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दिनांक एवं हस्ताक्षर SIGN & DATE		संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी. - हरिद्वार)	FF06048 Rev 00
		PLANT PURCHASE SPECIFICATION (CFFP - HARDWAR)	पृष्ठ का Page 1 of 4

HIGH PURITY TIN INGOTS

1.0 GENERAL:

This specification governs the quality requirements of High Purity Tin Ingots of grade Sn. 99.85

2.0 APPLICATION:

Used for alloying additions in copper based alloys in foundries, manufacturing of solders and tin based babbitts and soldering of retaining bands of armatures and rotors.

3.0 CONDITION OF DELIVERY:

As cast.

4.0 COMPLIANCE WITH NATIONAL STANDARD:

The material shall comply, in general with the requirements of the following national standard and also meet the requirements of this specification.
 IS :26 -1992, Gr: Sn 99.85 : Tin Ingot.

5.0 SIZE AND SHAPE:

The material shall be in the form of ingots weighing not more than 40 kg each.

6.0 MANUFACTURE:

Tin (Sn) shall be produced by any approved process of smelting and refining.

7.0 FREEDOM FROM DEFECTS:

The ingots shall be free from dross, slag and other foreign inclusions and shall have a clean surface.

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स्वत्वधिकार एवं गोपनीयता
 इस प्रलेख में दी गई सूचना भारत में भारती सूची संख्या 100 के तहत सुरक्षित है। इसका उपयोग अन्य उद्देश्य के लिए नहीं किया जा सकता है। इस दस्तावेज़ को बिना अनुमति के प्रसारित, प्रकट, या किसी भी प्रकार से प्रतिलिपि बनाना या किसी भी प्रकार से प्रसारित करना गैर-कानूनी है।

दिनांक एवं हस्ताक्षर SIGN & DATE	RMI SOMNATH GHOSH		अनुवादक TRANSLATED BY	T DAVE
	MPIC SHANTANU		तैयार किया WORKED BY	AK CHAKRABORTY
भारती सूची संख्या INVENTORY NO.	CHAIRMAN PESC R PARTHASARTHY	तैयार किया DATE & SIGNATURE	जांचक CHECKED BY	DR. MS RAWAT
	सहायक निदेशक AGREED DUPT	नाम NAME	सचिव SECRETARY PESC	सहायक निदेशक DR. MS RAWAT
संस्थान मानक समिति APPROVED PLANT STANDARDS COMMITTEE				
तैयार किया PREPARED FOUNDRY TECH		जारी ISSUED FOUNDRY TECHNOLOGY		दिनांक DATE: 08.10.10

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8.0 TEST SAMPLES:

Unless otherwise agreed, one ingot shall be selected from each consignment of 1000 kg or part thereof representing one heat of the metal produced under uniform conditions of manufacture and offered for tests at one time.

The method of preparing samples for chemical analysis shall be in accordance with IS:1817:1961

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9.0 CHEMICAL COMPOSITION:

The chemical composition of the material, when analysed in accordance with IS: 1940- Method of Chemical Analysis of Tin Ingots, shall have the following composition.

Element	% minimum	% maximum
Tin (Sn)	99.85	-
* Lead (Pb)	-	0.04
* Antimony (Sb)	-	0.04
* Bismuth (Bi)	-	0.04
* Copper (Cu)	-	0.04
* Arsenic (As)	-	0.04
* Iron (Fe)	-	0.01
* Total impurities (including lead, antimony, bismuth, copper, arsenic and iron)	-	0.15

स्वातंत्र्यसिद्धता एवं गोपनीयता
 इस प्रलेख में दी गई सूचना भारत भारती लिमिटेड की संपत्ति है। इसका प्रयोग एवं प्रकाशन के बिना भारत भारती लिमिटेड की लिखित अनुमति के बिना नहीं किया जा सकता है।


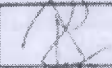
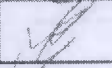
10.0 Inspection and Replacement

10.1 BHEL reserves the right to inspect material at vendor/manufacturers' premises before despatch. The supplier shall intimate in advance about readiness of material enclosing a copy of test certificate of the material offered for inspection. However inspection at BHEL shall be final. The supplier shall offer BHEL representative all reasonable test facilities without charge to satisfy the latter that the material being furnished is in accordance with this specification. The supplier shall prepare and provide necessary test specimens for testing to be carried out at his premises. If facilities are not available at his works, the supplier shall make necessary arrangements for carrying out the prescribed tests elsewhere.

10.2 If the material received is not found in accordance with these requirements, it shall be rejected and the supplier will have to replace it free of cost at the earliest.

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		जांचकर्ता CHECKED BY AKC		

Revision History Stage & Date		संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी. - हरिद्वार) PLANT PURCHASE SPECIFICATION (CFPP - HARDWAR)	FF 06048 Rev 00 पृष्ठ का Page 3 of 4	
Revision No. Approved By	SUBMITTER'S COMPANY'S NO.	<p>11.0 Test Certificates</p> <p>Unless otherwise specified, one original and three copies of original manufacturer's test certificates shall be supplied with each consignment bearing the following information. In order to facilitate quick clearance of material, the supplier shall ensure to send a copy of test certificate along with despatch document.</p> <ul style="list-style-type: none"> a. BHEL PO No. with Date b. Specification No. c. Supplier reference d. Identification No. / Batch No. e. Test results as per Clause 9.0 f. Any other specific information which the supplier would like to convey. <p>Suppliers other than the original manufacturer shall ensure providing original manufacturer's test certificates with linkage to supplier's invoice stating the batch No., lot No., etc of the supply.</p>		
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used or copied in any way without the written consent of the company.	<p>12.0 Packing and Marking</p> <p>The material should be packed in suitable packing to avoid scale formation, pilferage and damage to the ingots during transportation, storage and to facilitate handling. Packing should be that of the original manufacturer. Each container shall have the following marking.</p> <ul style="list-style-type: none"> (a) Supplier's name and trade mark, if any. (b) Name of the product, grade (c) Melt No./Batch No. (d) Net Weight & Gross Weight 			
स्वतंत्रिकार एव कोपनीयारु हरिद्वार की संस्था में ही यह सुका शरत ही हरिद्वार की संस्था में ही यह सुका शरत ही हरिद्वार की संस्था में ही यह सुका शरत ही	Revision No. Stage & Date			
संस्था की संस्था	निर्माणकर्ता WROTE BY T DAVE			
जांचकर्ता CHECKED BY AKC				

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संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी. - हरिद्वार)
PLANT PURCHASE SPECIFICATION
(CFPP - HARDWAR)

संस्थापक द्वारा
SIGN & DATE

सुपरवाइजर
SUPERVISOR'S
INVENTORY NO

संस्थापक द्वारा
SIGN & DATE

RECORD OF CHANGES

Rev Code	No. of changes	Sheet No.	Nature of Change	Sign	Date

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DISTRIBUTION OF PRINTS

RMI	√
STANDARD SECTION	√
MPIC	√

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