



उत्पाद मैनुअल
विधुत नमी मीटर — विशिष्ट खाद्यान्न, बीज और आटा
IS 8824 (Part-1): 2022 के अनुसार

DRAFT PRODUCT MANUAL FOR
ELECTRICAL MOISTURE METERS – FOOD GRAINS, SEEDS AND FLOUR
ACCORDING TO IS 8824 (PART 1): 2022

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में अभ्यास और पारदर्शिता के संचालन में पारदर्शिता सुनिश्चित करने 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 लाइसेंस/प्रमाणपत्र 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 coherence 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 licence/certificate.

1.	उत्पाद Product	:	IS 8824 (Part 1): 2022
	शीर्षक Title	:	Electrical Moisture Meters – Food Grains, Seeds and Flour
	संशोधनों की संख्या No. of Amendments	:	Nil
2.	नमूना दिशानिर्देश Sampling Guidelines:		
a)	कच्चा माल Raw Material	:	For moisture meters as per Type I: Manufacturer to submit declaration/undertaking in compliance to Table 1, clause 6.9.1 of IS 8824 (Part 1):2022 for the following Compression Unit Parts: (i) Body/housing, (ii) Test Cup (iii) Plunger
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Each Type and Model to be tested for GoL/CSoL
c)	नमूने का आकार Sample Size	:	One Moisture Meter
3.	परीक्षण उपकरणों की सूची List of Testing Equipment	:	Please Refer ANNEX – A
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please Refer ANNEX – B

5.	एक दिन में संभावित परीक्षण Possible Tests in a day	:	All Tests
6.	Scope of Licence:/ लाइसेंस का दायरा		
	IS 8824 (Part 1): 2022 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 8824 (Part 1): 2022 with the following scope:”		
	उत्पाद का नाम Name of the product	Electrical Moisture Meters- Food Grains, Seeds and Flour	
	Type	a) Type I – Conductivity/Resistance Type Moisture meters; and/or b) Type II – Capacitance/Dielectric Type Moisture meters	
	Model	a) Portable Model; and/or b) Table Top	
	Supply Voltage	a) DC Source; b) Battery; c) AC Supply; d) Rechargeable Battery (Manufacturer to declare the safe applicable limit and there shall be low battery indication for error free measurement, as per provisions of clause 6.4 of IS 8824(Part-1):2022)	

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ANNEX - A

LIST OF TEST EQUIPMENT

Major test equipment required to test as per the Indian Standard

Sl. No.	Tests used in with clause reference	Test Equipment
1.	Initial Grain Calibrations, Cl. 6.2.1	Sieve, Analytical Balance LC 0.001 g, Grinding Mill, Metal/Glass Dish, Hot Air Oven, Desiccator, Stop Watch, Air conditioner, Humidifier, Hygrometer, Thermometer
2.	Constructional Features of Conductivity/Resistance type Moisture Meter	Measuring Jar of 10 ml.
3.	Constructional Features for Capacitance/Dielectric Type Moisture Meter	Weighing Balance, Steel Scale, Vernier Caliper.

The above list is indicative only and may not be exhaustive.

ANNEX – B

SCHEME OF INSPECTION AND TESTING

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 given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare and implement a calibration plan for the test equipment.

2. TEST RECORDS –The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING– The Standard Mark as given in the Schedule of the licence, shall be suitably marked on each moisture meter, provided always that the moisture meter to which this mark is thus applied, conform to every requirement of the specification.

3.1 Packing – The material shall be packed in suitable container in which it could be conveniently and safely transported, as per provisions of clause 9.1 of IS 8824(Part-1):2022.

3.2 Marking – The Display plate of the moisture meter shall bear clearly and indelibly marked with the information as mentioned under clause 9.2.1 of IS 8824(Part-1):2022. In addition, the following details shall be mentioned on each Display plate of the moisture meter:

a) BIS Licence No. CM/L _____

b) BIS website details i.e – “For details of BIS Certification please visit www.bis.gov.in”.

3.2.1 The manufacturer shall provide a manual as per provisions of clause 9.2.2 of IS 8824(Part-1):2022.

4. CONTROL UNIT - For the purpose of this scheme, all moisture meters of the same Type and model produced in one day from the same material shall be considered as a control unit.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

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 (Level of Control
Para 5 of Scheme of Inspection and Testing)**

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	No. of Samples	Frequency	Remarks
Cl.	Requirement	Test Method					
		Clause	Reference				
6	General and Construction Requirements						
6.1	General	6.1	IS 8824 (Part 1)	R	Each Piece		
6.2	Temperature Compensation	6.2	IS 8824 (Part 1)	R	Three	Each Control Unit	
6.3	Display	6.3	IS 8824 (Part 1)	R	Each Piece		
6.4	Supply Voltage	6.4	IS 8824 (Part 1)	R	Manufactures shall submit a declaration for the safe applicable limit of the supply voltage		
6.5	Accessories	6.5	IS 8824 (Part 1)	R	Manufactures shall submit a declaration for the details of all the accessories		
6.6	Carrying Case	6.6	IS 8824 (Part 1)	R	Manufactures shall submit a declaration that the meter is provided with a carrying case having all the accessories.		
6.9	Constructional Features of Conductivity /Resistance type moisture meter	6.9	IS 8824 (Part 1)	R	Three	Each Control Unit	
6.10	Constructional Features for Capacitance/Dielectric type moisture meter	6.10	IS 8824 (Part 1)	R	Three	Each Control Unit	
7	Test Results						

7.1	Repeatability Measurement	7.1	IS 8824 (Part 1)	R	Ten	Each Control Unit	
7.2	Uncertainly Measurement	7.2	IS 8824 (Part 1)	R	Ten	Each Control Unit	
8	Measuring Range	8	IS 8824 (Part 1)	R	Manufacturing shall submit a declaration for the moisture measuring range t the Bureau.		

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-Contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note 2: Levels of control given in column 3 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 for approval by BO Head.