



उत्पाद मैनुअल
घरेलु और सामान विद्युत् साधित्रों की सुरक्षा भाग 2 विशेष अपेक्षायें
अनुभाग 14 बिजली की रसोई मशीनें (पहला पुनरीक्षण)
आई एस 302-2-14 : 2009 के अनुसार

PRODUCT MANUAL
SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES
PART 2 PARTICULAR REQUIREMENTS
SECTION 14 ELECTRIC KITCHEN MACHINES (FIRST REVISION)
ACCORDING TO IS 302-2-14 : 2009

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 Safety of Household, Commercial and Similar Electrical Appliances (Quality Control) Order, 2025 does not apply to electrical appliances which fall under the scope of any other Quality Control Order issued under the Bureau of Indian Standards Act, 2016 or notified for mandatory Bureau of Indian Standard certification under any other Act. Hence, in case a manufacturer is already having a valid licence for 'Hand-held Blender' as per IS 302-2-14 : 2009 and/ or for 'Domestic Electric Food Mixer (Liquidizers and Grinders) and Centrifugal Juicer' as per IS 4250 : 2025, then those manufacturers are not required to take a separate licence as per IS 302 (Part 1) : 2024 / IEC 60335-1 : 2020.
2. For all other products covered in the scope of IS 302-2-14 : 2009, the manufacturer shall get a licences as per IS 302 (Part 1) : 2024/ IEC 60335-1 : 2020 as per the provisions of Safety of Household, Commercial and Similar Electrical Appliances (Quality Control) Order, 2025.

1.	मानक संख्या IS No.	:	IS 302-2-14 : 2009
	शीर्षक Title	:	SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES - ELECTRIC KITCHEN MACHINES (FIRST REVISION)
	संशोधनों की संख्या No. of amendments	:	0
2.	नमूना दिशानिर्देश Sampling Guidelines:		
a)	कच्चा माल Raw material	:	• Components as per Cl. 24 of IS 302-2-14
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer ANNEX – A
c)	नमूने का परिमाण Sample Quantity	:	2 numbers
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 302-2-14 : 2009 with the following scope:		
	Name of the Product		Household Electric Kitchen Machines- Safety requirements
	Type/ Functionality of the product		(For example, Food processor/ Hand-held blender/ Centrifugal Juicer/ egg beater/ bean slicers/ berry-juice extractors/ blenders/ can openers/ churns/ citrus-fruit squeezers/ coffee mills not exceeding 500 g hopper capacity/

		cream whippers/ food mixers/ grain grinders not exceeding 3 l hopper capacity/ graters/ ice-cream machines, including those for use in refrigerators and freezers/ knife sharpeners/ knives/ mincers/ noodle makers/ potato peelers/ shredders/ sieving machines/ slicing machines etc)
	Model Number	
	Rating	__ W, __ V, __ Hz, __ Phase, ac
	Class of appliance	
	Insulation class	
	Degree of protection	
	Any other aspect specific to the type of the product	

ANNEX – A

समूहीकरण दिशानिर्देश **Grouping Guidelines**

- 1(a). The firm shall declare the varieties they intend to cover in the Licence along with a model number. The firm shall declare the parameters in the scope of licence for each model number.
- 1(b). Samples of Electric Kitchen Machines shall be tested considering the following:
- i. Type/ Functionality of the product (For example, Food processor/ Hand-held blender/ Centrifugal Juicer/ egg beater etc.)
 - ii. Rated voltage
 - iii. Rated input power
 - iv. Class of appliance
 - v. Insulation class
 - vi. Degree of protection against harmful ingress of water
- 1(c). All other parameters stated above remaining the same, the following relaxation may be given when a variety is tested for all the requirements:
- i. To cover a range of rated inputs, samples of minimum and maximum rated power rating may be tested.
 - ii. If a variety with a particular degree of protection is tested, varieties with lower degrees of protection may also be covered.
2. The firm shall declare the varieties they intend to cover in the Licence. The Scope of Licence may be restricted based on the manufacturing and testing capabilities of the manufacturer.
3. 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/Chemical	Tests Used In With Clause Reference
1.	Petroleum spirit	Cl 7 (Marking)
2.	Test probe B, 13 and 41 of IS 1401, Voltmeter, mill-ammeter, oscilloscope, force gauges, 2000 ohm non-inductive resistor, coulomb meter, energy meter	Cl. 8 (Protection Against Electric Shock)
3.	Voltmeter, Ammeter, Wattmeter, Timer	Cl. 10 (Power input and current)
4.	Temp recorder, Fine wire thermocouples, Winding resistance measurement system, Test Corner, probe for measurement of surface temperature	Cl. 11 (Heating)
5.	Metal foil, Leakage Current Tester, Isolation transformer, HV test supply, Network as per relevant fig. of IS 302-1	Cl. 13 (Leakage current and electric strength at operating temperature)
6.	Impulse voltage test generator and monitor	Cl. 14 (Transient voltages)
7.	IP test equipment, Measuring beaker, Spray Nozzle (only when the second numeral is greater than 0), Spillage test apparatus, Humidity Chamber with Temperature and Humidity controller, HV test facilities	Cl. 15 (Moisture resistance)
8.	Metal foil, Low impedance ammeter, HV test supply	Cl. 16 (Leakage current and Electric Strength)
9.	Temp recorder, Fine wire thermocouples, Winding resistance measurement system, Test Corner, probe for measurement of surface temperature	Cl. 17 (Overload protection of transformers and associated circuits)
10.	Plywood board, Electrostatic discharge test apparatus, Radiated field test apparatus, Fast transient burst test apparatus, Voltage dip and interruption test apparatus	Cl. 19 (Abnormal Operation)
11.	Inclined plane, masses, force gauges, test probe similar to test probe B of IS 1401 with circular stop face 50 mm Ø, Stop plate, test rod	Cl. 20 (Stability and Mechanical Hazards)
12.	Spring hammer, Hardened steel pin, Force gauges	Cl. 21 (Mechanical Strength)

13.	Test rig for torque on pin supported appliance, Heating cabinet, Test probe 11 of IS 1401, Test fingernail , Force gauge, Pressure test apparatus, Automatic cord reel test apparatus, Oxygen bomb with pressure apparatus, Methylated spirits	Cl. 22 (Construction)
14.	Flexing test apparatus	Cl. 23 (Internal wiring)
15.	Flexing test apparatus, Cord anchorage force & torque tester, Cold chamber	Cl. 25 (Supply connection and external flexible cords)
16.	Torque screwdriver	Cl. 16 (Terminals for external conductors)
17.	Earth continuity tester	Cl. 27 (Provision for earthing)
18.	Torque gauge	Cl. 28 (Screws and connections)
19.	Mechanical measurement tools, Rod or ball gauges, Proof tracking test apparatus	Cl. 29 (Creepage Distance clearance and Distance through Insulation)
20.	Heating Oven with Temp controller, Ball pressure Apparatus, Glow wire test apparatus	Cl. 30 (Resistance to heat and fire)
21.	Humidity Chamber with Temp and Humidity Controller, Measuring Cylinder 500 ml, Ammonium Chloride, Carbon Tetrachloride, Distilled Water	Cl. 31 (Resistance to Rusting)
22.	Air conditioner, Heater	General Test Conditions and preparation of sample

Metal foil as per specifications given at Cl. 13.2 of IS 302-1 : 2008.

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 electric kitchen machines of the same model number manufactured in one 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 electric kitchen machine and also on its packaging** (wherever applicable) provided always that the material so marked conforms to each requirement of the specification. In addition, marking shall be done as per the Cl. 7 of IS 302-2-14 : 2009.

4. Additional Marking requirements:

- a) The material shall also be marked with the following additional requirement on packaging:
“For BIS certification details please visit www.bis.gov.in”.
- b) Instruction shall be provided with each Electric Kitchen Machine as per requirement prescribed at Cl. 7.12 of the IS 302-2-14 : 2009.

5. 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)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted		
Cl.	Requirement	Test Methods			No. of Sample	
		Cl.	Ref			
24	Components	24	IS 302-2-14, IS 302-1	S	Each consignment of components received	No. of components received
CL 5.1 & Annex -A	Earth continuity test	A-1	IS 302-1	R	Each appliance marked	
	Electric strength test	A-2	IS 302-1	R	Each appliance marked	
	Functional test	A-3	IS 302-1	R	Each appliance marked	
7	Marking and Instruction	7	IS 302-2-14, IS 302-1	R	Firm to have adequate compliance of this part. However, appropriate manufacturer for evaluation	
27	Provision for Earthing	27	IS 302-1	R	One	Each appliance
8	Protection Against Access to Live Parts	8		R	One	
10	Power Input and Current	10		R	One	
13	Leakage current and Electric strength at operating temperature	13		R	One	

11	Heating	11	IS 302-2-14, IS 302-1	R	One	Once in a week for each model number manufactured during the period
14	Transient Overvoltage	14	IS 302-1	S	One	Once every six months for each model number manufactured during the period.
17	Overload protection of transformers and associated circuits	17		S	One	
16	Leakage current and Electric strength	16		S	One	
23	Internal wiring	23		S	One	
26	Terminals for external conductors	26		S	One	
28	Screws and connections	28		S	One	
31	Resistance to rusting	31		S	One	
32	Radiation, Toxicity and Similar Hazards	32		S	One	
15	Moisture Resistance	15	IS 302-2-14, IS 302-1	S	One	
19	Abnormal operation	19		S	One	
20	Stability and Mechanical hazards	20		S	One	
21	Mechanical strength	21		S	One	
22	Construction	22		S	One	
25	Supply connection and external flexible cords	25		S	One	
29	Clearances, Creepage Distances and solid insulation	29		S	One	
30	Resistance to heat and fire	30		S	One	

ANNEX – D

एक दिन में संभावित परीक्षण Possible Tests in a day

1. Marking (Cl. 8)
2. Earth Continuity Test (A-1 of IS 302-1)
3. Electric Strength Test (A-2 of IS 302-1)
4. Functional test (A-3 of IS 302-1)
5. Protection Against Electric Shock (Cl. 8)
6. Power Input and Current (Cl. 10)
7. Electric Insulation and Leakage Current at Operating Temperature (Cl. 13)
8. Provisions of Earthing (Cl. 27)