



उत्पाद मैनुअल

आई एस 6290 : 1986 के अनुसार

भांप इस्तरी – विशिष्टि (पहला पुनरीक्षण) के लिए

दस्तावेज संख्या – पीएम/आई एस 6290/1/ अक्टूबर 2024

*विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना-
। के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का
उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया
जाएगा। दस्तावेज का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा
भी किया जा सकता है।*

**PRODUCT MANUAL FOR
SPECIFICATION FOR STEAM IRONS (FIRST REVISION)
ACCORDING TO IS 6290 : 1986**

Document No - PM/IS 6290/1/October 2024

*This Product Manual shall be used as reference material by all Regional/Branch
Offices & licensees to ensure uniformity 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.*

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उत्पाद मैनुअल
भांप इस्तरी – विशिष्टि (पहला पुनरीक्षण)
आई एस 6290 : 1986 के अनुसार

**PRODUCT MANUAL
SPECIFICATION FOR STEAM IRONS (FIRST REVISION)
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विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

Note:

1. The product 'Safety of household and similar electrical appliances – Electric iron' as per IS 302-2-3 is covered under mandatory certification. Therefore, Licence as per IS 302-2-3 : 2007 or licence as per IS 302 (Part 2/ Sec 3) : 2024 / IEC 60335-2-3 : 2022 for the concerned variety (model) is a pre-requisite for getting licence for the product as per IS 6290 : 1986.

1.	मानक संख्या IS No.	:	IS 6290 : 1986
	शीर्षक Title	:	SPECIFICATION FOR STEAM IRONS (FIRST REVISION)
	संशोधनों की संख्या No. of amendments	:	5
2.	नमूना दिशानिर्देश Sampling Guidelines:		

a)	कच्चा माल Raw material	:	—
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer ANNEX – A
c)	नमूने का परिमाण Sample Quantity	:	4 number
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer ANNEX – B
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer ANNEX – C
5.	एक दिन में संभावित परीक्षण Possible tests in a day:	:	Please refer ANNEX-D
6.	लाइसेंस का दायरा /Scope of the Licence	:	
Licence is granted to use Standard Mark as per IS 6290 : 1986 with the following scope:			
	Name of the Product	Steam Irons	
	Model No.		
	Type	Vented Steam Iron (With cord/ Cordless)/ Pressurized Steam Iron (With cord/ Cordless)/ Instantaneous Steam Iron (With cord/ Cordless)/ Spray Iron (With cord/ Cordless)	
	Rating	1000 / 1250 W, ____ V, ____ Hz, ____ Phase	
	Class of Appliance	Class I/II/III	
	Grade	Pollution Degree ____, Material Group ____	
	Type of coating of sole plate	Electroplated coating/ PTFE Coating/ other coating (to be declared by the manufacturer)	
	Mass of the iron	____ kg	
	Capacity of Water Tank	____ L	

ANNEX – A

समूहीकरण दिशानिर्देश **Grouping Guidelines**

- 1) Manufacturer shall declare the parameters indicated in the scope of licence for each model of the Steam Iron produced by them.
- 2) For GoL/CSOL, each model of Steam Irons shall be tested. Change in aesthetics, i.e colour, visual design etc may not be treated as different model.
- 3) The Firm shall declare the varieties of Electric Irons they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing capability and Testing facilities of the Manufacturer.
- 4) During the operation of the Licence, BO shall ensure that all the Varieties covered in the Licence are tested in rotation to the extent possible.

ANNEX – B

परीक्षण उपकरणों की सूची

List Of Test Equipment

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Major test equipment required to test as per the Indian Standard

Sl. No.	Test equipment list	Test used in with clause reference
1.	Voltmeter, Finger Test Apparatus	Cl. 8 (Protection against Electric Shock)
2.	Voltmeter, Ammeter, Wattmeter	Cl. 10 (Power input and current)
3.	Test Corner consisting of dull-black painted plywood, Temperature Controller	Cl. 11 (Temperature Rise)
4.	IR Meter, Micro ammeter, HV Tester, Stopwatch	Cl. 13 (Leakage current and electric strength at operating temperature)
5.	Humidity Test Chamber	Cl. 15 (Moisture Resistance)
6.	Metal foil, HV Test Supply	Cl. 16 (Insulation resistance and electric strength)
7.	Test Corner, Felt Strips, Copper/brass disks	Cl. 19 (Abnormal Operation)
8.	Inclined Test Apparatus	Cl. 20 (Stability and mechanical hazards)
9.	Spring Hammer, Finger Test Apparatus	Cl. 21 (Mechanical strength)
10.	Micrometer, VAW meter, Pressure Test Apparatus	Cl. 22 (Construction)
11.	Flexing Test Apparatus	Cl. 23 (Internal wiring)
12.	Cord Grip Test Apparatus, Measuring Tape, Micro ohmmeter	Cl. 25 (Supply connection and external flexible cables and cords)
13.	Torque Screwdriver	Cl. 26 (Terminals for external conductors)
14.	Earth Contact Resistance Testing Panel (ECR Measurement), Voltmeter, Ammeter	Cl. 27 (Provisions for earthing)
15.	Torque Wrench	Cl. 28 (Screws and connections)
16.	Filler Gauge, Vernier Caliper, Micrometer	Cl. 29 (Creepage distance and clearances)
17.	Glow Wire Test Apparatus, Oven, Ball Pressure Apparatus, Heating Oven with temperature controller	Cl. 30 (Resistance to Heat, Fire and Tracking)
18.	Humidity Chamber with temperature and humidity controller, measuring cylinder, Ammonium chloride, Carbon	Cl. 31 (Resistance to rusting)

	Tetrachloride	
19.	Test Corner, Fine wire thermocouples, three point metallic support	Cl. 101 (Measurement of soleplate temperature)
20.	Three point metallic support, flannel cloth, paper	Cl. 102 (Measurement of Temperature Distribution)
21.	Fine wire thermocouples, three point metallic support	Cl. 103 (Measurement of initial overswing temperature and heating-up excess temperature), Cl. 104 (Measurement of cyclic fluctuation of temperature of the hottest point), Cl. 105 (Measurement of temperature drop under load)
22.	Metallic support, distilled water, thermostat, stop watch	Cl. 106 (Measurement of heating up time under steaming operation), Cl. 107 (Measurement of steaming and steaming rate)

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

ANNEX – C

निरीक्षण और परीक्षण की स्कीम

Scheme Of Inspection And Testing

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality Assurance Plan 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 defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.4.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: **All STEAM IRONS of same model number manufactured in a day, shall constitute a control unit.** The manufacturer has the choice to define their own control unit/batch/lot and submit the same to the BIS.

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.

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

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. Column 2 of Table 1 indicates routine tests where test equipment is required in house as “R” or other tests which can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.2 **For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as “R” in Column 2 of Table 1) is also optional.**

2.2.1 MSME manufacturers may utilize common cluster-based facilities as per guidelines for the utilization of cluster-based test facilities by MSMEs or the provisions of Sharing of testing facilities or get testing done from BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 **Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1)**, where different tests given in the specification shall be carried out in accordance with the method given in the specification. They shall also implement a calibration plan for the in-house test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.4 **TEST RECORDS**- The manufacturers maintaining an in-house laboratory or utilizing common cluster-based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

3. **MARKING** - The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on **each STEAM IRONS and also on its packaging** provided always that the material so marked conforms to each requirement of the specification.

3.1 Marking shall be done as per the **IS 6290 : 1986**.

3.2 **Additional Marking requirements**: The product shall also be marked with the following additional requirement on packaging:

a) “For BIS certification details please visit www.bis.gov.in”

4. **REJECTION** - All 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
(ONLY FOR GUIDANCE PURPOSE)

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
24	Component	24	IS 6290	S	Each consignment	No further testing required, if supplied with test certificate or BIS Standard Mark.	
	Marking	7	IS 6290	R	Firm should exercise adequate control so that whole production should meet the requirements. Records shall be maintained		
	Earth Continuity Test	A-1	IS 302 (Part 1)	R	Each Steam Irons		
	Electric Strength Test	A-2	IS 302 (Part 1)	R	Each Steam Irons		
	Functional test	A-3	IS 302 (Part 1)	R	Each Steam Irons		
8	Protection Against Live Parts	8	IS 302-2-3	R	Each Steam Irons		
13.2	High Voltage Test	13.2	IS 302-2-3	R	Each Steam Irons		
27	Provision for Earthing	27	IS 302-2-3	R	Each Steam Irons		
10	Power Input and current	10	IS 302-2-3	R	Each Steam Irons		
13	Leakage current and electric strength at operating temperature	13	IS 302-2-3	R	One	Each Control Unit	
16	Leakage current and electric strength	16	IS 302-2-3	R	One	Each Control Unit	
11	Temperature Rise	11	IS 302-2-3	R	One	Once in a week for all the models number manufactured during the period	
14	Transient Overvoltage	14	IS 302-2-3	S	One	Once every three months for all the models number manufactured during the period	
15	Moisture Resistance	15	IS 302-2-3	S	One		
20	Stability and Mechanical Hazards	20	IS 302-2-3	S	One		
28	Screws and Connections	28	IS 302-2-3	S	One		
31	Resistance to Rusting	31	IS 302-2-3	S	One		

18	Endurance	18	IS 6290, IS 302 (Part 1)	S	One	Once every six months for all the models number manufactured during the period
19	Abnormal Operation	19	IS 302-2-3	S	One	
21	Mechanical Strength	21	IS 6290, IS 302-2-3	S	One	
22	Construction	22	IS 302-2-3	S	One	
23	Internal Wiring	23	IS 302-2-3	S	One	
24	Components	24	IS 302-2-3	S	One	
25	Supply Connection and External Flexible Cords	25	IS 302-2-3	S	One	
26	Terminals for External Conductors	26	IS 302-2-3	S	One	
29	Clearances, Creepage Distances and Solid insulators	29	IS 302-2-3	S	One	
30	Resistance to heat, Fire and Tracking	30	IS 302-2-3	S	One	
31	Resistance to Rusting	31	IS 302-2-3	S	One	
101	Resistance of Soleplate Temperature	101	IS 6290	S	One	
102	Measurement of Temperature Distribution	102	IS 6290	S	One	
103	Measurement of Initial Overswing Temperature and Heating-Up Excess Temperature	103	IS 6290	S	One	
104	Measurement of Cyclic Fluctuation of Temperature of the Hottest Point	104	IS 6290	S	One	
105	Measurement of Temperature Drop under Load	105	IS 6290	S	One	
106	Measurement of Heating Up Time under Steaming Operation	106	IS 6290	S	One	
107	Measurement of Steaming Time and Steaming Rate	107	IS 6290	S	One	

ANNEX – D

एक दिन में संभावित परीक्षण Possible Tests in a day

1. Earth Continuity test (A-1 of IS 302 (Part 1));
2. Electric strength test (A-2 of IS 302 (Part 1));
3. Functional Test (A-3 of IS 302 (Part 1));
4. Marking (Cl. 7);
5. Protection Against Live Parts (Cl. 8 of IS 302-2-3);
6. Power Input and current (Cl. 10 of IS 302-2-3);
7. Leakage current and electric strength at operating temperature (Cl. 13 of IS 302-2-3);
8. Provision for Earthing (C. 27 of IS 302-2-3).