



उत्पाद मानुयल  
वस्त्रादी - पुरुषों के लिए बुने हुये (नीटेड) पुलोवर  
IS 3617:1992 के अनुसार

**PRODUCT MANUAL FOR  
Textiles- Gents Pullover, Knitted  
According to IS 3617:1992**

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम की स्कीम-I के तहत यह उत्पाद मानुयल प्रमाणीकरण के प्रचलन में रीति और पारदर्शिता के सुसंगत सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेंस धारियों द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस लाइसेंस/प्रमाण पत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग किया जा सकता है।

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.	उत्पाद Product	:	IS 3617:1992
	शीर्षक Title	:	वस्त्रादी - पुरुषों के लिए बुने हुये (नीटेड) पुलोवर Textiles- Gents Pullover, Knitted
	संशोधन संख्या No. of amendments	:	0
2.	नमूनाकरण दिशा निर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Yarn shall comply to the requirements given in 4.1 and 4.2. Fabric shall comply to the requirements given in 4.3. Seams and Stitches shall comply to the requirement given in 4.4.
b)	समूहिकरण दिशा निर्देश Grouping Guidelines	:	कृपया Annex-A देखें Please see Annex-A
c)	नमूने का परिमाण Sample Size	:	2 Pullover
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	कृपया Annex-B देखें Please refer Annex –B

4.	<b>निरीक्षण व परीक्षण स्कीम</b> <b>Scheme of Inspection and Testing</b>	:	कृपया Annex-C देखें Please refer Annex - C
5.	<b>एक दिन में संभावित परीक्षण</b> <b>Possible tests in a day</b>	:	Dimension, Construction, pH
6.	<b>लाइसेन्स का कार्यक्षेत्र/Scope of the Licence :</b>		
	IS 3617:1992 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेन्स निम्नलिखित कार्यक्षेत्र के लिए प्रदान किया जाता है Licence is granted to use Standard Mark as per IS 3617:1992 with the following scope:		
	<b>उत्पाद का नाम</b> <b>Name of the product</b>	Textiles- Gents Pullover, Knitted	
	Type	Woollen Pullover(Superfine/fine/medium)/Acrylic Pullover/Blended Pullover	
	Sizes	75/80/85/90/95/100/105/110 cm	

**ANNEX A**  
**GROUPING GUIDELINES**

IS 3617 mentions 3 classes of pullovers (woollen/Acrylic/Blended), any size from a class shall be tested to cover all the sizes for that particular type.

For woollen pullovers, separate samples of Superfine/fine/medium quality shall be drawn and tested

However, scope shall be restricted based upon the manufacturing and testing capability of the manufacturing unit.

During the operation of the licence, samples of each type and size covered in the licence shall be drawn and tested in rotation

**ANNEX B**  
**List of Test Equipment**

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

Sr. No.	Test Equipment	Tests used in with Clause Reference
1	Tape	DIMENSIONS(Clause 5.1)
2	Magnifying Glass/pick glass Horizontal surface	Construction(Clause 5.2)
3	<b>APPARATUS</b> <ul style="list-style-type: none"> <li>• Cubex International Shrinkage Testing Apparatus or Wash Wheel or an Equivalent Machine</li> <li>• A Laboratory or Domestic Spin Drying Apparatus</li> <li>• Marking Equipment - As specified in 4.3 of IS : 10099-1982</li> <li>• Make-Weights</li> <li>• Analytical balance</li> <li>• pH meter</li> </ul> <b>REAGENTS</b> <ul style="list-style-type: none"> <li>• Anhydrous sodium dihydrogen phosphate</li> <li>• Other laboratory reagents</li> </ul>	Dimensional Change (due to relaxation) (Clause 5.2)
4	<b>APPARATUS</b> <ul style="list-style-type: none"> <li>• Weighing Balance</li> <li>• Oven (capable of capable of maintaining temp of <math>105\pm 3^{\circ}\text{C}</math>)</li> <li>• Soxhlet apparatus</li> </ul> <b>REAGENTS</b> <ul style="list-style-type: none"> <li>• Benzene</li> <li>• Methyl alcohol</li> <li>• Cotton wool</li> <li>• Petroleum ether</li> </ul>	Scouring loss(Clause 5.2)
5	<b>APPARATUS</b> <ul style="list-style-type: none"> <li>• Water bath capable of maintaining a temperature of <math>66\pm 0.5^{\circ}\text{C}</math>.</li> <li>• Conical flask</li> <li>• Sintered Glass filter crucible</li> <li>• pH Meter</li> <li>• Soxhlet apparatus</li> <li>• Weighing balance</li> <li>• Dessicator</li> </ul>	Alkali Solubility (Clause 5.2)

	<b>REAGENTS</b> <ul style="list-style-type: none"> <li>• Sodium Hydroxide</li> <li>• Acetic acid</li> <li>• Light petroleum ether</li> <li>• Distilled water</li> <li>• Liquor</li> </ul>	
6	Distilled or deionized water Mechanical shaker Potassium Chloride (KCl) solution Buffer solution Stoppered glass or polypropylene flasks Beaker Rod pH meter (LC 0.1 Ph) 1 ltr volumetric flask Balance accurate to 0.01 g	pH Value of Aqueous Extract (Clause 5.2)
7	<b>a) Colour Fastness to light (IS/ISO 105-B02 : 2014):</b> Xenon-arc apparatus as per IS/ISO 105-B02 : 2014  <b>b) Colour Fastness to washing (IS/ISO 105-C10:2006)</b> Suitable mechanical laundering device Balance accurate to 0.01 g Mechanical Stirrer Non corrodible (Stainless Steel) Balls Means of Heating soap solution Soap Sodium Carbonate Soap Solution Grade 3 Water Adjacent fabrics/Multifibre adjacent fabric  <b>c) Colour fastness to rubbing (IS/ISO 105-X12 : 2016)</b> Suitable testing device  Soft-back waterproof abrasive paper, or grating of stainless steel wire 1 mm in diameter and mesh width about 20 mm.  Rubbing cotton cloth Grey Scale for evaluating staining  <b>d) Colour fastness to dry cleaning (IS 4802:1988)</b> Suitable mechanical device Glass or stainless steel containers	Minimum Colour Fastness ratings (Clause 5.2)

	Non corrodible (Stainless Steel) Discs Undyed Cotton twill cloth Grey Scales Glass tubes Perchloroethylene or Any Other Solvent Used for Dry-Cleaning	
8	<p><b>For identification of textile fibres as per IS 667:1981</b> - Compound microscope, dissecting needles, glass slides, cover glasses and a cross- sectioning device. The microscope should be equipped to permit examination from 100X to 500x</p> <p>Apparatus/reagents for quantitative chemical analysis of mixtures of fibres as per IS 11195-1985</p>	Blend Composition (Clause 5.2)

**The above list is indicative 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 equipments.

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

**3. PACKING AND MARKING**– The Standard Mark, as given in the Schedule of the licence, shall be printed on the cloth label attached to each pullover on the inside of the neck portion (back side) or at the right side on the body of the seam in case of high neck pullover, provided always that the pullovers to which this mark is thus applied conforms to every requirement of the specification.

3.1 Packing and marking shall be done as per the provision of the Indian Standard. In addition, the following details shall be mentioned on the packaging of each pullover legibly and indelibly:

a) BIS Licence No. CM/L \_\_\_\_\_.

b) BIS website details i.e –“For details of BIS certification please visit [www.bis.gov.in](http://www.bis.gov.in)”.

**4. CONTROL UNIT** – For the purpose of this scheme, all pullovers of the same class (and category in case of woollen pullovers) manufactured in a day under similar conditions shall constitute a control unit.

**5. LEVELS OF CONTROL** – The test 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 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: LEVELS OF CONTROL**

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
CI No	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
4	Manufacture	4	IS 3617				
4.2	Conformity of Yarn	4.2	IS 3617	S	1	Each consignment	If received with test certificate of supplier, testing is not required
4.3	Conformity of Fabric	4.3	IS 3617	S	1	Each consignment	-do-
4.4	Seams and Stitches	4.4	IS 3617	S	1	Each consignment	-do-
4.5	Pullover – Shape, Welt (or tape), Border, High neck portion, reinforcements, freedom from defects	4.5.1 to 4.5.7	IS 3617	R	1	Each Control unit	
5.1	Dimension and Tolerance	Clause 5.1	IS 3617	R	1	Each Control unit	-
5.2	Requirements of Pullover						
1)	Construction	C-2	IS 3617	R	1	Each control unit	-
2)	Dimensional change		IS 1313	S	1	Once in 3 months	Whenever raw material and construction is changed it should be done
3)	Scouring loss	C-3	IS 3617	R	1	Once in a week	-
4)	Alkali Solubility		IS 3429	R	1	Once in a week	-



5)	pH value of aqueous extract		IS 1390	R	1	Once a week	-
6)	Minimum colour fastness ratings	Clause 5.2	IS/ISO 105-B02 : 2014, IS/ISO 105-X12 : 2016, IS/ISO 105-C10:2006, IS 4802:1988	S	1	Once in 3 months	These tests are type test and shall be carried out at the time of initial approval or whenever there is any change in the design, shade and construction.
7)	Blend composition		IS 11195	S	1	Once in a year	These tests are type test and shall be carried out at the time of initial approval or whenever there is any change in the raw material.

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 empaneled 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 to BO Head.