



PRODUCT MANUAL FOR LEATHER PUMP BUCKETS AND SEAT VALVES MADE FROM VEGETABLE TANNED LEATHER ACCORDING TO IS 1015:2000

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 1015:2000
	Title	: Leather pump buckets and seat valves made from vegetable tanned Leather
	No. of Amendments	: 1
2.	Sampling Guidelines:	
a)	Raw material	: As per Clause 4 of IS 1015:2000
b)	Grouping guidelines	: Separate samples shall be drawn for each of the variety (Pump Buckets/ Seat Valves) for covering in the scope of licence. _____
c)	Sample Size	: (1 Square meter) - 1 Pc ; Plus 6 no of Buckets & 6 Nos Seat Valves
3.	List of Test Equipment	: Please refer <u>ANNEX – B</u>
4.	Scheme of Inspection and Testing	: Please refer <u>ANNEX – C</u>
5.	Possible tests in a day :	
	(i) Requirement as per Clause 5.1, 5.2, 5.3	
	(ii) Cupping test (Clause 4.3)	
	(iii) Dimension of Seat valve (Clause no 6.1)	
Scope of the License:		
“Licence is granted to use Standard Mark as per IS 1015:2000 with the following scope:		
Name of the product	Leather pump buckets and seat valves made from vegetable tanned Leather	
Type	Pump Bucket/ Seat Valves	

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

Sr.No	Test Equipment/Chemicals and Identification Numbers (Where applicable)	Range (Where applicable)	Valid Calibration (Where required) Yes/No	Tests Used in with Clause Reference
1	Muffle furnace	0-1200°C, LC-1°C	Yes	Cl 3.4 & 4.1 of IS 581
2	pH meter	0-14pH	Yes	Cl 5.3 of IS 1015
3	Buffer solution/tablets	4, 7, 9.2, 14	--	Cl 5.3 of IS 1015
4	Oven	0-300°C	Yes	Cl 3.4 & 4.1 of IS 581
5	Mechanical shaker	0-1000 RPM	--	Cl 3.4 & 4.1 of IS 581, Cl 5.3 of IS 1015
6	Stop watch	0-9999 Seconds	Yes	Cl 3.4 & 4.1 of IS 581. Cl 5.3 of IS 1015
7	Evaporating Basin Porcelain/ quartz	0-200ml	---	Cl 3.4 & 4.1 of IS 581
8	Hot Plate	0-300°C	--	Cl 3.4 & 4.1 of IS 581
9	Fume Hood	--	---	Cl 3.4 & 4.1 of IS 581
10	Thickness measurement gauge Spring type/ Wedge type	LC-0.1mm, with flat presser foot and Anvil 10.2± 0.6mm the spring shall capable of exert force upto 950 grams	Yes	Cl 3.5,4.1 of IS 581, tb.2 & IS 5914
11	Apparatus for Shrinkage temperature measurement	--	--	As per fig. 1 of IS 5914
12	Thermometer	-50 to 300°C	Yes	Cl 3.5,4.1 of IS 581, tb.2
13	Glass Vessel 80mm Dia, 115mm length	--	--	Cl 3.5,4.1 of IS 581, tb.2

14	Performance test setup	--	---	Cl.no 5.4 of IS 1015, Annex-D
15	Humidity Chamber	65RH	--	Cl 3.4 & 4.1 of IS 581
16	Mandrels	61.7,35,23.6, 17.2, 13.2, 12.7,10.4,8.3,6.8	Yes	Cl.no 4.4 of IS 1015, Annex-B
17	Press Knife	--	---	Cl 3.5 & 4.1 of IS 581
18	Cupping test apparatus	As per Annex-A	--	Cl. No 4.3 of IS 1015
19	Immersion oil	Flash point 244°C minimum		
20	Filter paper			
21	Digital weighing Balance	0-250 gram, LC-0.001g	yes	
22	Desiccator with vacuum pump	-	--	
23	Soxhlet Extraction apparatus	--	--	Cl.no 5.3 of IS 1015,
24	Kjeldahl Flask	---	--	
25	Glass Flask	--	--	Cl 3.5 & 4.1 of IS 581
Chemical & Glassware as per IS 581, 582, 5914				
	Distilled water	Phenol/ pthalein indicator		
	Sulphuric acid	Sodium Hydroxide		
	Silica/Platinum crucible	Indicator		
	Ammonium Nitrate	Standard sulphuric acid		
	Dichloromethane	Standards Hydrochloric acid		
	Calcium oxide	Ethyl Alcohol		
	Petroleum hydrocarbon solvent	Ether petroleum		
	Catalyst Mixture	Standard sodium hydroxide solution		
	Sulphur trioxide	Complete Glass ware as per requirement of IS 581, IS 582, IS 1015, IS 5914		
	Concentrated Sulphuric acid			

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

ANNEX C
Scheme of Inspection & 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. MARKING – As per the requirements of IS 1015:2000. The following information shall be marked on tag affixed on each pump buckets & Seat valve

- a) Manufacturers Name and recognized trade mark;
- b) Number of leather pumps buckets and seat valves in the package
- c) Batch No. and date of manufacture;
- e) License No. (CM/L-);

4. CONTROL UNIT – For the purpose of this scheme, all pump buckets and seat valves of same type and size manufactured from same material in a day shall constitute a control unit.

5. LEVELS OF CONTROL - The tests as indicated in column 2 of [Table 1](#) and the levels of control in column 6 of [Table 1](#), shall be carried out on the whole production of the factory which is covered by this scheme and appropriate records and charts maintained in accordance with item 2 above. All production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the 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

Test results				Test equipment requirement (R)-Required / (S)-Sub-Contracting permitted	Levels of Control		
(1)	(2)	(3)			(5)	(6)	(7)
Sl.No	Test	Test Methods			No. of samples	Frequency	Remarks
		Clause	Reference				
1	Raw material requirement	4.1, IS 1015	IS 581, IS 582 IS 5914	R	1	Each Unit Control	Non-conforming material has not be used further in manufacturing the product
2	Area Stability in water at 70°C	4.2, IS 1015	LP 25 of IS 5914	R	1		
3	Cupping test	4.3, IS 1015	Annex-A of IS 1015	R	1		
4	Cracking test	4.4, IS 1015	Annex-B of IS 1015	R	1		
Requirement for leather Pump Buckets							
5	Manufacture	5.1, IS 1015		R	1	Each Unit Control	
6	Thickness	5.2, IS 1015		R	1		
7	pH of water soluble	5.3, Tb 1of IS 1015	LC 18 of IS 582	R	1		
	Differential number						
8	Acid value of the Extract Fat		Annex-C of IS 1015				1
9	% Solvent extractables substances		LC 4 of IS 582		1		
10	Performance test	5.4, IS 1015	Annex-D of IS 1015	R	1		
Requirement for leather Seat Valves							
11	Dimensions	6.1, IS 1015		R	1	Each Unit Control	
12	Performance test	6.2, IS 1015	Annex-D of IS 1015	R	1		

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. 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.