

केन्द्रीय मुहर विभाग-2

हमारा संदर्भ : के.मु.वि.-2/16:12254

09 05 2018

विषय : आई एस 12254:1993 की एसटीआई/12254/1 अक्टूबर 2001

आई एस 12254:1993 की एसटीआई डॉक: एसटीआई/12254/1 अक्टूबर 2001 की स्कैन कॉपी संलग्न है I

(आदित्य दास)  
वैज्ञा.सी.

प्रमुख (CMD-2)

सभी क्षेत्रीय/शाखा कार्यालयों/सीएचडी को परिचालित

प्रतिलिपि: आईटीएस बीआईएस इंटरनेट पर अपलोड करने के लिए

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16:12254

09 05 2018

**Subject: STI Document for IS 12254: 1993 (Doc: STI/12254/1 Oct 2001)**

Please find enclosed scanned copy of STI Document for IS 12254: 1993 (Doc: STI/12254/1 Oct 2001)

(Aditya Das)  
Scientist C

Head CMD-2

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DOC: STI/12254/1  
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SCHEME OF TESTING AND INSPECTION  
FOR CERTIFICATION OF  
POLYVINYL CHLORIDE (PVC) INDUSTRIAL BOOTS  
ACCORDING TO IS 12254:1993  
(First Revision)

1.0 LABORATORY - A 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 specification.

1.1 All testing apparatus shall be periodically checked and calibrated and records of such checks/calibration shall be maintained.

2.0 TEST RECORDS - All records of tests and inspection shall be kept in suitable forms approved by the Bureau.

2.1 Copies of any records and other connected papers that may be required by the Bureau shall be made available at any time on request.

3.0 QUALITY CONTROL - 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 (Part I):1972, IS 397 (Part 2):1985 and IS 397 (Part 3):1980].

3.1 In addition, effort should be made to gradually introduce a Quality Management System in accordance with the Quality System modules as per IS/ISO 9001 or IS/ISO 9002 or IS/ISO 9003 as appropriate to the activities of the organization.

4.0 STANDARD MARK - The standard mark(s) as given in column (1) of the First schedule of the licence shall be stamped on the underside of each style of PVC boot, provided always that the PVC boots to which this mark is thus applied conform to every requirement of the specification.

5.0 MARKING - In addition, the following information shall be given on each PVC Industrial Boot.

- a) Manufacturer's name or his recognized trade mark, if any on bottom of outer sole at non wearing portion (waist);
- b) The size & fitting numbers on bottom of outer sole at not wearing portion (waist)
- c) Control unit/code no. on the outer upper portion at top.
- d) Month/year of manufacture on bottom of outer sole at non wearing portion (waist).
- e) Any statutory marking on the outer upper portion at top.
- f) Licence number (CM/L.....)

6. PACKING- The PVC Boot shall be wrapped in tissue paper and suitably packed as agreed to between the purchase & manufacturer.

6.0 LEVELS OF CONTROL - The tests as indicated in Table 1 and at levels of control specified therein shall be carried out on the whole production of the factory covered by the scheme and appropriate records and charts maintained in accordance with clause 2.0 above. All the production which conforms to the Indian Standard and covered by this licence shall be marked with Certification Mark of the Bureau.

6.1 On the basis of test results decisions shall be taken regarding conformity of the control unit as a whole to the requirements of the specification. For the purpose of this scheme the control units shall be as follows:

6.1.1 Control Unit-Finished PVC Industrial Boot-PVC boot of one style produced in a day from the same consignment of raw material.

7.0 RAW MATERIALS-

7.1 If the raw materials bear the BIS Certification Mark further testing may not be necessary.

DOC: STI/12254/1  
October 2001

7.2 Fabric (for lined Boots)- The fabric shall be knitted & free from visible defects. It shall also conform to breaking strength

cl.4.1 of IS 12254:1993 when tested in accordance to IS 1969:1985.

7.3 Eyelets & Laces- (Applicable to Ankle Boots)

7.3.1 Eyelets- Brass Coated Steel or aluminium eyelets of size (collar diameter) 10 mm as given in table 1 of IS 5041:1978 shall be used.

7.3.2 Laces - The laces used shall conform to requirement specified at 4.2.2 of IS 12254:1993 when tested in accordance with IS 4778:1982. The black laces if used shall also be free from sulphur when tested as per Annexure B of IS 12254.

7.4 Steel Toe Caps- Caps which are found conforming to type 2 of IS 5852:1992 shall be used.

8.0 REJECTIONS - A 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 its disposal. Such material shall in no case be stored together with that conforming to the specification.

9.0 SAMPLES - The licensee shall supply, free of charge, the samples required in accordance with Bureau of Indian Standard (Certification) Regulations, 1988, as subsequently amended, from his factory or godowns. The Bureau shall pay for the samples taken by it from the open market.

10.0 REPLACEMENT - Whenever a complaint is received soon after the goods with Standard Marks have been purchased and used, and if there is adequate evidence that the goods have not been misused, defective goods are replaced free of cost by the licensee in case the complaint is proved 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 the Bureau.

10.1 In the event of any damages caused by the goods bearing the Standard Mark, or 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 licensee and BIS shall not in any way be responsible in such cases.

DOC: STI/12254/1  
October 2001

11.0 STOP MARKING - The marking of the product shall be stopped under intimation to the Bureau 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. The marking may be resumed as soon as the defects are removed under intimation to Bureau.

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

12.0 PRODUCTION DATA - The licensee shall send to BIS as per the enclosed proforma to be authenticated by a Chartered Accountant a statement of quantity produced, marked and exported by him and the trade value thereof end of each operative year of the licence (See proforma enclosed).

IS 12254:1993  
POLYVINYL CHLORIDE (PVC) INDUSTRIAL BOOTS  
TABLE 1: LEVELS OF CONTROL  
(Para 6 of the Scheme of Testing and Inspection)

TEST DETAILS			LEVELS OF CONTROL			
Clause	Requirements	Test Method	Reference	No. of Samples	Frequency	Remarks
4.1	Fabric( for lined Boots)	10	IS 1969:1985	5	Each consignment of one type	Only Materials, conforming to the relevant Indian Standards, shall be utilized in the manufacture of PVC Boots. Ref Cl 7.0 of STI
4.2.1	Eyelets (for ankle Boots)	Table 1	IS 5041:1978	5	-do-	Ref Cl 7.3.1 of STI
4.2.2 & 4.2.3	Laces (for ankle Boots) Black laces	- Annex B	IS 4778:82 IS 12254:1993	5	-do-	Ref Cl 7.3.2 of STI
4.3	Steel Toe Cap	4.3	Type 2 IS 5852:1992	5 Pair	-do-	Ref Cl 7.4 of STI
5.1	Shape & Design	5.1.1(Fig.1)	IS 12254:1993	5	Each Control Unit	
5.2	Soling Pattern	5.2	IS 12254:1993	5	-do-	
5.3	Thickness	5.3.1	IS 12254:1993	5	-do-	
5.3	Thickness of components	5.3.2 & Table 1	IS 12254:1993 & IS 12240(Part 1):1988	5	-do-	Only materials, conforming to the relevant Indian Standards, shall be utilized in the manufacture of PVC Boots.
5.4	Hardness	5.4 & Table 2	IS 12254:1993 & IS 12240 (Part 2):1988	5	-do-	
5.5	Relative Density		IS 12240 (Part 3):1988	1	-do-	
5.6	Volatility		IS 12240 (Part 4):1988	1	-do-	

5.7	Lead Content		IS 12240 (Part 5):1988	1	Every 7 <sup>th</sup> Control Unit
5.8	Tensile requirements		IS 12240 (Part 6):1988	1	Each Control Unit
5.9	Resistance to cut growth		IS 12240 (Part 7):1988	1	Once in every month
5.10	Resistance to flexing for upper		IS 12240 (Part 8):1988	1	Once in every month
5.11	Leg Height	Table 4 & 5.1.1	IS 12254:1993	1	Each Control unit
5.12	Leakage Resistance	5.12..1	IS 12254:1993	1	Every 7 <sup>th</sup> Control unit
5.13	Cold Flex temperature (optional)*	5.13	IS 12254:1993	1	Every six months
5.14	Finish	5.14	IS 12254:1993	Every Pair	
5.15	Performance	Annex D	IS 12254:1993	1 Pair	Each Control Unit

\* If required by purchaser.

6

PROFORMA 1 FORM OF RECORDS OF RAW MATERIAL  
(Para 2 of the Scheme of Testing and Inspection)

Name of the Material	Date of Receipt	Quantity Received	Name of the supplier	No. of samples drawn	Test Certificate no. & date. Name of the lab.	Qty. found acceptable	Quantity of material used till date	Material in balance with date	Remarks
1	2	3	4	5	6	7	8	9	10
Fabrics									
Eyelet & laces									
Steel Toe Cap									
Polyvinyl Chloride									

PROFORMA 2 FORM OF RECORDS-THICKNESS REQUIREMENTS FOR  
COMPONENTS OF PVC BOOT  
(Para 2 of the Scheme of Testing and Inspection)

Sl.No.	Name of the component	Date	Control Unit	1	2	3	4	5
1	Round the upper Top Circumference							
2	Lowest part of upper							
3	Foxing Strip At heel (over cleats)							
4	Foxing Strip Except Heel (Over cleat)							
5	Foxing Strip At Heel (Between cleats)							
6	Foxing Strip Except Heel (Between cleats)							

**PROFORMA 2 FORM OF RECORDS-THICKNESS REQUIREMENTS FOR  
COMPONENETS OF PVC BOOT contd.  
(Para 2 of the Scheme of Testing and Inspection)**

Sl.No.	Name of the Component	Date	Control Unit	1	2	3	4	5
7	Boot Bottom Full thickness (over cleats)							
8.	Boot Bottom Outsole only (Over Cleats)							
9.	Boot Bottom Full thickness (Between cleat)							
10.	Boot Bottom Outsole only (Between cleat)							
11.	Heel-Full thickness (Over cleats)							
12.	Heel-Wearing surface to filler block (Over cleats)							
13.	Heel-Wearing surface to filler block (Over cleats)							
14	Heel-Wearing surface to filler block (Between cleats)							

**PROFORMA 3 FORM OF RECORDS-FINISHED BOOTS  
(Para 2 of the Scheme of Testing and Inspection)**

FABRIC (1)	EYELETS (2)	LACES (3)	FINISH (4)	PERFORMANCE TEST (5)

2

Doc:STI/12254/1  
Oct 2001

PROFORMA 4 FORM OF RECORDS-FINISHED BOOTS  
(Para 2 of the Scheme of Testing & Inspection)

Date	Control Unit No.	Items Manufacture Boots(L/R)	No. of Pair Size	Manufacture No. Passed/Failed	Finish No. Passed/Failed	Total Pair Passed	General Information Raw material Supplier name Test Certificate No. Name & Address of Consignee Order no. Date, Invoice etc.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

9