## भारतीय मानक ब्यूरो

## केंद्रीय मुहर विभाग-2

संदर्भ:\_CMD-2/G-99 दिनांक: 13 05 2020

# विषय: Stampings/ laminations/cores of transformers (with or without winding) के लिए certificate of conformity प्रदान हेतु ड्राफ्ट वस्तु विशिष्ट दिशा निर्देश

इस्पात मंत्रालय ने, इस्पात और इस्पात उत्पाद (गुणवत्ता नियंत्रण) आदेश, 2020 दिनांक 14.02.2020, द्वारा यह निर्धारित किया है कि Stampings/ laminations/ cores of transformers (winding के साथ या बिना) भारतीय मानक ब्यूरो (अनुसूची निर्धारण) विनियमों के अनुसूची-॥ के योजना-IV के अनुसार ब्यूरो से अनुरूपता प्रमाणपत्र (Certificate of Conformity) के तहत केवल बीआईएस मानक चिन्ह से चिन्हित IS 3024:2015 के अनुरूप Grain Oriented Electrical Steel Sheet and Strip व IS 648:2006 के अनुरूप Cold rolled non- oriented electrical steel sheet and strip, से ही बनाए जाएंगे।

अनुरूपता प्रमाणपत्र प्रदान करने की सुविधा के लिए, संलग्न उत्पाद विशिष्ट दिशानिर्देश तैयार किए गए हैं। इन दिशा निर्देशों को भारतीय मानक ब्यूरो (अनुसूची निर्धारण) विनियमों के अनुसूची- ॥ के योजना-IV के अनुसार ब्यूरो से अनुरूपता प्रमाणपत्र (Certificate of Conformity) के प्रमाणन के दिशा निर्देशों के साथ पढ़ा जाना है, जिनहे इस लिंक के माध्यम से देखा जा सकता है।

यह दस्तावेज़ टिप्पणियों के लिए 30 दिनों की अवधि के लिए परिचालित किया जा रहा है, जिसे निम्नलिखित प्रारूप में cmd2@bis.gov.in पर ईमेल द्वारा भेजा जा सकता है:

Name and Address of the Comm	nentator:				
Mobile Number and Email Address of the Commentator:					
Clause of the guidelines	nes Proposed Change/Comment Justification for the pro- change/comment				

(मीनल पासी) प्रमुख, केंद्रीय मुहर विभाग-2 भा मा ब्यूरो, नई दिल्ली

### BIS वैबसाइट व इंट्रानेट के माध्यम से परिचालित

प्रतिलिपि: ITSD - BIS वैबसाइट व इंट्रानेट के माध्यम से परिचालन हेतु

#### **BUREAU OF INDIAN STANDARDS**

#### **CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/G-99 Date: 13 05 2020

Subject: Draft Product Specific Guidelines for Grant of certificate of conformity for Stampings/laminations/cores of transformers (with or without winding) under Scheme IV of Schedule II of BIS (Conformity Assessment) Regulations, 2018.

Ministry of Steel, vide Steel and Steel Products (Quality Control) Order, 2020 dated 14.02.2020, has mandated that Stampings/ laminations/ cores of transformers (with or without winding) Made from BIS standard marked Grain Oriented Electrical Steel Sheet and Strip conforming to IS 3024:2015 or Cold rolled non- oriented electrical steel sheet and strip conforming to IS 648:2006 under a Certificate of Conformity from the Bureau as per Scheme–IV of Schedule– II of the Bureau of Indian Standards (Conformity Assessment) Regulations, 2018

In order to facilitate the grant of Certificate of Conformity, the enclosed product specific guidelines have been prepared which are to be read along with the Guidelines for Grant of Certificate of Conformity (CoC) as per the conformity assessment Scheme - IV of Schedule - II of BIS (Conformity Assessment) Regulations, 2018 – reg which is available through this <u>link</u>.

This document is being circulated for a period of 30 days for comments, which may be sent by email to cmd2@bis.gov.in in the following format:

Name and Address of the Comme	ntator:	
Mobile Number and Email Address	s of the Commentator:	
Clause of the guidelines	Proposed Change/Comment	Justification for the proposed change/comment

(Meenal Passi)

Head, Central Marks Department-2 (CMD-2)

BIS HQ, New Delhi

**Circulated through BIS website and BIS Intranet** 

Copy to: ITSD- with a request to host on BIS intranet and BIS website

#### PRODUCT SPECIFIC GUIDELINES

#### For certificate of conformity for

# Stampings/ laminations/cores of transformers (with or without winding) under Scheme IV of Schedule II of BIS (Conformity Assessment) Regulations, 2018

#### 1. Application

The application shall be made in the Form - V (under Scheme IV of Schedule II of BIS (Conformity Assessment) Regulations, 2018) with relevant documents. In addition, the following documents shall also be submitted with the application:

- List of BIS licensed manufacturers from whom BIS standard marked Electrical Steel (IS 3024:2015 or IS 648:2006) is being procured indicating name, address, BIS licence number and validity date of licence.
- ii) Copy of Mill Test Certificate (s) of the BIS Standard Marked electrical steel sheet or strip as per IS 3024:2015 or IS 648:2006 issued by one or more of the BIS licensed manufacturers declared at SI No (i) above which is being used as input material.
- i) In case BIS standard marked Electrical Steel is being sourced through intermediary, complete details of the intermediaries involved including their names, addresses, GST Numbers etc. In addition, chain of documents establishing traceability, such as additional invoices, packing slips, e-way bills, bill of lading, IEC certificate (for imported material) shall also be submitted establishing traceability to the mother coil of BIS standard marked Electrical Steel.
- ii) Name, address, and contact details (phone number, email address) of the consignees of the Stampings/ laminations/ cores of transformers.
- iii) Declaration of the products for which CoC is being applied for in the format as given in **Annexure I.**

#### 2. Factory Visit

- i. A visit will be paid to the factory of the applicant for assessment of the manufacturing & testing infrastructure, production process, quality control and testing capabilities, once the application has been found complete in all respects. Inspection format as applicable for Scheme-I shall be used.
- ii. The following documents, as applicable, shall be taken and verified during the factory visit
  - Self-evaluation cum verification report in the proforma, as given in Annexure II
  - Details of quality control personnel (If available)
  - Calibration certificates of testing equipment to be verified during the visit (If in-house testing is being done)
  - Copy of Mill Test Certificate (s) of the BIS Standard Marked electrical steel sheet or strip as per IS 3024:2015 or IS 648:2006

- Plant layout indicating the location of manufacturing area, storage area for raw material and finished product, testing laboratory etc.
- Manufacturing process and in-process controls as declared by the applicant.
- Location plan of the factory
- iii. In case the applicant is conducting any in-house testing on Stampings/ laminations/cores, possible tests shall be witnessed during the inspection and observations recorded as per the test report format being followed by the applicant. This test report shall be taken and enclosed with the Inspection report.
- iv. The applicant shall offer a sufficient quantity of Electrical Steel being used as input material and Stampings/ laminations/ cores of transformers which shall be inspected during the factory visit. It shall be checked that the Electrical Steel is BIS Standard Marked and manufactured by one of the manufacturers holding a valid BIS licence whose details were declared by the applicant in their application. The details of the Electrical Steel sheets/coils and Stampings/ laminations/ cores of transformers inspected during the visit shall be indicated in the Inspection report.
- v. The premises and production/testing records shall be inspected to check that the applicant is using only BIS Standard Marked Electrical Steel as input material for the manufacture of Stampings/laminations/ cores of transformers.
- vi. However, since there are no tests specified to be done to ascertain conformity to the requirements of the Quality Control Order, application for issue of CoC shall not be rejected on account on non-availability of in-house testing facilities.

#### 3. Inspection and Testing Plan

- i. An Inspection and Testing Plan means a plan to be adopted by the manufacturer for exercising control at different stages in the production process. The plan specifies the level of control and the frequency of inspection and testing so as to ensure that the final product conforms to the specified requirements given in standard(s) or part of standard or essential requirements, as the case may be.
- ii. Accordingly, a suggested Inspection and Testing Plan has been prepared and is enclosed at Annexure III. This shall be discussed with the applicant during factory visit and if accepted, his acceptance shall be obtained and enclosed with the Inspection report. The manufacturer may also define his own Inspection and Testing Plan as per the prescribed format provided it serves the intended purpose and may submit the same with justification to Head BO for approval. The decision on the adequacy of the inspection and testing plan submitted shall be taken by Head of the BO.

#### 4. Processing for Grant of CoC

i. After receipt of satisfactory Factory Visit inspection report and acceptance/finalization of Inspection and Testing Plan, Head BO shall review the case and take decision on grant of CoC.A template of the letter to be sent for communication of Grant of CoC is given at Annexure-V of Guidelines for Grant of Certificate of Conformity (CoC) as per the conformity assessment Scheme - IV of Schedule - II of BIS (Conformity Assessment) Regulations, 2018 dated 08 May 2019.

ii. The CoC shall initially be granted for not less than one year and upto two years and attested as per Form – VIII(under Scheme IV of Schedule II of BIS (Conformity Assessment) Regulations, 2018). However, scope of CoC shall be defined as follows

**Product:** Stampings/ laminations/ cores of transformers (with winding/without winding) – [Whichever is not applicable to be struck out]

**Scope:** Made from BIS standard marked: Grain Oriented Electrical Steel Sheet and Strip conforming to IS 3024:2015/ Cold rolled non- oriented electrical steel sheet and strip conforming to IS 648:2006 [Whichever is not applicable to be struck out]

#### 5. Rejection of Application

- i. The application may be processed for rejection as per the sub-regulation (5) of regulation 12 of BIS (Conformity Assessment) Regulations, 2018 under certain situations which may include one or more of the situations mentioned below:
  - Firm has failed to remove deficiencies in application within stipulated time.
  - If corrective actions are not taken within the time period stipulated in discrepancy-cumadvisory report
  - The firm has not been clearing the financial dues to the Bureau.
  - The firm has tampered with documents in connection with the grant of the CoC.
  - The firm has indulged in unethical practices in the context of grant of the CoC.
  - Major deviation is observed from the details declared in the application, is observed during the factory visit.
  - Failure of firm in providing all assistance to certification officer in connection with carrying out factory visit
- ii. Before rejecting an application, a rejection notice of not less than 21 days shall be given to the applicant (template attached as Annexure Vlof Guidelines for Grant of Certificate of Conformity (CoC) as per the conformity assessment Scheme IV of Schedule II of BIS (Conformity Assessment) Regulations, 2018 dated 08 May 2019). The applicant shall be given a reasonable opportunity of being heard either in person or through its representative. In case the facts or the explanation furnished by the applicant or its representative is not satisfactory, the application shall be rejected. The closing of application shall be communicated to the applicant (template of the letter is given at Annexure –VIIof Guidelines for Grant of Certificate of Conformity (CoC) as per the conformity assessment Scheme IV of Schedule II of BIS (Conformity Assessment) Regulations, 2018 dated 08 May 2019).
- iii. The competent authority shall pass speaking orders for decision taken.

#### 6. Surveillance

i) Holder of certificate of conformity shall submit to the concerned BO the details of electrical steel purchased and consumed by them, enclosing the Mill Test Certificates and also the

details of Stampings/ laminations/ cores of transformers manufactured and dispatched by them from this steel, **on a quarterly basis**.

- The concerned BO, shall select one or more of the manufacturers of BIS Standard markedelectrical steel from among the ones indicated by the CoC holder and write to them enclosing a copy of the Mill Test Certificate and requesting them to inform whether the same is authentic. Efforts shall be made to write to at least one manufacturer per CoC holder per quarter by rotation.
- During surveillance inspection at the premises of holder of certificate of conformity, the compliance to the defined Inspection and Testing Plan shall be checked and details of raw material purchase/consumption and production/dispatch records as declared by the CoC holder shall be verified. In addition, physical verification shall also be done to confirm that only BIS Standard Marked electrical steel is being used for manufacture of the product for which CoC is held. Inspection format as applicable for Scheme-I shall be used.
- iv) The concerned BO shall also obtain feedback from buyers on a regular basis, especially from licensees of transformers.
- v) The concerned BO shall maintain a COC holder wise list of labs to which testing has been outsourced by the CoC holders. (This is only for the purpose of record and it shall not be insisted that CoC holder conduct any testing either in-house or at any lab)

#### 7. Suspension

The BO may suspend the certificate of conformity and direct the holder of certificate of conformity to stop its use if, at any time, there is sufficient evidence that the product may not be conforming to the specified requirements covered under the certificate of conformity and such evidence is not limited to, but may include one or more of the following, namely:

- i. In case it is found that the Mill Test Certificate or any other document submitted is inauthentic and the applicant fails toprovideasatisfactoryexplanation in the stipulated time.
- ii. Major deviation observed in the implementation of manufacturer's inspection and testing plan;
- iii. Major modification(s) in the manufacturing process without prior evaluation of BIS
- iv. Relocation of manufacturing unit to a new address without intimation;
- v. Closure of manufacturing unit for more than six months without intimation;
- vi. Non-compliance of any instruction issued by BIS from time to time and/or non-payment of financial dues.

#### 8. Additional Features for Foreign Manufacturers

In addition to the requirements mentioned above, the foreign manufacturers shall also submit the duly filled formats specified in Annexure - VIII, IX, X, and XIof Guidelines for Grant of Certificate of Conformity (CoC) as per the conformity assessment Scheme - IV of Schedule - II of BIS (Conformity Assessment) Regulations, 2018 dated 08 May 2019.

#### 9. Inspection Fee

The inspection fee shall be payable, in advance, as per sub-paragraph (5) of paragraph 5 of Scheme - IV of Schedule - II of BIS (Conformity Assessment) Regulations, 2018.

#### **10.** Provision for Appeal

For the cases, in which manufacturer submits appeal to Director General, the brief history of the case shall be communicated by RO/BO to concerned CMD (template as per Annexure – Xlof Guidelines for Grant of Certificate of Conformity (CoC) as per the conformity assessment Scheme - IV of Schedule - II of BIS (Conformity Assessment) Regulations, 2018 dated 08 May 2019).

### Annexure - I

### **DECLARATION OF PRODUCTS FOR WHICH COC IS APPLIED**

Sl. No	PRODUCT	SCOPE/ REQUIREMENTS
1	Stampings/ laminations/ cores of transformers (with winding/without winding) – [Whichever is not applicable to be struck out]	Electrical Steel Sheet and Strip conforming to IS 3024:2015/ Cold rolled non- oriented electrical steel

#### Annexure - II

#### Self-evaluation cum verification report

- 1. Generalinformation
  - a) Applicant'sname
  - b) Enclose plantlayout:
- 2. Rawmaterials
  - a) Raw MaterialsUsed:

SI. No	Raw material	Name and address of supplier	Name and BIS certification Licence Number of manufacturer of electrical steel	Mill Test certificate Nos with date of electrical steel (MTC copy to be enclosed)	Details of documents establishing traceability to the BIS Standard Marked material (docs to be enclosed)
	Grain Oriented				
	Electrical Steel				
	Sheet and Strip				
	conforming to IS				
	3024:2015				
	Cold rolled non-				
	oriented electrical				
	steel sheet and strip				
	conforming to IS				
	648:2006				

- 3. Packing andmarking
  - a) Nature of packing
  - b) Quantity perpackage
  - c) Marking onarticle
  - d) Method of marking (printing, Stencilling, embossingetc)
  - e) Form of label(s), if any (enclose oneset)
  - f) Batch or Code numbering foridentification
  - g) In what manner marking differs from theprovisions in the specified requirements

#### 4. Details of Consignees:

Sl. No.	Name of Consignee Address		Contact Number	Email	

5. Details of Quality Control personnel

Sl. No.	Name	Designation	Qualification	Experience	

#### 6. BrandName(s)

Declaration of brand name/trademark proposed to be covered under certification

a) Brand Names/Trademark(s) being used:

Brand Names/Trademark(s) which would be marked on the product bearing the BIS Certification (Give actual design depiction of the Brand Name/Trade Mark(s)	Owned by self or others	Registered/ Unregistered	Date of registration/ introduction
b)			

- c) Other Brand Names/Trademark(s) used for the same product marketed without BIS Certification as per Scheme IV. Givereasons.
- d) In case Brand Names/Trademark(s) of any other party/manufacturer is being used for purposes of the above, give the design depiction of the Brand Names/Trademark(s) and copy of the agreement authorizing the use of thesame.
- e) I/We undertake to inform BIS in advance as and when we propose to use any other Brand Names/ Trademark(s) in conjunction with the operation of the BIS Certification Scheme -IV.
- f) I/We also undertake that, as far as possible, the entire production which conforms to the specification shall bear labelling and marking as specified by BIS , irrespective of the Brand Names/Trademark(s)used.
- g) I/We understand that the above has been given only as information to BIS, that BIS has no role in permitting/approving of any Brand Name or Trade Mark, that this is not in anyway be interpreted to mean that BIS has permitted/approved the use of the Brand Name(s) and Trademark(s) listed above, and that the responsibility is entirelymine/ours.
- h) I undertake to inform BIS whenever there is any change in sources of supply of raw material i.e. electrical steel or any changes in my consignees.

#### Declaration

The information given in this report are true to the best of my knowledge and belief. I shall

be responsible if any misleading information has been given in this report and the application shall be liable for rejection if wrong information has been given. If the CoC is granted on the basis of information which is found to be incorrect later, the CoC shall be liable for cancellation.

I/We declare that we have the requisite manufacturing infrastructure, production processes, quality control and testing capabilities towards maintaining conformance of the product to the specified requirement(s) on continuous basis.

Place:

(Signature)
Name and Designation

#### **ANNEXURE - III**

# INSPECTION AND TESTING PLAN FOR STAMPINGS/ LAMINATIONS/ CORES OF TRANSFORMERS (WITH WINDING/WITHOUT WINDING)

- **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 shall be carried out.
- **1.1**The manufacturer shall prepare a calibration planfor the test equipments.
- **2. TEST RECORDS** —The manufacturer shall maintain records to establish conformity to the essential requirements and also the tests conducted.
- 2.1 The manufacturer shall also maintain records of the purchase and consumption of electrical steel (CRGO/CRNO) used in manufacturing as well as the dispatch of stampings/laminations/cores of transformers including the Mill Test Certificates, Invoices etc. through which it shall be possible to establish traceability of the material manufactured and dispatched to the electrical steel purchased and consumed.
- **3. LABELLING AND MARKING**—Each package of Stampings / laminations / cores of transformers shall be marked with Certificate of Conformity Number. It shall also be accompanied with a test certificate indicating CoC Number and other details for which a suggested template is enclosed as **Template-I**
- 3.1 Each package shall also be marked with the type of material i.e.Stampings/ laminations/ cores of transformers, the Mill Test Certificate Number and Date of the corresponding BIS Standard marked electrical steel from which it is manufactured, batch number, date or week of manufacturing, and complete address of manufacturer
- 3.2 The details of BIS website shall also be marked on the package i.e. For details of BIS Certification, please visit www.bis.gov.in.
- **4. CONTROL UNIT** –Each batch of Stampings/ laminations/ cores of transformers manufactured from the same mother coil of electrical steel against a single purchase order shall constitute a control unit.
- **5. LEVELS OF CONTROL** -The levels of control as per Table 1, shall be followed for the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.
- 5.1 **Records** of purchase/ consumption of electrical steel and production/dispatch of Stampings/ laminations/ cores of transformers shall be maintained in an appropriate format to establish traceability of each batch and package to the coil of electrical steel from which it was manufactured.
- **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 (Para 5 of Inspection and Testing Plan)

	(1)	(2)				
	Requirements	Levels of Control				
SI. No.	Requirement	· ·		Remarks		
1	Raw material			Each coil shall be accompanied by Mill Test Certificate		
2	Thickness	Check against purchase specification	Each control unit			
3	Stacking Factor	-do-	-do-			
4	Watt Losses	-do-	-do-			
5	Density	-do-	-do-			
6	Ductility Class/Bends					
7	Dimensions and tolerances	-do-	-do-			

Note-1: Levels of control given in column 2 are only recommendatory in nature. The manufacturer maydefine the control unit/batch/lot and submit hisown levels of control in column 3 with proper justification and submit for approval to BO head.

Note:2- If the manufacturer is subcontracting any tests to an outside lab, the details of the same shall be submitted by them to BO head.

# <u>Template – I</u> <u>Test Certificate for Stampings/ laminations/ cores of transformers</u> (Para 3 of Inspection and Testing Plan)

1. Test Certificate Number and Date:

2. Manufacturer's Name and Address:

3.	Certifica	ate of Confor	rmity Number and	validity:						
4.	Custom	Customer Name and Address:								
5.	Purchas	Purchase Order Number and Date:								
6.	Work O	rder Numbe	r and Date:							
7.	Bill/Invo	oice Number	and Date:							
8.	Quantit	y (in Kg):								
9.	Descrip	tion: <i>Stampii</i>	ngs/ laminations/ o	cores of transf	ormei	rs				
10	. Details	of Electrical S	Steel used for man	ufacture						
	Name Addres Manuf mothe	acturer of	BIS Licence Number	Mill TC No. and Date	Coil	No.	CRGO/CRNC Grade as po IS 3024/ 648	er	Quantity used in manufacturing of this lot/batch	
11	. Require	ments								
	S. No.	Parameter		Required Val	ue	Obse	erved value	R	emarks	
	1.	Thickness								
	2.	Stacking Fa	actor							
	3.	Watt Losse								
	1	Density								

I hereby declare that the above product has been manufactured from BIS standard marked

electrical steel (CRGO/CRNO) and the above declared parameters are true and correct.

NAME/SIGNATURE AND DESIGNATION OF AUTHORIZED SIGNATORY

Date:

Dimensions and tolerances