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उत्पाद मैनुअल
तप्त निमज्जी एल्यूमिनियम- जिंक मिश्रधातु लेपित इस्पात पत्ती एवं चादर –विशिष्टि
IS 15961: 2025 के अनुसार

**Product Manual for
Hot Dip Aluminium-Zinc Alloy Metallic Coated Steel Strip and Sheet-Specification
According to IS 15961: 2025**

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

1.	भारतीय मानक संख्या IS No.	:	IS 15961:2025
	शीर्षक Title	:	Hot Dip Aluminium-Zinc Alloy Metallic Coated Steel Strip and Sheet
	संशोधनों की संख्या No. of amendments	:	0
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Base metal shall conform to IS 513 Pt.1 or IS 513 Pt.2 Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/Factory Surveillance
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer Annex-A
c)	नमूने का परिमाण Sample Quantity	:	For mechanical test: 1 metre in length For chemical test: 5 pieces of 5cm X 5cm /50 g drillings

		Subjective requirements e.g. Dimensions, Shape and Tolerances (Cl 13) shall be tested in the factory (during Factory Testing) on the full width strip/sheets from which samples are drawn for Independent Testing. Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (in case of market surveillance, effort may be made to procure the required quantity of product sample, as far as possible since raw material sample may not be available in market)
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	Grade Designation, Coating Class, Supply Form, Surface treatment, Surface finish, Sizes : Note: Apart from the above, any other requirements/parameters may also be declared as per the standard, as applicable.
3.	परीक्षण उपकरणों की सूची List of Test Equipment	: Please refer to Annex- B
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	: Please refer to Annex- C
5.	एक दिन में संभावित परीक्षण Possible tests in a day	
	All tests. Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide ready reference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.	
6.	लाइसेंस का दायरा /Scope of the Licence: IS 15961: 2025 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेंस निम्नलिखित कार्यक्षेत्र के लिए प्रदान किया जाता है □Licence is granted to use Standard Mark as per IS 15961: 2025 with the following scope:	
7.	उत्पाद का नाम Name of the product	Hot Dip Aluminium-Zinc Alloy Metallic Coated Steel Strip and Sheet
	Grades Designation	YS250,.....
	Coating Class	AZ70,.....
	Supply form	Plain, Profiled sheets
	Surface treatment	T,....
	Surface Finish	Normal(N)/ Skin-Passed(S)
	Size(Thickness/Width)	Thickness.....mm upto and including...mm, Width upto...mm Length (in case of sheets/profiled sheets)

PM/15961/4
January 2026

BUREAU OF INDIAN STANDARDS
Manak Bhawan, 9, Bahadur Shah Zafar Marg,
New Delhi – 110002

ANNEX-A
TO PRODUCT MANUAL FOR
Hot Dip Aluminium-Zinc Alloy Metallic Coated Steel Strip and Sheet
According to IS 15961:2025

GROUPING GUIDELINES

1. Hot dip Aluminum – Zinc Alloy Metallic Coated Steel Strip and Sheet according to IS 15961: 2025 is classified on the basis of the following:

- Grade Designation
- Coating Class

2. The coated steel sheets covered under this standard may also be supplied in plain form as well as in profiled form.

3. The following grouping based on type of product, shall be followed for considering grant of licence/inclusion as per IS 15961:2025:

Grade Designation (in Ascending Order)	Coating Class (in Ascending Order)	Remarks
YS 250 YS 300 YS 350 YS 450 YS 550	AZ70 AZ90 AZ100 AZ120 AZ150 AZ165 AZ180 AZ200	i. One sample of each form (plain or profiled) of any base metal thickness corresponding to the Higher Yield Stress (Minimum) shall be drawn and tested. On successful testing of the sample, all grades of yield stress (Minimum) equal to or lower than that tested of all sizes can be covered in scope of licence. If the sample tested is in profiled form, the plain form may also be included within the scope of the licence. ii. If the above sample tested is of higher coating class eg (AZ 200) recommendation can include lower coating classes (AZ 180, AZ165, AZ 150, AZ120, AZ 100, AZ90, AZ 70) also. No separate sample is required to be drawn for steel with differential coating. However, if sample drawn and tested is of differential Coating recommendation can include lower coating class based on the higher coating class of differential coating. iii. The recommendation on surface treatment/surface finish should be on the basis of manufacturing facilities.

4. It shall however be ensured that firm has necessary manufacturing capabilities and testing facilities for the entire sizes/processes proposed to be covered under scope of BIS Certification.

5. During the operation of license, BO shall ensure that all sizes /processes covered in the license are drawn for independent testing on rotation over a period of time.

ANNEX – B

LIST OF TEST EQUIPMENTS
(INDICATIVE LIST, FOR GUIDANCE ONLY)

Major test equipment required to test as per requirements of Indian Standard.

Sl. No.	Test Equipment/Chemicals and Identification Numbers (Where applicable)	Tests Used in with Clause Reference
1	Single Pan Balance of L.C 0.01 g minm HCL (sp gr 1.19) Distilled Water Solvent Naptha Steel scale or Vernier calliper Hot water arrangement Alcohol Running water tap Dryer Stop watch	Coating test (9) (Weight Loss Method)
2	XRF	Coating test (9) (Instrument Method)
3	UTM (0-1000KN)	Tensile test (8)
4	Steel Mandrels, UTM attachments/clamps/ vice/Magnifying glass	Adhesion Test(10)
5	Weighing Balance	Mass(12)
6	Measuring Tape, Vernier Calipers Filler gauge, flat bench, Micrometer, Cord	Dimensions, Shape and Tolerances (13)

Note: The above is an indicative list for the purpose of guidance only

ANNEX- C SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that during operation of BIS licence, manufacturers will implement a Quality Assurance Plan (QAP) i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or subcontracting/sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: For the purpose of this scheme, steel sheets /Coils of same Cast/Heat, produced to same Dimension, grade, Coating Class, Surface Finish and Surface treatment Conditions under identical conditions and manufactured in a day shall constitute a control unit.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in Table 1. Manufacturer has the discretion of declaring their own levels of control or accept the levels of control given in this document.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan.

2. ENSURING COMPLIANCE THROUGH TESTING- manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred:

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

2.1 TEST RECORDS- The manufacturers shall maintain test records for the tests carried out (either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the license and Licence Number (i.e. CM/L...) shall be suitably incorporated on metal tag/label/sticker attached to each coil or package of sheets/ strips and on the test certificate issued along with each consignment, provided always that the product thus marked and packed conforms to all the requirement of the specification.

3.1 Packing and Marking shall be done as per the Indian Standard.

3.2 Additional Marking requirements: Additionally, the following shall also be marked on each Package of the material:

- a) “For BIS certification details please visit www.bis.gov.in”
- b) Any other requirement not specified in the Indian Standard

4. TEST CERTIFICATE – For each consignment of BIS Certified material conforming to IS 15961:2025 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).

5. REJECTION - The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. 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
(Recommended Levels of Control by BIS- For Guidance Only)

(1)				(3)		(4)
TEST DETAILS				LEVELS OF CONTROL		REMARKS
Clause	Requirements	Test Method		No. of Samples	Frequency	
		Clause	Reference			
5	Base Metal	5.1 7	IS 15961:2025 IS 513 Pt.1 IS 513 Pt.2	One	Each cast in a consignment	No testing for Product Analysis is required if material fed to Hot Dip baths is ISI marked and is received with Test Certificate
8	Tensile Test	8.1 to 8.3 Table-1	IS 15961:2025 IS 1608 Pt.1	Each Coil/ One Per 1000 sheets or part thereof	Each Control Unit	In case of agreement between purchaser and supplier, frequency of testing shall be as per agreement.
9	Coating Test	9.1 to 9.7 Table-2	IS 15961:2025	-do-	-do-	—
10	Coating adhesion Test	10 Table-3	IS 15961:2025	-do-	-do-	—
11	Freedom from defects	11.1 11.2	IS 15961:2025	Adequate inspection to ensure that the material is free from defects.		
12 & 13	Mass, Dimensions, Shape and Tolerances	12 13.1 to 13.8	IS 15961:2025 IS/ISO 16163	Each Coil/One Per 1000 sheets or part thereof	Each Control Unit	—

Annexure-I
(Para 4 of the Scheme of Inspection and Testing)
XYZ IRON AND STEEL COMPANY
(Registered office Address and works address)

ISI Mark
With IS No.
and CM/L
no.

Test Certificate for Hot dip Aluminum – Zinc Alloy Metallic Coated Steel Strip and Sheet
According to IS 15961:2025

TEST CERTIFICATE NO. _____

To M/s _____

Dated _____

We certified that the material described below fully conforms to IS 15961:2025 Chemical, Physical and Mechanical properties of the product 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 15961:2025 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Order No. & Date	Section (nom Size)	Control Unit No.	Grade	Qty in tonnes	Chemical Composition (%)								Mechanical Properties				Coating class	Remarks
					C	S	P	Si	Mn	Cu ^{\$}	Micro Alloying Elements [@]	Al	CE	Tensile strength	%EL	YS		

\$ For copper-bearing quality

@Micro-alloying element present should be indicated

Remarks
Wagon No.
Truck No.

FOR XYZ IRON AND STEEL COMPANY

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