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केन्द्रीय मुहर विभाग-2

हमारा संदर्भ : के.मु.वि.-2/16: 3976 16 10 2018

विषय: संशोधित IS IS 3976:2018 – Safety Rubber Canvas Boots for Miners के अनुसार Scheme of Inspection and Testing (SIT)

1. संशोधित IS 3976:2018 – Safety Rubber Canvas Boots for Miners के अनुसार Scheme of Inspection and Testing (SIT) अवलोकन हेतु संलग्न है।

(आदित्य दास)
वैज्ञानिक सी (सी एम डी-2)

प्रमुख (के.मु.वि.-2)
सभी क्षेत्रीय/शाखा कार्यालयो को इंट्रानेट के माध्यम से परिचालित

प्रतिलिपि:

आई टी एस विभाग - बीआईएस इंट्रानेट पर अपलोड करने के लिए

CENTRAL MARKS DEPARTMENT-2

Our Ref: **CMD-2/16: 3976** **16 10 2018**

Subject: Scheme of Inspection and Testing (SIT) for Revised IS 3976:2018 – Safety Rubber Canvas Boots for Miners

1. Please find enclosed Scheme of Inspection and Testing (SIT) for Revised IS 3976:2018 – Safety Rubber Canvas Boots for Miners

(Aditya Das)
Sc. 'C' (CMD-2)

Head (CMD-2)

Circulated to all ROs/BOs

Copy to: ITS for hosting on BIS Intranet

SCHEME OF INSPECTION AND TESTING FOR CERTIFICATION OF SAFETY RUBBER CANVAS BOOTS FOR MINERS ACCORDING TO IS 3976:2018

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. **LABELLING AND MARKING** -The Standard Mark as given in Schedule of the license shall be incorporated, on the label attached with Safety Rubber Canvas Boots for Miners and the labeling/ marking and packing shall be done as per the provision of the Indian Standard, provided always the Safety Rubber Canvas Boots for Miners thus marked conforms to all the requirement of the specification. In addition, details of BIS website shall be marked as follows: "For details of BIS certification please visit www bis.gov.in"

4.CONTROL UNIT – For the purpose of this scheme, all finished boots of one type vulcanized at a time shall constitute a control unit.

4.1 On the basis of test results, decision shall be taken regarding conformity of the control unit as a whole to the requirements of the specification.

5. **LEVELS OF CONTROL -** The tests, as indicated in 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. **REJECTION -** 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. A separate record providing the detailed information regarding the rejected control units and mode of their disposal shall be maintained, such material shall in no case be stored together with that conforming to the specification. Standard Mark if applied on such material shall be defaced.

SAFETY RUBBER CANVAS BOOTS FOR MINERS
ACCORDING TO IS 3976:2018

SCHEME OF INSPECTION AND TESTING

TABLE 1: LEVELS OF CONTROL

(1)				(2)	(3)		(4)
Test Details				Test equipment requirement R:required (or) S: Sub-contracting permitted	**Levels of Control**		**Remarks**
Clause	**Requirements**	**Test Method**			**No. of Samples**	**Frequency**	
		Clause	**Reference**				
5.1, 5.1.1	Design, Fittings		IS 1638	R	One pair of each size	Each Control unit	
5.2	Material						
5.2.1	Upper	5.10 5.4.3 5.4.6 5.5.2	IS 3976 IS 15298 (Pt 2) IS 15298 (Pt 2) IS 15298 (Pt 2)	S	Two	Each consignment of material	

5.2.2	Compact insole/compact insocks/counter stiffener lining	5.6.1 6.12	IS 15298 (pt 2) IS 15298 (Pt 1)	S	-do-	-do-	
5.2.3	Coated binding material	Table 1	IS 3976	S	Two	Each consignment	
5.2.4	Reinforcing material			S	Five	Each consignment	
5.2.5, 5.2.5.1 to 5.2.5.4	Compact sole heel	Table 2	IS 3976	S	One	Each consignment	
5.2.6	Thread for upper closing	Table 4, Annex B	-do-	S	One	-do-	
5.2.7	Safety toe cap	3.6	IS 3976	S	Ten	Each consignment	
5.2.8	Laces	Annex B, C	IS 3976	S	three	-do-	
5.2.9	Eyelets			S	Five	-do-	
5.2.10	Counter stiffener			S	-do-	-do-	
5.3	Construction			R	Each pair	Each pair	
5.4	Finish			R	-do-	-do-	
5.5	Mass			R	-do-	-do-	
5.6	Height of upper	6.2	IS 15298 (Pt 1)	R	5 pair of s each size	Each Control Unit	
5.7	Performance Test	5.4	IS 15298 (Pt1)	R	One pair	Each Control Unit	
5.8	Upper/outsole bond strength	5.2	IS 15298 (Pt 1)	R	-do-	Each Control Unit	
5.9	Sole interlayer bond strength for bi-polymer and bi-density sole	5.2	IS 15298 (Pt 1)	R	-do-	-do-	

5.10	Consolidation test	-	IS 3400 (Part 5)	R	-do-	Each Control Unit	Pl See Note 4
5.11	Compression resistance	5.5	IS 15298 (Part1)	R	-do-	-do-	
5.12	Internal length of toe cap	5.3	-do-	R	-do-	-do-	
5.13	Energy absorption test	5.14	-do-	R	-do-	-do-	
6.1	Abrasion resistance of compact outsole	8.3	-do-	R	-do-	-do-	
6.2	Flexing resistance of compact outsole	8.4	-do-	R	-do-	-do-	
6.3	Tear Strength of compact outsole	8.2	-do-	R	-do-	-do-	
6.4	Resistance to hot contact-sole heel	8.7	-do-	R	-do-	-do-	
6.5	Hydrolysis	8.5 5.8.5	IS 15298 (Part1) IS 15298 (Part2)	R	-do-	-do-	
7	Additional properties, if required by purchaser i) Resistance to fuel ii) Resistance to electricity	 8.6.1 6.2.2.3	 IS 15298 (Part2) IS 15298 (Part2)	S	Pl see note 3		
8	Chemical requirements	Table 6	IS 3976	S	One	Every month	

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 by B.O. Head.

Note-3: For additional properties as per clause 7 of IS 3976 i.e. resistance to fuel and electricity which are to be tested if required by purchaser, the frequency/levels of control may be as agreed between purchaser and supplier.

Note-4: Whenever more than one size of boots are manufactured at least two samples belonging to different sizes shall be tested from each control unit in such a way that all the sizes of boots manufactured are tested in a day.