PM/ 5852(Pt.1)/ 1
May 2020

PRODUCT MANUAL
FOR TOE CAPS FOR PROTECTION OF FEET, PART 1: METALLIC TOE CAPS
ACCORDING TO IS 5852 (Pt.1):2019

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 5852 (Pt.1):2019
	Title	:	Toe Caps for Protection of Feet, Part 1: Metallic Toe Caps
	No. of Amendments	:	0
2.	**Sampling Guidelines:**		
a)	**Raw material**	:	No specific requirement
b)	**Grouping guidelines**	:	Not applicable (Separate samples of each metallic toe cap number, type and application to be tested for covering the same in the scope of licence)
c)	**Sample Size**	:	4 Pairs
3.	**List of Test Equipment**	:	Please refer ANNEX –A
4.	**Scheme of Inspection and Testing**	:	Please refer ANNEX –B
5.	**Possible tests in a day :**		
	Finishing, Dimensions, Impact Resistance, Compression Resistance		
6.	**Scope of the Licence :**		
	Licence is granted to use Standard Mark as per IS 5852(Pt.1):2019 with the following scope:		
	Name of the product		Toe Caps for Protection of Feet, Part 1: Metallic Toe Caps
	Metallic Toe Cap Numbers		As per Table 1 or 2 of IS 5852(Pt.1):2019
	Type		Internal/External
	Application		Intended for Protective Footwear/Safety Footwear

ANNEX A

List of Test Equipment

Major test equipment required to test as per the Indian Standard

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Dimensions (4.2) Internal Length Width of Flange	Steel Scale Vernier Caliper Flat Surface Gauges
2	Impact Resistance(4.3)	Impact apparatus including clamping device, modelling clay cylinder, dial gauge
3	Compression resistance (4.4)	Compression testing machine including modelling clay cylinder, dial gauge
4	Corrosion resistance (4.5)	Soft paper or textile Ethanol Sodium chloride Dish Glass plate Filter Paper

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 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 punched on each metallic toe cap, provided always that the product so marked conform to requirements of the specification.

3.1 Packing and marking shall be done as per the requirements of the standard. In addition, the following details shall be mentioned on each toe cap:-

a) BIS Licence No. CM/L ----------.

b) BIS website details i.e. —"For details of BIS certification please visit www.bis.gov.in".

c) Control Unit No/Code No to identify the batch and date of manufacture

d) "Made in India" if goods are to be exported

4. CONTROL UNIT – For the purpose of this scheme, the metallic toe caps of same metallic toe cap number, type (internal or external), and intended use/application (intended for safety footwear or protective footwear) manufactured in one day from the same consignment of metal, 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 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

(1)				(2)	(3)		
Test Details				**Test equipment requirement R: required (or) S: Sub-contracting permitted**	**Levels of Control**		
Cl.	**Requirement**	**Test Method**			**No. of Sample**	**Frequency**	**Remarks**
		Clause	**Reference**				
4.1	Finishing	4.1	IS 5852 Pt.1	R	15 toe caps*	Each Control Unit	*5 samples at the start of control unit, 5 in the middle and 5 at end should be taken to constitute 15 toe caps. Also See Note 3
4.2	Dimensions						
4.2.1	Internal Length	Annex A	IS 5852 Pt.1	R	5 toe caps for each side (left or right)	Each Control Unit	See Note 3
4.2.2	Width of Flange	Annex B	-do-	R	-do-	-do-	-do-
4.3	Impact Resistance	Annex C	-do-	R	2 toe caps for each side (left or right)	-do-	The test should be evenly spread out throughout the day and if sample is found failing the production of preceding hour shall be deemed unfit for marking
4.4	Compression resistance	Annex D	-do-	R	-do-	-do-	-do-
4.5	Corrosion resistance	Annex E	-do-	R	3 toe cap pairs	Once a week for each type Of metal	If any sample fails, the entire control unit shall be rejected.

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.

Note-3: If any sample is found not conforming to specification, immediate corrective measures in the process shall be taken and production resumed only after defect has been rectified and verified by drawing and testing twice the number of samples. The entire part of production of that control unit, pertaining to period preceding the rectification of the defect, shall be considered unfit for marking.