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उत्पाद मैनुअल

लेखन एवं मुद्रण कागज़ – विशिष्ट

भाग 1 – अकाउंट बुक, एजोर लेड, बॉन्ड क्रीम लेड और क्रीम वोव/वाइट/ प्रिंटिंग/रंगीन प्रिंटिंग

ऑफ़सेट प्रिंटिंग और टाइपराइटिंग प्रारूप

IS 1848 Part 1: 2018 के अनुसार

PRODUCT MANUAL

FOR Writing and Printing Papers Specification Part 1 Account Book, Azure Lead, Bond, Cream Laid and Cream Wove/Printing White/Printing Coloured/Printing Offset, Printing Maplitho, Printing White Super Calendered and Typewriting Types

ACCORDING TO IS 1848 Part -1: 2018

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.	मानक संख्या IS No.	:	IS 1848 (Part 1) : 2018
	शीर्षक Title	:	Writing and printing papers —specification Part 1 Account Book, Azure Lead, Bond, Cream Laid and Cream Wove/Printing White/Printing Coloured/Printing Offset, Printing Maplitho, Printing White Super Calendered and Typewriting Types
	संशोधनों की संख्या No. of amendments	:	02
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	No specific requirement 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 to Annex-A

c)	नमूने का परिमाण Sample Quantity	:	50 sheets of 560 x 650 mm 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)
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		
	a) General b) Substance c) Thickness d) Size e) pH f) Tensile Index g) Brightness h) Opacity i) One minute Cobb test j) Double Fold k) Gloss l) Wax pick m) Smoothness (Bendtsen) n) Tear Index 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 readyreference 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 1848 Part 1: 2018 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 1848 Part 1 : 2018 with the following scope:		
	Name of the product उत्पाद का नाम		Writing and printing papers
	Type of paper		a) Account book, and/or b) Azure laid , and/or c) Bond , and/or d) Cream laid and cream wove/ printing white/ printing coloured/ printing offset , and/or e) Printing, maplitho, and/or f) Printing, white super calendered , and/or g) Typewriting
	Sizes of the paper (to be declared)		a) In mm x mm (width x length, in case of sheet) b) In mm (width, in case of reels)

	Substance of the paper	In g/m ²
	Other Aspects	Coloured/Printed/White paper

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ANNEX – A
GROUPING GUIDELINES

1. The IS incorporates following Type of Writing and printing papers:
 - a. Account book, and/or
 - b. Azure laid , and/or
 - c. Bond , and/or
 - d. Cream laid and cream wove/ printing white/ printing coloured/ printing offset, and/or
 - e. Printing, maplitho, and/or
 - f. Printing, white super calendered, and/or
 - g. Typewriting
2. The IS provides that substance of writing and printing papers shall be as prescribed in IS 1763
3. Sizes of trimmed writing and printing paper shall be in accordance with IS 1064
4. For the purpose of GOL and CSoL, the following Grouping Guideline may be considered:
 - a. Each Type of Writing and printing paper shall be tested to be covered in the Scope of Licence
 - b. Any size (of sheet or reel) and any nominal substance (as per IS 1763) for a Type may be tested to cover all sizes and all nominal substances for the Type in the scope of Licence.
 - c. If white paper is covered, coloured and/or printed paper may be covered in the scope of Licence

Scope of licence shall be restricted based on the manufacturing and testing facilities available.

During operation of licence, samples of each variety covered in the scope of licence, shall be tested in rotation, to the extent possible

ANNEX – B
LIST OF TEST EQUIPMENTS
(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sr. No.	Tests used in with Clause Reference	Test Equipment
1	Mechanical Pulp Content (CI 4.1)	Apparatus for fibre analysis of paper and board consisting of a microscope, weighing balance, hot plate, light source, dissecting needles, Artist's brush, slides, droppers, and other glassware and reagents as per IS 5285
2	Substance (CI 4.2)	Cutting device, balance and special sheet-weighing balance as per 5.3 of IS 1060 (Pt 5/Sec 5), conditioning chamber and arrangement to carry out test at the same condition
3	Thickness (CI 4.3)	Dead weight micrometer with dial gauge, thickness gauge
4	Sizes and Tolerances on Size (CI 4.4)	Vernier calipers, measuring scale or tape
5	pH value (CI 4.5)	pH meter, glassware, Beaker and reagents as distilled or deionized water, Standard buffer solutions water per 10 of IS1060 (Pt 1/Sec 1)
6	Tensile Index (CI 4.6, Table 1)	Tensile Testing, cutting device, balance and special sheet-weighing balance as per 5.3 of IS 1060 (Pt 5/Sec 5), conditioning chamber and arrangement to carry out test at the same condition
7	Brightness ISO (CI 4.6, Table 1)	Reflectometer with reference and working standards.
8	Opacity (CI 4.6, Table 1)	Reflectometer with reference and working standards, Black cavity
9	One minute Cobb test (CI 4.6, Table 1)	Absorptiveness tester, thermometer, water as per 5.1 of IS 1060 (Pt 5/Sec 4), Metal roller, Balance, timer, conditioning chamber and arrangement to carry out test at the same condition
10	Double Fold (CI 4.6, Table 1)	Fold tester as per CI 5.1 of IS 1060 (Part 6/Sec 3), Cutting Device, means of measuring the temperature, conditioning chamber and arrangement to carry out test at the same condition
11	Gloss (CI 4.6, Table 1)	Gloss meter with Gloss standards and Zero gloss standard.
12	Wax pick number (CI 4.6, Table 1)	Smooth Surface (hardwood block or table), Dennison standard paper testing waxes, alcohol or gas flame
13	Smoothness (Bendtsen) (CI 4.6, Table 1)	Bendtsen Type instrument as per IS 9894:1981
14	Tear Index (CI 4.6, Table 1)	Elmendorf type tear tester as per 5 of IS 1060 (Pt 6/Sec 1), Cutting device, balance and special sheet-weighing balance as per 5.3 of IS 1060 (Pt 5/Sec 5), conditioning chamber and arrangement to carry out test at the same condition

ANNEX C

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality Assurance Plan 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 defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.4.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is:

1.3.1.1 For the product, manufacturing units (licensee units) may be classified into the following two categories:

- a) Paper Mills i.e. those units which are manufacturing Writing and printing papers (from pulp etc.)
- b) Paper converters i.e. those units which are purchasing ISI Marked Writing and printing papers in bulk from paper mills and carrying out processing/cutting operations to produce the final product (cut paper) on which standard mark is applied

1.3.1.2 For the purpose of this scheme, following definition of Control unit may be considered

- a) For paper mills - Writing and printing papers of same Type, size, substance and aspect, produced and packed on a particular machine continuously during a day.
- b) For paper converters - the Writing and printing papers produced using the same batch of ISI Marked paper and packed on a particular machine continuously during a day.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1 (A and B)**.

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. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given

below. Column 2 of Table 1 indicates routine tests where test equipment is required in house as “R” or other tests which can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.2 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as “R” in Column 2 of Table 1) is also optional.

2.2.1 MSME manufacturers may utilize common cluster based facilities as per guidelines for the utilization of cluster based test facilities by MSMEs or the provisions of Sharing of testing facilities or get testing done from BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1), where different tests given in the specification shall be carried out in accordance with the method given in the specification. They shall also implement a calibration plan for the in-house test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.4 TEST RECORDS- The manufacturers maintaining an in-house laboratory or utilizing common cluster based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

The Paper converting units shall maintain details of the converted paper in format given in Table 2

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on the package of each ream or reel of Writing and Printing Papers provided always that the paper in the ream or reel so marked conforms to each requirement of the specification.

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

3.2 Additional Marking requirements: The package of each ream or reel of Writing and Printing Papers shall also be marked with the following additional

- a) “For BIS certification details please visit www.bis.gov.in”

In case of paper converter units, the following shall also be marked

- b) Name of original paper mill with its BIS licence number
- c) Name of Paper Converter unit and his recognized trade mark, if any

4. REJECTION - All 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
(ONLY FOR GUIDANCE PURPOSE)
A. For Paper Mills

(1)				(2)	(3)		(4)
Test Details				Test equipment requirement R:required (or) S: Sub-contracting permitted	Levels of Control		Remarks
Clause	Requirements	Test Method			No. of Samples	Frequency	
		Clause	Reference				
4.1	General		IS 1848 (Part 1)	R	Manufacturer shall maintain adequate inspection and in process control, to ensure product meets specified requirements and maintain test records for tests involving Visual examination		
	Mechanical pulp.	12	IS 5285	S	One	Once in a month	Test for pulp applicable only for paper mills
4.2	Substance		IS 1848 (Part 1) IS 1763 IS 1060 (Part 5/Sec5)	R	-do-	Each control unit	Tolerance on mass of ream is not applicable for paper in reels
4.3	Thickness		IS 1060 (Part 1)	R	-do-	-do-	Applicable if nominal thickness is specified by the purchaser.
4.4	Size	4	IS 1064	R	Manufacturer shall maintain adequate inspection and in process control, to ensure product meets specified requirements and maintain test records for tests		
4.5	pH	10	IS 1060 (Part 1)	R	One	Each control unit	
4.6,4.7 & Table 1	a) Tensile Index i) Cross Direction ii)Machine direction		IS 1060 (Part 5/Sec 6)	R	-do- -do-	-do- -do-	
	b) Brightness		IS 1060 (Part 4/ Sec 13)	R	-do-	-do-	Not applicable for coloured paper and printed paper. Applicable only for white paper
	c) Opacity		IS/ISO 2471	R	-do-	-do-	
	d) One minute Cobb test		IS 1060 (Part 5/Sec4)	R	-do-	-do-	

	e) Double Fold i) Cross Direction ii) Machine direction		IS 1060 (Part 6/Sec3)	R	-do-	-do-	
	f) Gloss		IS 1060 (Part 5/Sec 12)	R	-do-	-do-	Applicable only for white paper.
	g) Wax pick	8	IS 1060 (Part 3)	R	-do-	-do-	
	h) Smoothness (Bendtsen)	3	IS 9894	R	-do-	-do-	
	j) Tear Index i) Cross Direction ii) Machine Direction		IS 1060 (Part 6/Sec1)	R	-do- -do-	-do- -do-	

B. For paper converters

(1)				(2)	(3)		(4)
Test Details				Test equipment requirement R:required (or) S: Sub-contracting permitted	Levels of Control		Remarks
Clause	Requirements	Test Method			No. of Samples	Frequency	
		Clause	Reference				
4.1	General		IS 1848 (Part 1)	R	Manufacturer shall maintain adequate inspection and in process control, to ensure product meets specified requirements and maintain test records for tests involving Visual examination		
4.3	Thickness		IS 1060 (Part 1)	R	-do-	-do-	Applicable if nominal thickness is specified by the purchaser.
4.4	Size	4	IS 1064	R	Manufacturer shall maintain adequate inspection and in process control, to ensure product meets specified requirements and maintain test records for tests		
4.6,4.7 & Table 1	b) Brightness		IS 1060 (Part 4/ Sec 13)	R	-do-	-do-	Not applicable for coloured paper and printed paper. Applicable only for white paper
	f) Gloss		IS 1060 (Part 5/Sec 12)	R	-do-	-do-	Applicable only for white paper.
	g) Wax pick	8	IS 1060 (Part 3)	R	-do-	-do-	
	h) Smoothness (Bendtsen)	3	IS 9894	R	-do-	-do-	

TABLE 2
RECORD OF WRITING AND PRINTING PAPERS (Converted from reels by paper converters)

Sl. No.	Name of the manufacturer (Paper Mill)	Particulars of test reports received with C.U/Lot no.	Date of manufacture (Month and year)	Quantity received	Date of receipt	Date of paper converted from reels	Lot no.	Details of paper converted		Details of dispatch
								Size	quantity	
1	2	3	4	5	6	7	8	9	10	11