

भारतीय मानक ब्यूरो
(केंद्रीय मुहर विभाग III)

हमारा संदर्भ : सी एम डी - III/16 : IS 2082

31 मई 2018

विषय : आई एस 2082:2018 के लिए पुनरीक्षित एस टी आई का अनुपालन

इसे उपरोक्त विषय का संदर्भ प्राप्त है।

सक्षम प्राधिकारी ने अनुपालन हेतु पुनरीक्षित एस टी आई को अनुमोदित कर दिया है।

सभी क्षेत्रीय और शाखा कार्यालयों से अनुरोध है की उपरोक्त पुनरीक्षित एस टी आई का अनुपालन सुनिश्चित करें।

अलिस्मिता खाग
वैज्ञानिक बी (सी एम डी-III)

प्रमुख (सी एम डी-III)

सभी क्षेत्रीय /शाखा कार्यालय

प्रतिलिपि : आई टी एस विभाग - बी आई एस इंटरनेट पर डालने हेतू

CENTRAL MARKS DEPARTMENT III

Our Ref: CMD III/16: IS 2082

31 May 2018

Subject: Revised STI for implementation of IS 2082:2018

This has reference to the subject mentioned above.

The Competent Authority has approved the revised STI for implementation.

All ROs/BOs are requested to ensure the implementation of the above STI.

Alismita Khag
Sc.B(CMD-III)

Head (CMD III)

DDG(Certification)

Circulated to: All ROs/BOs

Copy to: ITS for hosting on Intranet

**SCHEME OF TESTING AND INSPECTION FOR CERTIFICATION OF
STATIONARY STORAGE TYPE ELECTRIC WATER HEATERS
ACCORDING TO IS 2082:2018**

1. LABORATORY

1.1A laboratory shall be maintained which shall be suitably equipped and staffed, where different tests given in the Specification shall be carried out in accordance with the methods given in the Indian Standard.

1.2 All test equipments shall be periodically checked, verified and calibrated and records of such checks/verification/calibration shall be maintained.

2. TEST RECORDS

2.1 All records of tests as per this Scheme of Testing and Inspection shall be kept in suitable forms.

2.2 Copies of any such records that may be required by BIS shall be made available at any time on request.

3. QUALITY CONTROL

3.1 It is recommended that, as far as possible, Statistical Quality Control (SQC) methods may be used for controlling the quality of the product during production as envisaged in this Scheme [see IS 397 (various parts)].

3.2 In addition, effort should be made to gradually introduce a Quality Management System in accordance with IS/ISO 9001.

4. STANDARD MARK

4.1 The Standard Mark, as given in Column (1) of the First Schedule of the licence shall be applied on each stationary storage type electric water heater in the form of transfix labels or anodized plate suitably fixed thereon, provided always that the stationary storage type electric water heater to which the Standard Mark is applied conforms to every requirement of the specification. The mark shall be applied in a manner and place that there is no possibility of its being removed from the stationary storage type electric water heater and misused elsewhere.

5. MARKING

5.1 In addition to the Standard Mark, the information as per clause 7 of IS 2082:2018 shall be clearly and indelibly marked on each stationary storage type electric water heater. In

addition, the water heater shall also be marked with an identification in code or otherwise to enable the date and lot of manufacture to be traced back from factory records.

5.2 Each water heater shall be provided with the instruction manual for installation, operation and use, routine maintenance and safety precautions. This shall also include values declared by the manufacturer in respect of relevant test requirements.

5.3 The manual shall also specify the critical components and supply the circuit diagram to ensure proper replacement of components for each class (Cl. 6 of IS 2082:2018) at the time of servicing.

6. LEVELS OF CONTROL

6.1 The tests as indicated in Table 1, and at the levels of control specified therein, shall be carried out on the whole production of the factory covered by this scheme and appropriate records maintained in accordance with clause 2 above and charts may be maintained as per clause 3 above. All the production which conforms to the Indian Standard and covered by this licence shall be marked with Standard Mark.

6.2 Control Unit: For the purpose of this Scheme, all stationary storage type electric water heaters of the same class, design, rated capacity and rated voltage manufactured in a week or 500 stationary storage type electric water heaters of same class, design, rated capacity and rated voltage manufactured within a week, whichever is less, shall constitute a control unit.

6.3 If stationary storage type electric water heaters of more than one class, rated capacity and/or rated voltage are manufactured on the same day, water heaters of each class, rated capacity and rated voltage shall constitute separate control unit.

6.4 On the basis of the test results, decision regarding conformity or otherwise of the production shall be made.

6.5 In respect of all other clauses of the Specification and at all stages of manufacture, the factory shall maintain appropriate control and checks to ensure that the product conforms to various requirements of the Specification.

6.6 Wherever the Raw Materials/Components used is under the Mandatory Certification of BIS, they shall necessarily be ISI marked and no further testing is required. Wherever the Raw Materials/Components used is not under the Mandatory Certification of BIS and is accompanied with Test Certificate or ISI marked, in such cases also no further testing is required.

7. REJECTIONS

7.1A separate record shall be maintained giving information relating to the rejection of the production not conforming to the requirements of the Specification and the method of

disposal. Such material shall in no case be stored together with that conforming to the Specification. The Standard Mark (if already applied) on rejected material shall be defaced.

8. SAMPLES

8.1 The licensee shall supply, free of charge, the samples required in accordance with the Bureau of Indian Standards (Certification) Regulations, 1988, as amended from time to time, from the factory or godown. BIS may draw samples from the open market, if available.

9. REPLACEMENT

9.1 Whenever a complaint is received soon after the goods with Standard Mark have been purchased and used, and if there is adequate evidence that the goods have not been misused, defective goods shall be replaced free of cost by the licensee in case the complaint is found to be genuine and the warranty period (where applicable) has not expired. The final authority to judge the conformity of the product to the Indian Standard shall be with BIS.

9.2 In the event of any damage caused by the goods bearing the Standard Mark, or any claim being filed by the consumers against BIS Standard Mark and not “conforming to” the relevant Indian Standard, entire liability arising out of such non-conforming product shall be of the licensee and BIS shall not in any way be responsible in such cases.

10 STOP MARKING

10.1 The marking of the product shall be stopped under intimation to BIS if, at any time, there is some difficulty in maintaining the conformity of their product to the Specification, or the testing equipment goes out of order or due to any other reason. The marking may be resumed as soon as the defects are removed under intimation to BIS.

10.2 The marking of the product shall be stopped immediately if directed to do so by BIS for any reason. The marking may then be resumed only after permission by BIS. The information regarding resumption of marking shall also be sent to BIS.

11 PRODUCTION DATA

The licensee shall send to BIS a statement of quantity produced, marked and exported by him and the value thereof at the end of each operative year of the licence as per the enclosed proforma which has to be authenticated by a Chartered Accountant.

IS 2082:2018
STATIONARY STORAGE TYPE ELECTRIC WATER HEATERS
TABLE 1 LEVELS OF CONTROL
(Clause 6 of the Scheme of Testing and Inspection)

TEST DETAILS				LEVELS OF CONTROL			
Clause	Requirements	Test Method		No. of Specimen	Lot Size	Frequency	Remarks
		Clause	Reference				
21	Finish	21	IS 2082	Each water heater			In case a water heater fails, all the water heaters in the control unit shall be tested and those not passing shall be rejected. Twice the original number shall be tested in the subsequent control units for these requirements till 5 consecutive control units pass. The original frequency shall then be restored.
22.1.3 (d)	Pressure Test	22.101	IS 302-2-21				
8	Protection against access to live parts	8	-do-				
22.1.3 (b)	High Voltage	13.3	-do-				
22.1.3 (c)	Earthing Connection	27	-do-				
8	Power input & current	10	-do-	Five water heaters	One Control Unit	Every Control Unit	
8	Leakage current & electric strength at operating temperature	13	-do-				
8	Construction	22	-do-				
8	Provision for Earthing	27	-do-				
14	Capacity	14	IS 2082				
8	Heating	11	IS 302-2-201	One water heater	—	Every month for each type & design	In case a sample fails, the marking of that type & design shall be stopped and after a thorough investigation the defect shall be rectified. The marking shall be resumed when samples of that type & design taken from the improved lot show conformity to the requirements
8	Moisture resistance	15	-do-				
8	Transient Overvoltages	14	-do-				
8	Leakage current & electric strength	16	-do-				
8	Overload Protection of transformers and associated circuits	17	-do-				

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STATIONARY STORAGE TYPE ELECTRIC WATER HEATERS
TABLE 1 LEVELS OF CONTROL
(Clause 6 of the Scheme of Testing and Inspection)

TEST DETAILS				LEVELS OF CONTROL			
Clause	Requirements	Test Method		No. of Specimen	Lot Size	Frequency	Remarks
		Clause	Reference				
15	Standing Loss	15	IS 2082	One water heater	—	Every month for each type & design	In case a sample fails, the marking of that type & design shall be stopped and after a thorough investigation the defect shall be rectified. The marking shall be resumed when samples of that type & design taken from the improved lot show conformity to the requirements
19	Deviation from dial calibration	19	-do-				
16	Hot water output	16	-do-				
17	Reheating Time	17	-do-				
18	Mixing Factor	18	-do-				
20	Cyclic Temp. Variation (differential)	20	-do-				
8	Abnormal Operation	19	IS 302-2-21	One water heater	—	Every six months for each type & design	
8	Stability & Mechanical hazards	20	-do-				
8	Mechanical Strength	21	-do-				
8	Internal Wiring	23	-do-				
8	Components	24	-do-				
8	Supply connections & external flexible cords	25	-do-				
8	Terminals for external conductors	26	-do-				
8	Screws & connections	28	-do-				
8	Clearances, creepage distances & solid insulation	29	-do-				
8	Resistance to heat & fire	30	-do-				
8	Resistance to rusting	31	-do-				
8	Radiation, Toxicity and Similar Hazards	32	-do-				

PROFORMA FOR OBTAINING PRODUCTION DETAILS

Period covered	
Name of Licensee	
CM/L No.	
Name of Articles (s)	IS No.
Grade/Type/Size/Variety/Class/Rating	
Brand/Trade/Name(s) of Product covered under BIS Certification Mark	
Total production of the articles(s) licensed for certification marking	
Total production of the article(s) conforming to Indian Standard	
Production covered with BIS Certification Mark and its Value :	
a) Quantity	
b) Value (Rs.)	
Brand Name used on production covered under BIS Certification Mark	
Calculation of marking fee on unit-rate basis; Marking Fee per unit	
a) Unit	
b) Quantity covered with BIS Certification Mark	
c) Marking fee rounded off in whole rupees as obtained by applying unit rates given in (a) on quantity given in (b)	
NOTE: In case a clause is not applicable, suitable remarks may be given against it	
Quantity not covered with BIS Certification Mark, if any.	
Reasons for such non-coverage	
Brand Name under which non-ISI goods were sold	
Quantity exported with BIS Standard Mark and its value	
Brand Name under which BIS Certified goods are exported	
Authentication by Chartered Accountant	