



**PRODUCT MANUAL FOR
SELF-CONTAINED DRINKING WATER COOLER
ACCORDING TO IS 1475 (Part 1):2001**

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 1475 (Part 1):2001
	Title	:	Self-contained Drinking Water Coolers - Part 1: Energy Consumption and Performance
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	Cables - as per IS 9968 (Part 1) or IS 694, as applicable Other components- as per Cl. 6 of IS 1475 (Part 1)
b)	Grouping guidelines	:	Please refer ANNEX –A
c)	Sample Size	:	2 nos of water cooler
3.	List of Test Equipment	:	Please refer ANNEX –B
4.	Scheme of Inspection and Testing	:	Please refer ANNEX –C
5.	Possible tests in a day	:	H.V test (Cl. 7.7.2), Electric insulation test (Cl. 7.7.1), Performance test (Cl. 7.8), Cooling capacity (Cl. 7.7.3)
6.	Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 1475(Pt 1):2001 with the following scope:		
	Name of the product	Self-contained water coolers	
	Variety	Pressure Type and/or Storage Type, cooling capacity rating in l/h, water storage capacity in litres (as applicable), single/three phase, voltage rating in volts	

ANNEX A

Grouping Guidelines

1. IS 1475 (Part 1) covers Water coolers of the following Types:

(a) Pressure type water coolers

- Bubbler Type
- Faucet Type

(b) Storage type water coolers

- May store or cool water in the same container
- May employ bottle or container for storing supply of water to be cooled

2. **(a) Pressure type water cooler**

Pressure type water coolers are grouped as given below based on cooling capacity:

Group	Cooling Capacity Rating
Group 1	Up to and including 30 l/h
Group 2	Above 30 l/h

Sample of any variety of Pressure type water cooler [as indicated at 1(a)] with highest cooling capacity rating from each group shall be tested to cover both the varieties of Pressure type water coolers in that particular group for cooling capacity rating upto and including the cooling capacity rating tested.

(b) Storage type water cooler

Sample of any variety of Storage type water cooler [as indicated at 1(b)] with highest cooling capacity rating and highest storage capacity shall be tested to cover both the varieties of Storage type water coolers for cooling capacity rating and storage capacity upto and including the capacities tested.

3. Single/Three phase water coolers shall be tested separately. .

4. The Firm shall declare the varieties 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.

5. 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**List of Test Equipment***Major test equipment required to test as per the Indian Standard*

Sl. No.	Test Equipment	Tests used in with Clause Reference
1	Voltmeter	Cl 5.1
2	DBT indicator	Cl 5.2
3	Digital temp Indicator with sensors	Cl 5.2
4	Liquid flow meter	Cl 5.2.1
5	Mercury thermometer	Cl 5.3
6	Measuring Jars/Cylinders	Cl 5.6.2
7	Energy meter	Cl 7.8
8	Hour Meter	Cl.7.5.7
9	Measuring tape	To Measure dimension of tank
10	Micrometer	To Measure thickness of sheet
11	Digital temp. Indicator	Cl 7.5.7
12	IR Tester	Cl 7.7.1
13	HV tester	Cl 7.7.2
14	Megger	Cl 7.7.1
15	Ammeter	
16	Stop watch/ Timer	
17	Volt meter	Cl 5.1
18	Performance panel	7.7.3.1

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 equipment.

2. TEST RECORDS –The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. LABELLING AND MARKING–As per requirements of IS 1475 (Part 1): 2001.

4. CONTROL UNIT – Self-contained Water Coolers of same type, cooling capacity and storage capacity (as applicable) manufactured in 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 submitted by the manufacturer 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)		
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				
6.1 to 6.17	Component and their material.	6.1 to 6.17	IS 1475 (Part 1)	S	One	Each consignment	No further testing is required if accompanied with test certificate or ISI marked. Cables used shall be ISI Marked.
7.2 (a)	Electric insulation test	7.7.1	IS 1475 (Part 1)	R	One	Each water cooler	
7.2 (b)	Performance test	7.8.2	IS 1475 (Part 1)	R	One	Each water cooler	
7.2 (c)	High Voltage Test	7.7.2	IS 1475 (Part 1)	R	One	Each water cooler	
7.1(c)	Cooling capacity rating test	7.7.3	IS 1475 (Part 1)	R	One	Once in a month for each type, cooling capacity and storage capacity (as applicable)	
7.1(d)	Maximum operating conditions	7.7.4	IS 1475 (Part 1)	R	One		

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

Note-2: -Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.