



**PRODUCT MANUAL FOR  
HOUSE HOLD SEWING MACHINES  
ACCORDING to IS 1610:2018**

*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.	<b>Product</b>	:	IS 1610:2018
	<b>Title</b>	:	HOUSEHOLD SEWING MACHINES
	<b>No. of Amendments</b>	:	Nil
2.	<b>Sampling Guidelines:</b>		
a)	<b>Raw material</b>	:	-
b)	<b>Grouping guidelines</b>	:	Sewing Machine with each mode of driving arrangement (Hand operated/ Foot operated/ Motor-driven) shall be tested separately for GoL/CSoL
c)	<b>Sample Size</b>	:	One sewing machine
3.	<b>List of Test Equipment</b>	:	Please refer <a href="#">ANNEX – A</a>
4.	<b>Scheme of Inspection and Testing</b>	:	Please refer <a href="#">ANNEX – B</a>
5.	<b>Requirements which can be tested in a day</b> : All tests as per IS 1610:2018		
6.	<b>Scope of the Licence :</b>		
	“Licence is granted to use Standard Mark as per IS 1610:2018 with the following scope:		
	Name of the product	Household Sewing Machines	
	Type	Hand operated/Foot operated/Motor-driven	

Annex-AList of Test Equipment

*Major test equipment required to test as per the Indian Standard*

<b>Sl. No</b>	<b>Test Equipment</b>	<b>Test Used with Clause Reference</b>
1.	Micrometer	For General measurement
2.	Vernier Caliper (Digital)	5
3.	Surface Plate	4.1, 10.1, 10.3
4.	Height Gauge (Digital)	4.1, 10.1, 10.3
5.	V- Block	5, 8
6.	Dial Indicator	10
7.	Puppy Dial Indicator	4.1, 10.1, 10.3
8.	Hardener Tester Machine	8.3
9.	Temperature Gauge (Hot Air Oven	8.2
10.	Vernier Caliper	5
11.	Depth Gauge	5
12.	Thread plug Gauge	For general measurements
13.	Feeler Gauge	4.1, 10.1, 10.3
14.	Tachometer	10.1, 10.3
15.	Durability test ring	10.3
16.	Slip Gauge of different sizes	4.1, 10.1, 10.3
17.	Coat meter	8.3

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

**ANNEX - B**

**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 the requirements of IS 1610: 2018.

**4. CONTROL UNIT** –All Sewing Machines of same model and design 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 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 Standard 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, 20016.

**Table 1**

(1)				(2)	(3)		
Test Details				Test equipment requirement	Levels of Control		
Cl.	Requirement	Test Methods		R: required (or) S: Sub-contracting permitted	No. of Sample	Frequency	Remarks
		Clause	Reference				
3	Driving Arrangements	3	IS 1610	S	One	Each consignment	No further testing is required, if accompanied with test certificate or ISI marked
4.	Sewing Mechanism	4	IS 1610	R	Each Machine		
	Stich Regulator		IS 13872	–	Conformity to the relevant Indian Standard may be established.		
	Flywheel		IS 12798	–			
	Bobbin Winder		IS 13972	–			
5	Other Components	5	IS 1610	–	Conformity to the relevant Indian Standard may be established.		
6.	Lubrication	6	IS 1610	R	Each Machine		
7.2	Wooden Table/ Base		IS 12789	S	Two	Each Consignment	No further testing is required, if accompanied with test certificate or ISI marked
7.3	Table or base or cover (other materials)	As per agreement between purchaser and supplier		S	As per agreement between purchaser and supplier		
7.4	Stand	7.4	IS 1610	S	Two	Each Consignment	No further testing is required, if accompanied with test certificate or ISI marked

7.5	Stand (other materials)	As per agreement between purchaser and supplier		S	As per agreement between purchaser and supplier		
8.1 & 8.2	Workmanship and finish	8.1	IS 1610	R	Each machine		
		8.2	IS 1610	R	One	Every 5 <sup>th</sup> Control Unit	In case of unsatisfactory results, corrective action shall be taken and sample from each control unit shall be checked. Original frequency may be restored in case the samples taken from these consecutive control units satisfy the requirement.
8.3	Plating	8.3	IS 1610	R	One	Each batch of parts plated in single bath at a time	In case plated components are received from outside, five random samples per consignment shall be tested.
10.1	Accuracy Requirements	10.1	IS 1610	R	Two	Each Control Unit	In case both the machines pass for all the requirements the control unit shall be considered as conforming to the requirement. But, if any of the machines fail in one or more requirement, then each machine of the control unit shall be checked for these characteristics in which failures have occurred and only those machines conforming to these characteristics shall be considered as acceptable. However corrective action shall be taken for subsequent production.
10.2	Sewing Requirements	10.2	IS 1610	R	Two		

10.3	Durability Requirements	10.3	IS 1610	R	Two (Three, if the control unit consists of more than 100 machines)	Each Control Unit	In case any of the machines fails to meet the requirement of durability test, the failure shall be investigated and the corrective action shall be taken. The control unit shall be re-inspected for this test and double the number of machines shall be tested and shall be marked if none of the machines fails in any of the requirements.
11	Accessories in Service Box	11	IS 1610	--	Each Machine		
13.	Packing Requirements	13	IS 1610	R	Each Machine		

**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.