for outdoor stoves shall be such that they will support utensils as small as 3½ in (88.9 mm) in diameter when placed centrally over the burner.		NA
4.9.3	Covers or wind baffles when supplied with a stove shall not close when tested in accordance with the method outlined in Clause 5.75.7 Resistance to Wind.	No covers or wind baffles	NA
4.10	Burner Trays And Combustible Material Protection		
	A fixed bottom shall be provided which will prevent incandescent particles from reaching combustible materials.		Pass
4.11	Pilots		
	Pilots shall not be used.		Pass
4.12	Flow Limiting Devices		



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ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
	Except for No. 600 Connection, connection devices shall be equipped with a flow limiting device consisting of either:		NA
	a. An excess flow check valve complying with the Standard for Flow Control Valves for Anhydrous Ammonia and LP-Gas, UL 125, and that activates at a flow of not more than 100 scf/h (2.83m ³ /h) at a pressure of 100 psi (690 kPa) and has a bypass area that will not allow a flow greater than 10 scf/h (0.28 m ³ /h) at 100 psi (690 kPa); or		NA
	b. A device other than an excess flow check valve, which will limit flow to 10 scf/h (0.28 m ³ /h) at 100 psi (690 kPa).		NA
4.13	Instructions		NT
4.14	Marking		NT
5	Performance		
5.1	General		
	Portable gas stoves submitted for test under these provisions shall be tested with the type or types of gases selected by the manufacturer as specified in Clause 5.2, Test Gases.		Pass
5.2	Test Gases		
	In conducting the performance tests specified herein, gas with characteristics approximately as follows, shall be used. Propane gas – 2500 btu/ft ³ (94.7 MJ/m ³) or 21 551 Btu/lb (50.13 MJ/kg) 1.53 Relative Density Butane gas – 3260 btu/ft ³ (124 MJ/m ³) or 21 190 Btu/lb (49.29 MJ/kg) 2.00 Relative Density		Pass
	Stoves for use with propane gas shall be tests with HD-5 propane fuel.	.	NA
	These requirements also cover appliances equipped with a self-contained butane gas fuel supply. The fuel container is of the non-refillable type and has a maximum capacity of more than 4 fluid ounces (118 ml) but no more than 10 ounces (296 ml) of butane. The maximum capacity in pounds of water is 1.08 lbs (0.49 kg). A stove may employ no more than two fuel containers. The fuel container is removable and replaceable in normal use. The butane fuel container shall comply with DOT 2P or 2Q requirements and shall be listed to the Standard for Non-refillable (Disposable) Type Metal Container Assemblies for Butane, UL 147B		NA
	A stove for use with propane/butane mixtures shall be tested with the gas specified by the manufacturer. If more than one canister is approved for use, each model number of canister shall be provided by the manufacturer for testing. If more than one gas composition ratio or canister is to be approved for use, each gas composition ratio or canister shall be tested with the appliance at the discretion of the		Pass



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ANSI Z21.72-2016 / CSA 11.2-2016					
Clause	Test Items			Details	Result
	testing agency.				
5.3	Test Pressures And Burner Adjustments				
5.3.1	Unless otherwise stated, each test specified herein shall consist of a series of 3 tests; one at normal test pressure, one at a reduced pressure, and one at an increased pressure.				Pass
	a. TEST PRESSURE				
	Propane And Butane	Reduced:	8/11 of nominal regulator setting or range		NA
		Normal:	11/11 of nominal regulator setting or range		
		Increased:	13/11 of nominal regulator setting or range		
	b. TEST PRESSURE: Non – regulated For equipment using direct container pressure:				
	Propane	Reduced:	Container pressure at 0°F (-18°C) ambient [vapour pressure 23.5 psi (162 kPa)]		NA
		Normal:	Container pressure at 77°F (25°C) ambient [vapour pressure122.3 psi (843.2 kPa)]		
		Increased:	Container pressure at 100°F (37.8°C) ambient [vapour pressure172 psi (1 186 kPa)]		
	Butane	Reduced:	Container pressure at 40°F (4.4°C) ambient [vapour pressure 3 psi (20.7 kPa)]		NA
		Normal:	Container pressure at 77°F (25°C) ambient [vapour pressure 21psi (145 kPa)]		
		Increased:	Container pressure at 100°F (37.8°C) ambient [vapour pressure 37.5 psi (259 kPa)]		
	Propane/Butane mixtures Test pressures are determined by the testing agency based on the gas canister mixture specified by the manufacturer. Test pressures are based on 40°F (4.4 °C) for reduced, 77°F (25 °C) fo r normal, and 100°F (37.8 °C) for increased.				Pass
5.3.2	For regulated stoves, the test pressures specified in Clause 5.3.1 shall be applied at the outlet of the regulator.			Unregulated stove	NA
	For unregulated stoves, the test pressure specified in Clause 5.3.1 shall be applied at the stove inlet connection.				Pass
5.3.3	The input of the appliance after 15 minutes of warm-up period shall be within ±5 percent of the rated input when tested at the normal test pressure.			See the annex test table 2	Pass
5.3.3.1	During all tests, wind baffles shall be closed to their minimum operating position or to a minimum position allowed by the griddle plates where specified for use in these provisions.			No Wind baffles.	NA



ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
5.4	Combustion		
	A gas stove shall produce negligible carbon monoxide. This provision shall be deemed met when a concentration of carbon monoxide not in excess of 0.01 percent is produced in a room of 1000 ft ³ (28.3 m ³) content with 4 air changes occurring during the combustion of an amount of gas liberating 60,000 Btu (63.3 MJ).	See the annex test table 3	Pass
5.5	Burner Operating Characteristics		
5.5.1	Burner shall not flash back: a. Upon immediate ignition at normal, reduced, and increased test pressures. b. Upon two to five seconds delayed ignition at normal test pressure. c. During any of the other tests specified in these provisions.	See the annex test table 4	Pass
5.5.2	Burners shall operate without depositing carbon during any tests specified in these provisions.		Pass
5.5.3	Burners shall not expel gas through air openings in mixer faces at normal test pressure nor at a pressure only high enough to support combustion.		Pass
5.6	Gas Valves And Carrying Handles		
	Valve and carrying handle temperatures shall not exceed 40°F (22.2°C) above room temperature for metallic handles and 60°F (33.3°C) for non-metallic handles after operating the stove for a period of one hour at increased pressure, in a normal room temperature. Carrying handles shall be in a rest position.	See the annex test table 5	Pass
5.7	Resistance To Wind		
	A gas stove shall be so constructed that a 10 mph (4.47 m/s) wind at a temperature of 77°F (25°C) applied horizontally from any direction for a 10 minutes period will not cause malfunction to the burner or damage the mantle, at normal gas pressure.		Pass
5.8	Wall, Floor And Ceiling Temperatures		
	The maximum temperature on walls, and overhead combustible construction shall not exceed 194°F (90°C) [normal ambient temperature 77°F (25°C) plus 117°F (65°C) rise] and the maximum temperature on the floor shall not exceed 167°F (75 °C) [normal ambient 77°F (25°C) plus 90°F (50°C) rise] when the stove is tested at the manufacturer's specified clearances under the following Method of Test.	See the annex test table 5	Pass
	Method of Test The stove shall be placed in a partial enclosure as shown in Figure 2, Typical Fire Wall Corner, at the minimum side and top clearances specified by the manufacturer. Horizontal clearances shall be measured from the burner casing and vertical clearances and shall be measured from the center of the burner.		



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ANSI Z21.72-2016 / CSA 11.2-2016			
Clause	Test Items	Details	Result
	The stove shall be fired at normal gas pressure and at the manufacturer's rated input. Water-filled utensils 7 1/2 in (191 mm) in diameter shall be placed over each burner. The test shall be conducted until equilibrium conditions are attained.		
5.9	Marking Material Adhesion And Legibility		NT
5.10	Permanently Attached Marking Tags		NT
6	Manufacturing And Production Tests		NT

Remark:

1. NA =Not applicable; NT=Not Tested as per client's requirements; Pass= Meet the requirement; Fail=Not meet the requirement.
2. This appliance was tested with the ALPINE FMS-G3 gas cartridge.

Annex test table 1: Leakage

4.6.7 & 4.6.8		Leakage	
The leakage shall not leak in excess of 200 cm ³ /hr (70°F (21.1°C))	/	Test No.1: Tap close	Test No.2: tap open
	Normal operating pressure at 0°F (-18°C), 40°F (4.4°C) and 140°F (60°C) when for use with unregulated propane/butane mixture, the pressures to be determined by the listing agency; and	1.3 cm ³ /h	2.11 cm ³ /h
Verdict		Pass	Pass



Annex test table 2 The input rating

5.3.3	The input rating
Barometer (Room) Temp (°C):	24.0
Barometer Pressure(kPa):	102.0
Gas canister pressure	Container pressure at 77°F (25°C) ambient
Nominal heat input (Btu/h)	4600
Actual Burner Capacities (Btu/h)	4616
Deviation (%)	-0.35%
Allowed deviation (%)	±5%
Orifice injector size designed(mm)	0.24
Orifice injector size measured	0.24
Verdict	Pass

Annex test table 3 Combustion

5.4	Combustion		
Gas type	Butane - Propane mixtures		
Gas Pressure	Normal pressure	Reduced pressure	Increased pressure
Carbon monoxide (%) C _r	0.0053	0.0077	0.0054
Allowed (%)	0.01	0.01	0.01
Verdict	Pass	Pass	Pass

Note 1: Test was conducted with the burner covered with Dia. 241mm plate and a Dia. 191mm standardized vessel was placed on the plate.



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Annex test table 4 Burner Operating Characteristics

5.5	Burner Operating Characteristics		
	Condition	Result	Verdict
5.5.1 Burner shall not flash back:	a. Upon immediate ignition at normal, reduced, and increased test pressures.	No flash back	Pass
	b. Upon two to five seconds delayed ignition at normal test pressure.	No flash back	Pass
	c. During any of the other tests specified in these provisions.	No flash back	Pass
5.5.2	Burners shall operate without depositing carbon during any tests specified in these provisions.	No depositing carbon found	Pass
5.5.3	Burners shall not expel gas through air openings in mixer faces at normal test pressure nor at a pressure only high enough to support combustion.	No expel gas through air openings in mixer faces.	Pass

Annex test table 5 Temperatures

5.6 & 5.8	Temperatures				
Room temperature (°C)	24.8	Gas type:	butane- propane mixtures	Pressure	Vapor direct pressure-butane-propane mixtures
Distance	1 meter from walls and roof				
Test item	Actual temperature (°C)		The maximum allowable temperature rise above room temperature (25°C)		
Wall	28.6		65 (°C)		
Ceiling	26.5		65 (°C)		
Floor	27.9		65 (°C)		
Knob (Metal)	45.6		47.0(°C) = 22.2°C + Room temperature (°C)		
Valve	40.8		0~+70		
Gas cartridge	49.6		For reference only		



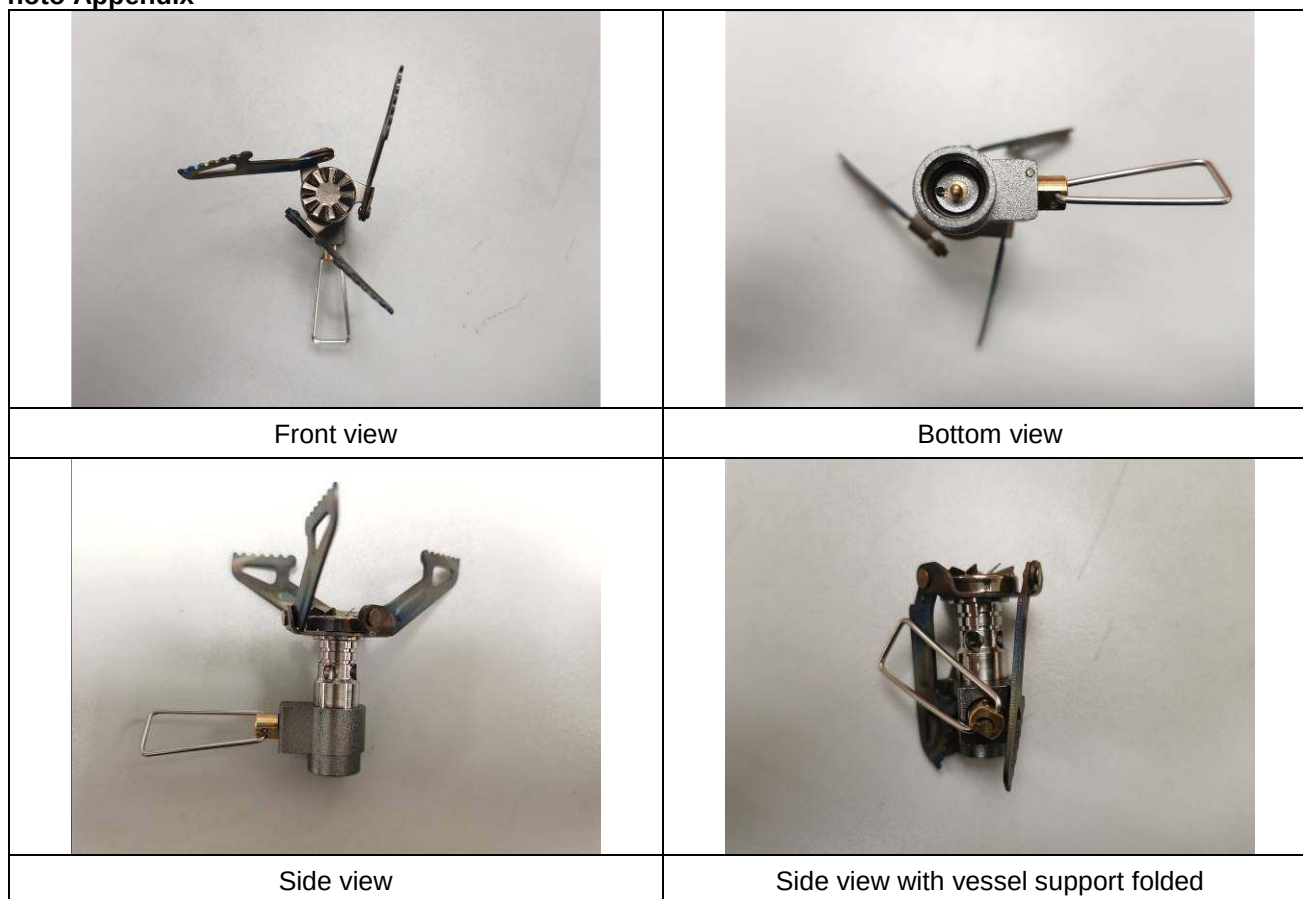
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Photo Appendix



End of Report



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