



**PRODUCT MANUAL FOR  
BURNERS FOR OIL PRESSURE STOVES AND OIL PRESSURE  
HEATERS ACCORDING TO IS 8808:2019**

*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.	<b>Product</b>	:	<b>IS 8808:2019</b>
	<b>Title</b>	:	<b>BURNERS FOR OIL PRESSURE STOVES AND OIL PRESSURE HEATERS</b>
	<b>No. of Amendments</b>	:	Nil
2.	<b>Sampling Guidelines:</b>		
a)	<b>Raw material</b>	:	As per clause 5 of IS 8808:2019.
b)	<b>Grouping guidelines</b>	:	Please refer <a href="#">ANNEX – A</a>
c)	<b>Sample Size</b>	:	2 burners.
3.	<b>List of Test Equipment</b>	:	Please refer <a href="#">ANNEX – B</a>
4.	<b>Scheme of Inspection and Testing</b>	:	Please refer <a href="#">ANNEX – C</a>
5.	<b>Possible tests in a day</b>	:	All tests
6.	<b>Scope of the Licence</b>	:	Please refer <a href="#">ANNEX – D</a>

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**ANNEX - A****Grouping Guidelines**

- The following parameters have been taken into consideration for developing the grouping guidelines for certification of Burners for Oil Pressure Stoves and Burners for Oil Pressure Heaters as per IS 8808 :2019:

(i) Burner Type (ii) Burner Designation and (iii) Thermal Efficiency

- Considering the above, following Groups have been formed for GoL/CSoL:

***(a) Burner for Oil Pressure Stove:***

<b>Burner Type</b>	<b>Burner Designation</b>	<b>Thermal Efficiency</b>	<b>Group</b>
Roarer Type	0, 1, 2, 3, 4	55 percent to 60 percent	I
	0, 1, 2, 3, 4	More than 60 percent	II
Silencer Type	OS, 1S, 2S, 3S	58 percent to 62 percent	III
	OS, 1S, 2S, 3S	More than 62 percent	IV
Tube Type	O, OS	55 percent and above	V

***(b) Burner for Oil Pressure Heaters:***

<b>Burner Type</b>	<b>Burner Designation</b>	<b>Thermal Efficiency</b>	<b>Group</b>
Roarer Type	1H, 2H, 3H, 4H	55 percent to 60 percent	VI
	1H, 2H, 3H, 4H	More than 60 percent	VII

- Burner of any Designation having any Thermal Efficiency from each Group shall be drawn for testing to cover all Designations of Burner in that particular Group. However, in-house test results for all remaining Designations in the Group shall also be submitted by the Firm.
- The Firm shall declare the varieties of Burners intended to be covered in the Licence and submit to BIS the drawing or suitable document to identify each variety of Burner. The Scope of the Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
- During the operation of the licence, BOs shall ensure that all the varieties covered in the licence are tested in rotation, to the extent possible.

**ANNEX-B****List of Test Equipment***Major test equipment required to test as per the Indian Standard*

<b>Sl. No.</b>	<b>Tests used in with Clause Reference</b>	<b>Test Equipment</b>
1	Shape, Size and Dimensions as per Clause 6	a. Vernier Caliper b. Micrometer
2	Construction and Assembly as per Clause 7	c. Dial Caliper d. Thread Gauge e. Scales f. Pricker
3	Maximum Pressure Tests as per Clause 10.1.1	a. Pressure Gauge b. Compressor c. Water Tank
4	Safety pressure test as per Clause 10.1.2	a. Hydraulic Test Bench b. Pressure Gauge
5	Bursting pressure test as per Clause 10.1.3	c. Stop watch
6	Thermal efficiency as per Clause 10.2	a. Weighing Balance and Weight Box b. Thermometer c. Aluminium Pan and Stirrer d. Test kerosene e. Stop watch f. Pressure gauge
7	Fuel Consumption as per Clause 10.3	a. Weighing Balance and Weight Box b. Thermometer c. Aluminium Pan d. Pressure gauge e. Stop watch

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

**ANNEX- C**

**Scheme of Inspection and Testing**

1. **LABORATORY** - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.
  - 1.1 The manufacturer shall prepare a calibration plan for the test equipments.
2. **TEST RECORDS** – The manufacturer shall maintain test records for the tests carried out to establish conformity.
3. **LABELLING AND MARKING** – As per the requirement of IS 8808: 2019.
4. **CONTROL UNIT** - Burners of the same Type and Size manufactured during a day shall constitute a control unit.
5. **LEVELS OF CONTROL** - The tests as indicated in column 1 of [Table 1](#) and the levels of control in column 3 of [Table 1](#), shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.
  - 5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.
6. **REJECTIONS** – 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

(1)		(2)		(3)			
Cl.	Test Details		Test equipment requirement R:required (or) S: Subcontracting permitted	No. of Sample	Levels of Control		
	Requirement	Test Method			Frequency	Remarks	
		Clause					Reference
5	Materials	5	IS 8808	S	One	Each Consignment	No further testing is required, if accompanied with Test Certificate.
6.	Shape, Size and Dimensions	6	IS 8808	R	One	Every half hour production	In case of bought-out components number of samples to be selected from a lot and permissible number of defectives shall be in accordance with Table 1 of Annex B of IS 8808.
7	Construction and Assembly	7.1 (Melting Point of brazing alloy)	IS 8808	S	One	Each Consignment	No further testing is required, if accompanied with Test Certificate.
		7.1 (except Melting Point of brazing alloy ) to 7.7	IS 8808	R	Each Burner	—	—

8	Finish	8	IS 8808	R	Each Burner	—	—
10	<b>TESTS</b>						
10.1	Maximum working pressure test	10.1.1	IS 8808	R	Each Burner	—	If any sample fails in any of these tests, two more samples from same control unit shall be tested for all these requirements. If any failure is observed during retesting, the control unit shall be rejected.
	Safety pressure test	10.1.2	IS 8808	R	One Burner	Each Control Unit	
	Bursting pressure test	10.1.3	IS 8808	R	One Burner	Each Control Unit	
10.2	Thermal efficiency	10.2	IS 8808	R	One Burner	Each Control Unit	
10.3	Fuel Consumption	10.3	IS 8808	R	One Burner	Each Control Unit	

**NOTE-1:** Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

**NOTE-2:** The control unit and levels of control as decided by the Bureau are obligatory, to which the licensee shall comply with.

**ANNEX – D****SCOPE OF THE LICENCE**

Licence is granted to use Standard Mark as per IS 8808: 2019 with the following scope:	
Name of the Product	<ul style="list-style-type: none"> <li>a) Burners for Oil Pressure Stoves</li> <li>b) Burners for Oil Pressure Heaters</li> </ul>
Type and Designations (as applicable)	<ul style="list-style-type: none"> <li>a) Burner Type (Roarer type/Silencer type/Tube type) and Burner Dsesignation</li> <li>b) Rate of Fuel consumption in g/h.</li> <li>c) Declared Thermal Efficiency ( if more than 60 % in case of Roarer type and more than 62% for Silencer type)</li> </ul>