

केन्द्रीय मुहर विभाग-2

हमारा संदर्भ: के मू वि-2/ G-99

25 09 2020

विषय: भा मा ब्यूरो (अनुरूपता आकलन) विनियम , 2018 की अनुसूची- II की योजना- IV के अनुसार Stampings/ Laminations/cores of transformers (with or without winding) के लिए अनुरूपता प्रमाणपत्र प्रदान हेतु उत्पाद विशिष्ट दिशा निर्देश मे संशोधन।

1. यह उपरोक्त विषय पर इस विभाग के परिपत्र दिनांक 03 09 2020 के संदर्भ मे है।
2. सभी को सूचित किया जाता है की उपरोक्त उत्पाद विशिष्ट दिशा निर्देशों मे जहा भी IS 3024:2015 के अनुरूप Grain Oriented Electrical Steel Sheet and Strip अथवा IS 648:2006 के अनुरूप Cold rolled non-oriented electrical steel sheet and strip का ज़िक्र है, उनके साथ IS 16585:2016 के अनुरूप Fe based amorphous strip delivered in the semi-processed state को भी पढ़ा जाए।
3. संशोधित उत्पाद विशिष्ट दिशा निर्देश अनुपालन हेतु संलग्न हैं।

आदित्य दास
वैज्ञानिक डी

प्रमुख (के मू वि-2)

सभी क्षेत्रीय/शाखा कार्यालयों व FMCD को BIS intranet माध्यम से परिचालित

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/G-99

25 09 2020

Subject: Modification to 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

1. This has reference to CMD-2's circular dated 03 09 2020 regarding the subject mentioned above.
2. It is informed that wherever in the Product Specific Guidelines, the terms 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 appear, the following may also be read alongside the same: **Fe based amorphous strip delivered in the semi-processed state conforming to IS 16585:2016.**
3. Modified product specific guidelines incorporating the above change are enclosed.

(Aditya Das)
Scientist D

Head (CMD-2)

Circulated to ROs/BOs/FMCD through BIS intranet

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:

- i) List of BIS licensed manufacturers from whom BIS standard marked Electrical Steel/material (as per IS 3024:2015 or IS 648:2006 or **IS 16585:2016**) 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 or **Fe based amorphous strip delivered in the semi-processed state as per IS 16585:2016** issued by one or more of the BIS licensed manufacturers declared at Sl 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 (for considering grant of CoC)

- 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
 - a) Self-evaluation cum verification report in the proforma, as given in **Annexure – II**
 - b) Details of quality control personnel (If available)
 - c) Calibration certificates of testing equipment to be verified during the visit (Copy of Mill Test Certificate (s) of the BIS Standard Marked electrical steel sheet or strip as per IS 3024:2015

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- or IS 648:2006 or **Fe based amorphous strip delivered in the semi-processed state as per IS 16585:2016**
- d) Plant layout indicating the location of manufacturing area, storage area for raw material and finished product, testing laboratory and segregated scrap area etc.
 - e) Plant, machinery, and testing equipment as per formats prescribed in the BIS (Conformity Assessment) Regulations, 2018
 - f) Manufacturing process and in-process controls as declared by the applicant.
 - g) Location plan of the factory
- iii. The applicant shall offer a sufficient quantity of ISI marked steel/**amorphous strip** 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 steel/**amorphous strip** 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 steel/**amorphous strip** /sheet/coils and Stampings/ laminations/ cores of transformers inspected during the visit shall be indicated in the Inspection report.
- iv. Factory Testing (for considering grant of CoC):**
- During the factory visit, the surface condition, thickness and width of the Electrical steel/**amorphous strip** or Sheet shall be checked for conformity to the requirements of IS 3024 or IS 648 and to the results mentioned in the Mill Test Certificate. In case the applicant is procuring slit coils through an intermediary, width need not be tested.
 - The thickness of individual stampings/laminations shall be tested for conformity to IS 3024 or IS 648 or **IS 16585**. It should also be checked that their thickness is the same as the thickness of the corresponding strip/sheet from which they have been manufactured. In case the stampings/laminations have been made from multiple coils/sheets, the thickness of stampings/laminations shall be cross checked against the corresponding coils/sheets. (In case checking the thickness of all such Stampings/ laminations is not possible, samples may be selected at random for testing).
 - In addition to the above, in case in-house testing facilities are available with the applicant, all tests possible in a day shall be conducted on the electrical steel /**amorphous strip** /sheet for conformity to IS 3024 or IS 648 or **IS 16585** and on the Stampings/ laminations/cores for conformity to the requirements of the purchaser.
- v. The premises and production/testing/material records shall be inspected to check that the applicant is using only BIS Standard Marked Electrical Steel/**amorphous strip** as input material for the manufacture of Stampings/ laminations/ cores of transformers.
- vi. It shall be verified that all material in factory is labeled properly including raw material, Work in Progress (WIP), and finished goods. Scrap must be only kept in scrap section clearly demarcated for identification. All non-BIS material imported for export purpose must also be demarcated and kept separately.

- vii. 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 for tests other than width and thickness.

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 / **Fe based amorphous strip delivered in the semi-processed state conforming to IS 16585:2016** *[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-cum-advisory 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 – VI 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). 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 –VII 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).
- 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 ISI marked material (as per IS 3024 or IS 648 or IS 16585) 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, also indicating the contact details of the ISI marked material suppliers and purchasers of the stampings/laminations/cores, on a quarterly basis.
- ii) The concerned BO, shall select one or more of the manufacturers of BIS Standard marked material 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.
- iii) 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 material (as per IS 3024 or IS 648 or IS 16585) 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).
- vi) The BOs which have issued CoCs shall collect market samples of BIS Standard Marked material (as per IS 3024 or IS 648 or IS 16585) periodically from the premises of CoC holders for testing as per IS 3024 or IS 648 or IS 16585 in third party labs. FMCD and those BOs who have issued BIS licences under Scheme-I for IS 3024/IS 648/ IS 16585 shall monitor the collection of market samples of electrical steel/material and coordinate with other BOs for collection of market samples to ensure that samples pertaining to each licensee are tested by rotation. FMCD shall be the nodal department for coordination in this respect till further orders.

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 to provide a satisfactory explanation 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 requirements 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 XI 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.

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 – XI 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).

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) – <i>[Whichever is not applicable to be struck out]</i> | 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 / Fe based amorphous strip delivered in the semi-processed state conforming to IS 16585:2016 <i>[Whichever is not applicable to be struck out]</i> |

Annexure - II**Self-evaluation cum verification report**

1. General information
 - a) Applicant's name
 - b) Enclose plant layout:
2. Raw materials
 - a) Raw Materials Used:

| Sl. No | Raw material | Name and address of supplier | Name and BIS certification Licence Number of manufacturer of ISI marked material | Mill Test certificate Nos with date of ISI marked material (MTC copy to be enclosed) | Details of documents establishing traceability to the ISI 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 | | | | |
| | Fe based amorphous strip delivered in the semi-processed state conforming to IS 16585:2016 | | | | |

3. Packing and marking
 - a) Nature of packing
 - b) Quantity per package
 - c) Marking on article
 - d) Method of marking (printing, Stencilling, embossing etc)
 - e) Form of label(s), if any (enclose one set)
 - f) Batch or Code numbering for identification
 - g) In what manner marking differs from the

provisions 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. Brand Name(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. Give reasons.

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 the same.

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 entirely mine/ours.

h) I undertake to inform BIS whenever there is any change in sources of supply of raw material 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.

Date:

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.

1.1The manufacturer shall prepare a calibration plan for 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 material 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 Test Certificate shall indicate: the type of material i.e. Stampings/ laminations/ cores of transformers, the Mill Test Certificate Number and Date of the corresponding BIS Standard marked material 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 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 stock positions, purchase/ consumption of raw material and production/dispatch of Stampings/ laminations/ cores of transformers shall be maintained in an appropriate format and certified periodically by a Chartered Accountant to establish traceability of each batch and package to the coil of ISI marked raw material from which it was manufactured. These records shall be shared with BIS as and when required. (Suggested template is given at **Template-II**)

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. There must be a separate demarcated area for rejected material and scrap.

TABLE 1
LEVELS OF CONTROL
(Para 5 of Inspection and Testing Plan)

| (1) | | (2) | | |
|--------------|--|--|-------------------|---|
| Requirements | | Levels of Control | | |
| Sl. No. | Requirement | Check required | Frequency | Remarks |
| 1 | Raw material | i. ISI marked ii. Thickness iii. Width iv. Surface Condition v. Any other requirement for which testing facilities available | Each Coil | Each coil shall be accompanied by Mill Test Certificate |
| 3 | Thickness | Check against IS, electrical steel strip/sheet thickness and purchase specification | Each control unit | |
| 4 | Stacking Factor | Check against purchase specification | -do- | |
| 5 | Watt Losses | -do- | -do- | |
| 6 | Density | -do- | -do- | |
| 7 | Ductility Class/Bends | -do- | | |
| 8 | Dimensions and tolerances (other than thickness) | -do- | -do- | |

Note-1: Levels of control given in column 2 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 and submit for approval to BO head.

Note-2: Conformity of the product to the purchase specification shall be ensured either through in-house testing or BIS recognized lab test report or Mill Test Certificate issued by the manufacturer of the BIS certified and ISI marked material. If the manufacturer is subcontracting any tests to an outside lab, the details of the same shall be submitted by them to BO head.

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

1. Test Certificate Number and Date:
2. Manufacturer's Name and Address:
3. Certificate of Conformity Number and validity:
4. Customer Name and Address:
5. Purchase Order Number and Date:
6. Work Order Number and Date:
7. Bill/Invoice Number and Date:
8. Quantity (in Kg):
9. Description: *Stampings/ laminations/ cores of transformers*
10. Details of material used for manufacture

| Name and Address of Manufacturer of mother coil | BIS Licence Number | Mill TC No. and Date | Coil No. | CRGO/CRNO Grade as per IS 3024/ IS 648 | Quantity used in manufacturing of this lot/batch |
|---|--------------------|----------------------|----------|--|--|
| | | | | | |

11. Requirements

| S. No. | Parameter | Required Value | Observed value | Remarks |
|--------|---------------------------|----------------|----------------|---------|
| 1. | Thickness | | | |
| 2. | Stacking Factor | | | |
| 3. | Watt Losses | | | |
| 4. | Density | | | |
| 5. | Dimensions and tolerances | | | |

I hereby declare that the above product has been manufactured from BIS standard marked material (as per IS 3024 or IS 648 or IS 16585) and the above declared parameters are true and correct.

NAME/SIGNATURE AND DESIGNATION OF AUTHORIZED SIGNATORY (with date)

Template –II

**Records for CRGO/CRNO/Amorphous material Opening Stock, Purchase & Consumption/Sale Details
from _____ to _____**

| BIS marked Purchase Details in Kg (Table 1) | | | | | Consumption/Sale Details in Kg (Table 2) | | | |
|---|------|--------|----------------------|---------------|---|-----------------------------|---------------------------------|---|
| A | B | C | D | E | F | G | H = (FxG) | I |
| Particulars | Date | Inv No | Seller's Particulars | Purchased Qty | Total Nos of Transformer Manufactured (Rating wise) | Rating wise Consumption per | Total CRGO Consumed Rating Wise | Total Weight I = (H+4% Scrap of B Cutting & C Notching) |
| | | | | | | Transformer (Kg) | | |
| Annual Purchase Record (_____ to _____) | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Opening Stock of BIS marked material as on _____ = _____ | | | | | Material/Lamination Sold to Others during the year (_____ to _____) = _____ | | | |
| Grand Total upto _____ | | | | | Grand Total upto _____ | | | |
| Opening Stock as on _____ (Grand Total of Table 1 – Grand Total of Table 2) = _____ | | | | | | | | |