

केन्द्रीय मुहर विभाग -2

संदर्भ- के.मु.वि.-2/16: 1993

16 01 2019

विषय : आई एस 1993:2018 प्रमाणन हेतु एस आई टी

इसे उपरोक्त विषय का संदर्भ प्राप्त है।

सक्षम प्राधिकारी ने अनुपालन हेतु संशोधित एस आई टी को अनुमोदित कर दिया है।

सभी क्षेत्रीय और शाखा कार्यालयों से अनुरोध है कि उपरोक्त एस आई टी का अनुपालन तत्काल प्रभाव से सुनिश्चित करें।

(अरुण पुच्छकायला)
वैज्ञानिक सी

प्रमुख (के.मु.वि -2) (हस्ता/-)

सभी क्षेत्रीय/शाखा कार्यालय

प्रतिलिपि : आई टी एस विभाग – बी आई एस इंटरनेट पर डालने हेतु

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16: 1993

16 01 2019

Subject: SIT for IS 1993:2018

This has reference to the subject mentioned above.

The revised SIT for IS 1993:2018 has been approved by the Competent Authority.

All ROs/BOs are requested to ensure the implementation of the SIT with immediate effect.

(Arun Puchhakayala)
Scientist C

Head (CMD-2) (sd/-)

All ROs/BOs

Copy to: ITS for hosting on BIS Intranet.

**SCHEME OF INSPECTION AND TESTING
FOR CERTIFICATION OF
COLD-REDUCED TINMILL PRODUCTS --
ELECTROLYTIC TIN PLATE
According to IS 1993:2018**

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, MARKING & PACKAGING –

The Standard Mark as given in the Schedule of the license and Licence Number (i.e. CM/L.....) shall be incorporated, and the Marking & Packaging shall be done as per the provisions of the Indian Standard, provided always that the product thus marked conforms to all the requirement of the specification.

4. CONTROL UNIT – For the purpose of this scheme, a control unit shall be taken as a single coil of one cast plated together under uniform conditions of production and upto a maximum of 30000 kg (30 tonnes).

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. TEST CERTIFICATE-For each consignment of BIS Certified material conforming to IS 1993:2018 there shall be a test certificate which shall contain the Standard Mark, the cast/Control Unit number and the corresponding test results (as given in Annexure-I enclosed)

7. 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. A separate record shall be maintained giving information on quantity and cast number/coil number/control unit number, as applicable, relating to all such rejections/defective/sub-standard material 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. The Standard Mark (if already applied) on rejected material should be defaced.

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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	Clause	Reference		No. of Samples	Frequency	
7	Chemical Composition	Choice of a suitable physical or chemical analytical method for the analysis shall be at the discretion of the manufacturer. In cases of dispute, the method for analysis used shall be agreed taking into account the relevant existing Indian Standards					
	Cast Analysis	7.1, Annex-C	IS 1993: 2018	R	One	Each Heat	Applicable for manufacturers having steel making facilities. The chemical composition as declared by the manufacturer.
	Product Analysis	-do-	-do-	R	One	Each Cast	Applicable for manufacturers without steel making facilities. However, no testing is required if non-alloy quality steel used is ISI marked.
	Purity of Tin	7.1	IS 1993: 2018	R	Purity of tin used to produce coating shall not be less than 99.85% (mass fraction).		
7.3	Finish	7.3	IS 1993: 2018 IS 15263	S	One	Each coil/ package of sheets	As mutually agreed to between manufacturer and purchaser.

7.4	Passivation and Oiling	7.4	IS 1993: 2018	S	Requirements, Test method and frequency, etc as agreed to between manufacturer and purchaser		
7.5	Imperfections	7.5.1 7.5.2 3.6	IS 1993: 2018	R	Adequate inspection in the line of production and in the stacks to ensure freedom from defects. For verification of grades by random selection of samples as per Cl. 13 of the specification & examination of the surface as per Cl. 3.6 of Specification to be resorted to.		
8	Tin Mass coating	8,13, 14.1, Table-2	IS 1993: 2018	R	One	Each Control Unit	
9	Mechanical Properties						
	Hardness Requirement	9.2, 14.2 and Table A.1, A.2	IS 1993: 2018 IS 1586(Pt.1)	R	One	Each Control Unit	
	Tensile property requirement	9.3,14.3 & Table-B.1	IS 1993: 2018 IS 1608 (Pt.1)	R	One	Each Control Unit	
10	Tolerances on Dimensions and shape	10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 14.4	IS 1993: 2018	R	Adequate measurement to ensure each coil/ package of sheets will conform to the various requirements and specified tolerances but in no case frequency will be less than two samples from the production of each coil/package of sheets.		
11	Joint within a coil	11.1 to 11.4	IS 1993: 2018	R	Adequate measurement to ensure that coils conform to the various requirements and specified tolerances.		

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: The control unit and levels of control as decided by the Bureau are obligatory to which the licensee shall comply with.



ANNEXURE I
 (Para 6 of the Scheme of Inspection and Testing)
XYZ IRON AND STEEL COMPANY
 (Registered office Address and works address)
TEST CERTIFICATE FOR COLD-REDUCED TINMILL PRODUCTS --ELECTROLYTIC TIN PLATE
According to IS 1993:2018

TEST CERTIFICATE No. _____

DATE _____

To M/s _____

We certified that the material described below fully conforms to 1993:2018, for Physical properties of the product and with Chemical composition as declared below, as tested in accordance with the Scheme of Inspection and Testing contained in the BIS Certification Marks Licence No. CM/L _____ are as indicated below against each order No.

(PLEASE REFER TO IS 1993:2018 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Order No. & Date	(nom Size)	Control Unit No.	designation	Quantity in tonnes	CHEMICAL COMPOSITION					Dimensional Tolerances					Mechanical properties		Mm. avg of tin mass coating	Surface finish	
					C %	S %	P %	Si %	Mn %	thickness	width	length	Edge camber	flatness	Out of square ness	Proof stress			hard ness

REMARKS

WAGON NO.

TRUCK NO.

(It is suggested that size A4 paper be used for this test certificate)

FOR XYZ IRON AND STEEL COMPANY