



उत्पाद मैनुअल

भारतीय मानक 4246: 2025 के अनुसार
द्रवित पेट्रोलियम गैसों के साथ प्रयुक्त घरेलु गैस चूल्हे और निर्मित हाब्स

दस्तावेज संख्या - पी एम/आई एस 4246/6/ अगस्त 2026

भारतीय मानक ब्यूरो की स्कीम-I (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिश्रिता की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/ प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

PRODUCT MANUAL FOR DOMESTIC GAS STOVE AND BUILT IN HOB FOR USE WITH LPG ACCORDING to IS 4246:2025

Document No.- PM/IS 4246/6/August 2026

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, ९, बहादुर शाह ज़फ़र मार्ग
Manak Bhawan, 9, Bahadur Shah Zafar Marg
नई दिल्ली- ११०००२
New Delhi – 110002



PRODUCT MANUAL FOR DOMESTIC GAS STOVE AND BUILT IN HOB FOR USE WITH LPG ACCORDING TO IS 4246:2025

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1.	Product	:	IS 4246:2025
	Title	:	Domestic Gas Stove and Built In Hob for Use With LPG
	No. of Amendments	:	One
2.	Sampling Guidelines:		
a)	Raw material	:	Materials and Components - As per clause 5 of IS 4246:2025
b)	Grouping guidelines	:	Each Type of Domestic Gas Stove/Built in Hob for use with LPG shall be tested for GoL/CSoL
c)	Sample Size	:	One Gas Stove/Built in Hob and spare components (Gas rail, nozzle, end plugs, gas cock, injector jets, installations, etc. as necessary for complete testing of the product)
3.	List of Test Equipment	:	Please refer <u>ANNEX – A</u>
4.	Scheme of Inspection and Testing	:	Please refer <u>ANNEX – B</u>
5.	Possible tests in a day	:	All tests
6.	Scope of the Licence	:	Please refer <u>ANNEX – C</u>

ANNEX - A**List of Test Equipments*****Indicative list of major test equipment required to test as per the Indian Standard***

Sl. No	Tests used in with clause reference	Test Equipments
1.	Testing of Materials - clause 5	(a) Muffle Furnace with Temperature Indicator (b) Magnifying Glass , Compass and Marker (c) Centre Punch and Hammer
2.	Gas Soundness - clause 13	(a) Leak Test apparatus with Bubble Indicator (b) Pressure gauge (c) Water Tank
3.	Strength and Rigidity - clause 15	(a) Dial Gauge with magnetic stand (b) Surface Plate and Iron weight (c) Steel Legs, Steel Strips (d) Frame, Fridge
4	Gas Consumption - clause 17	(a) Stopwatch, Thermometer (b) Gas Flow meter, Manometer (c) Air testing apparatus with empty compressor tank (d) Pressure Regulator, Barometer, Scale (e) Calibration Bottle
5	Resistance to draught - clause 23	a) Rotating Vane Anemometer b) Mini fan
6	Combustion Test - clause 24	(a) Digital CO(Carbon mono-oxide) Indicator (b) Gas collecting hood (c) Aluminium Vessel (d) Orsett Apparatus (e) Pipette (f) Chemicals, Measuring cylinders and Chemical Balance, wash bottle
7	Fire Hazard and Limiting Temperature - clause 25	(a) Thermocouple, Stainless steel tube (b) Temperature indicator
8	Thermal efficiency - clause 26	(a) Weighing Balance and Weight Box (b) Thermometer (c) Aluminium Pan and Stirrer (d) Pressure Regulator, Manometer
9	Dimensions	(a) Micrometer , Vernier caliper, Dial caliper (b) Thread Gauge
10	To maintain temperature for testing	(a) Air conditioner

The above list is indicative only and may not be treated as exhaustive.

ANNEX - B**Scheme of Inspection and Testing****1. QUALITY ASSURANCE PLAN**

1.1 It is expected that during operation of BIS licence, manufacturers will implement a Quality Assurance Plan (QAP) i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or subcontracting/sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with **para 2.1**.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 **Control Unit-** For the guidance of manufacturers, the recommended definition of Control Unit is quantity of Gas Stoves/Built-in Hobs having same design and material of burners, total gas consumption in g/h and rating of individual burners in kcal/h, manufactured in a day.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

1.3.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING- Manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred:

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

2.1 TEST RECORDS- The manufacturers shall maintain test records for the tests carried out (either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

- 3. PACKING, LABELLING AND MARKING** – As per the requirement of IS 4246:2025. The Standard Mark, as given in the Schedule of the licence, shall be marked on each Gas stove or Built in Hob, as applicable, provided always that the product thus marked conforms to all the requirement of the specification. In addition, the licence no. CM/L-_____ and details of BIS website shall be marked at an appropriate place on product or package as follows: “For details of BIS certification please visit www.bis.gov.in”.
- 4. REJECTION** - The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act,2016.

TABLE 1 (Recommended levels of control- For guidance only)

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Method		No. of Sample	Frequency	Remarks
		Clause	Reference			
4.	General	4, 4.1.1	IS 5116	Each Stove/Built-in Hob	---	---
5	MATERIALS					
	Main body of Burner	5.2,5.5 Annex C	IS 5116	One	Each Consignment	No further testing is required, if accompanied with the Test Certificate or ISI Marked. Raw materials which are under mandatory BIS Certification, shall be ISI Marked. In case of failure, consignment shall not be used in manufacturing.
	Plastic Component	5.1.1, Annex B	IS 5116			
	Toughened glass	5.1.2	IS 4246 IS 2553(Part 1) IS 14900			
		5.1.3 (e) Annex C 4, 5, 6	IS 4246 IS 6506			
	Copper and Copper Alloy	5.3, IS 2305	IS 5116			
	Non Metallic materials in contact with LPG	5.4, Annex D	IS 5116			
	Gas tap	5.6	IS 5116			

	Drip tray	5.7	IS 5116	One	Each Consignment	No further testing is required, if accompanied with the Test Certificate or ISI Marked. In case of failure, consignment shall not be used in manufacturing
	Additional requirement for surface of glass	5.1.3 (except 5.1.3 (e))	IS 4246	One	Each Control Unit	
6	Design for Maintenance	6	IS 4246	Each Stove/Hob	---	---
7	Rigidity and Stability	7.1	IS 4246	Each Stove/Hob	---	---
		7.2, 7.3	IS 4246	One	Each Control Unit	
8	Workmanship and Finish	7.1	IS 5116	Each Stove/Hob	---	---
	Vitreous–enamelled Components	7.2, Annex E	IS 5116	Two pieces	Each Consignment	No further testing is required, if accompanied with the Test Certificate or ISI Marked.
	Nickel Chrome plated material	7.3	IS 5116 IS 3203 IS 6009	Two pieces		In case of failure, consignment shall not be used in manufacturing.
	Painted surface	7.4	IS 5116	One	Every month	---
	Screws, Nuts, Bolts, Springs , Pipes and Pins	7.7	IS 5116	One	Each Consignment	No further testing is required, if accompanied with the Test Certificate or ISI Marked.
		8.3	IS 4246			In case of failure, consignment shall not be used in manufacturing.
	External finish	8.2	IS 4246	Each Stove/Hob	---	---
9	Gas Taps	8	IS 5116	Each Stove/Built in hob	---	---

		8.1 to 8.6, 8.8 to 8.12 Fig 2, 3	IS 5116	Each Stove/ Built in Hob	---	---
		8.7, Fig 4	IS 5116	Two	Each Consignment	No further testing is required, if accompanied with the Test Certificate or ISI Marked.
10	Injector Jets (Material of Construction and Thread to be declared)	9	IS 5116	10%	Each Consignment	In case of failure, consignment shall not be used in manufacturing.
11	Burners	10	IS 5116	Each Burner	---	---
		11.2, 11.3, 11.4	IS 4246	Each Gas Stove/ Built in Hob	---	---
12	Pan Supports	12.1, 12.3	IS 4246	Each Pan Support	---	---
13	Gas Soundness	16, Annex J	IS 5116	Each Gas Stove/ Built in Hob	---	If there is any defect in any stove, it shall be rectified. The rectified stove shall again be tested and marked only if found conforming. In addition, a stove shall be drawn from each control unit and tested for Gas Soundness after the stove has been operated for two hours.
14	Gas inlet connection	18.2	IS 5116	One Gas Stove/ Built in Hob	Once in a month	In case of failure, twice the number of samples shall be tested and if any stove fails the control unit shall be rejected.

		18.3,18.4	IS 5116	10%	Each Consignment	No further testing is required, if accompanied with the Test Certificate or ISI Marked. In case of failure, consignment shall not be used in manufacturing.
		14.2 to 14.6	IS 4246	Firm should exercise adequate control so that whole production should meet the requirements. Records shall be maintained		
15	Strength and Rigidity	15, Annex B	IS 4246	One Stove	Each Control Unit	In case of failure, twice the number of samples shall be tested and if any stove fails the control unit shall be rejected.
18	Ignition & Flame Travel	18 14, Annex G	IS 4246 IS 5116	Each Stove/ Built in Hob	-	If there is any defect in any stove, it shall be rectified. The rectified stove shall again be tested and marked only if found conforming.
19	Flame Stability	19	IS 4246	One Stove/Built-in Hob	Each Control Unit	
20	Noise Control	20	IS 4246	Each Stove Built in Hob	---	
21	Flash Back	21	IS 4246	One Stove/ Built in Hob	Each Control Unit	In case of failure, all gas stoves in the control unit shall be tested and only those stoves which are conforming shall be marked.
22	Formation of Soot	22	IS 4246	One Stove/ Built in Hob	Each Control Unit	

	TYPE TESTS					
5	Flash Back Test for Material of the Burner	5.2, Annex C	IS 5116	One burner and its part	Once in a month	The test shall also be conducted, if there is any change in material of Burner and its parts. or source of supply
17	Gas Consumption	17, Annex D	IS 4246	Three Stoves/Built in Hob	Each Control Unit	In case of failure, six more stoves or Built in-hobs, shall be tested from the same control unit and if any stove fails all the stoves in the control unit shall be checked and those stoves which are conforming shall be marked. However, those stoves which are failing may be reprocessed and retested and marked only if found conforming.
23	Resistance to Draught	23	IS 4246	One Stove/ Built in Hob	Once in a month for each type of Gas stove, Hob produced in the month	---
24	Combustion	24, Annex E		One Stove/ Built in Hob		---
25	Fire Hazard and Limiting Temperature	23, Annex M	IS 5116	One Stove/ Built in Hob	Once in a month	Stoves having different body material and finish shall be tested separately, if manufactured during the month
		25.2, Annex F	IS 4246	One Stove/ Built in Hob		

26	Thermal Efficiency	26, Annex F	IS 4246	One Stove/ Built in Hob	Once in a month	In case of failure, samples from three consecutive control units shall be tested and original frequency may be restored if all the samples pass.
----	--------------------	----------------	---------	-------------------------------	--------------------	--

ANNEX – C**SCOPE OF THE LICENCE**

Licence is granted to use Standard Mark as per IS 4246:2025 with the following scope:	
Name of the Product	Domestic Gas Stove and Built in hob, for use with Liquefied Petroleum Gases
Product covered	Domestic Gas Stove Built in hob
Type	a) Total Gas consumption in g/h. b) No. of burners and rating of burners in kcal/h. c) Material of body and burner d) Thread size of injector jet e) Toughened glass top, if applicable f) Auto- ignition, if applicable