



**उत्पाद मैनुअल
आई एस 13664:1993 के अनुसार
थैला भंडारण गोदामों के लिए पोलीपैलेट
के लिए**

दस्तावेज संख्या – पीएम/आईएस 13664/1/अप्रैल 2025

भारतीय मानक ब्यूरो की स्कीम-I (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिश्रिता की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/ प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

**PRODUCT MANUAL FOR
POLY-PALLETS FOR BAG STORAGE GODOWNS
ACCORDING to IS 13664:1993**

Document No.-PM/IS 13664/1/ April 2025

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.

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1.	Product	:	IS 13664: 1993
	Title	:	Poly-Pallets for Bag Storage Godowns
	No. of Amendments	:	Two
2.	Sampling Guidelines:		
a)	Raw material	:	As per Cl. 7 of IS 13664
b)	Grouping guidelines	:	Please refer ANNEX –A
c)	Sample Size	:	3 Nos for Type D Pallets, 5 Nos. for Type A, B and C Pallets.
d)	Declaration for testing of samples	:	a) Type (A/B/C1/C2/D) b) Material as per Cl. 7 Note: In addition to the above parameters, any other parameter as deemed necessary for testing as per the Standard, shall also be declared in the test request of sample
3.	List of Test Equipment	:	Please refer ANNEX –B
4.	Scheme of Inspection and Testing	:	Please refer ANNEX –C
5.	Possible tests in a day	:	Nominal Assembly Dimensions and Cross Sectional Details(Cl. 5.1 and 5.3); Type and Stability(Cl. 8.1 and 8.2); Assembly and Fastening(Cl. 8.3 and 8.4); End Plugs and Weight (Cl. 8.5 and 8.6); Axial Crushing Load, Cross Sectional Crushing Load and Ultimate Bending Load (Cl. 9.1.1); Shear Strength, Ultimate Tensile Strength, Elongation, Impact Strength Notched Specimen, Bend Strength at Yield, Compressive Strength at 10% deformation(Cl. 9.1.2); Top Deflection test, Bending Strength test, Compression(Block or stringer strength) test, Deformation test and Drop Test(Cl. 9.1.3); Bending Strength test,; Stacking(Deck

			Strength) test, Drop test(Cl. 9.1.3.1); Production routine tests (Cl. 9.2)
6.	Scope of the Licence:	:	Please refer ANNEX –D

ANNEX A

Grouping Guidelines

1. “Poly-Pallets for Bag Storage Godowns” covered under IS 13664: 1993 may be classified into different varieties based on following parameters:
 - a) **Type: A/B/C1/C2/D**
2. Considering the above, the following grouping guidelines for Grant of Licence/Change in Scope of Licence shall be followed:
 - a) “Poly-Pallets for Bag Storage Godowns” of each type, shall be tested separately.
3. Manufacturer shall declare varieties of the Poly-Pallets for Bag Storage Godowns, which are intended to be covered under the scope of licence. Scope of licence may be restricted based on manufacturing and testing capabilities.
4. During the operation of the Licence, BO shall ensure that all the varieties covered in the Licence are tested in rotation, to the extent possible.

Annex B
List of Test Equipment

Indicative list of major test equipment required to test as per the Indian Standard

Sl. No.	Tests used in with Clause reference	Test Equipment
1.	Assembly Dimensions and Cross Sectional Details(Cl. 5.1 and 5.3)	Measuring Tape, Steel Scale, Vernier calliper and Spring Loaded Dial Micrometer
2.	Stability(Cl. 8.2)	Flat Horizontal Surface
3.	Assembly(Cl. 8.3)	Right angle
4.	Weight(Cl. 8.6)	Weighing Scale
5.	Test on Top Members(Cl. 9.1.1, Table 2)	Universal Testing Machine
6.	Test on Bottom Members(Cl. 9.1.2, Table 3)	Suitable test fixtures (For Test Methods suitable standard as agreed between supplier and purchaser shall be referred. For the guidance for test methods reference may be made to ASTM D732, ASTM D638, ASTM D256, ASTM D570, ASTM D543, ASTM D790 and ASTM D695).
7.	Test on Assembled Poly-Pallets (Cl. 9.1.3)	Top Deflection test- rigid load applicator, test loads or load applying equipment as per IS 6219 Bend test- Weighing Scale, Load Applicators, test loads or load applying equipment, load board, safety stop, support, wing, in-fill pieces, Steel scale or vernier calliper as per IS 6219 Compression Test- flat, hard, rigid and horizontal surface, rigid load applicator of dimensions $(300 \pm 5) \text{ mm} \times (300 \pm 5) \text{ mm} \times (25 \pm 5) \text{ mm}$, block or stringer, test loads as per IS 6219 Deformation Test- rigid load applicator, test loads or load applying equipment as per IS 6219 Drop Test- Vernier Calliper, hard horizontal impact surface, Arrangement for dropping pallets as per IS 6219
8.	Test on Steel reinforced injection moulded plastic pallets and Injection moulded plastic pallets	Bend Test- as specified at serial no. 7 above Stacking Test- test loads or load applying equipment, load applicators, safety stop, solid supports, load boards, flat, hard, rigid horizontal surface as per IS 6219 Corner Drop Test- as specified at serial no. 7 above

The above list is indicative only and may not be treated as exhaustive

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. Batch 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 below**.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**.

1.3.2 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 sub-contracted 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) also is 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/empaneled 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.

3. LABELLING AND MARKING – As per the requirement of IS 13664:1993. The Standard mark as given in the schedule of the Licence shall be marked legibly and indelibly on each Pallet provided always that the product thus marked conforms to all the requirement of the specification. In addition, the licence no. CM/L-_____ and details of BIS website shall be marked at an appropriate place on product or package as follows: “For details of BIS certification please visit www.bis.gov.in”.

4. REJECTION - All the production which conforms to the Indian Standard and covered under scope of the licence shall be marked with 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

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
Raw Materials							
7.1	LDPE	7.1	IS 13664 & IS 3395	S	One	Each Consignment	No further testing is required in case material received is ISI Marked or received with test certificate
7.2	Steel	7.2	IS 13664 & IS 2062	S	One	Each Consignment	
7.3	Fasteners	7.3	IS 13664 & IS 6760	S	One	Each Consignment	
7.4	Material and Steel for steel reinforced injection moulded pallets	7.4	IS 13664 & IS 7328/IS 10146/IS 10910	S	One	Each Consignment	
	Dimensions and Constructions						
5.1	Nominal Assembly Dimensions	5.1,5.2	IS 13664	R	Each Pallet		
5.3	Dimensions and Cross Sectional Details of Members	5.3	IS 13664	R	Manufacturer shall exercise adequate levels of control so that entire production conforms to the Standard. Record shall be maintained		
8.1	Type	8.1	IS 13664	R			

8.2	Stability	8.2	IS 13664	R	Each pallet		
8.3	Assembly	8.3	IS 13664	R	Each pallet		
8.4	Fastening	8.4	IS 13664	R	Each pallet		
8.5	End Plugs	8.5	IS 13664	R	Each pallet		
8.6	Weight	8.6	IS 13664	R	Each pallet		
	Tests						
9.1.1	Test on Top Members	9.1.1, Table 2	IS 13664	S	One	Every 500 pallets	Applicable for Type A and Type B
9.1.2	Test on Bottom Members	9.1.2, Table 3	IS 13664	S	One	Every 500 pallets	Applicable for Type A and Type B
9.1.3	Test on Assembled Poly-Pallets	9.1.3	IS 13664	S	One	Every 500 pallets	Applicable for Type A and Type B
9.1.3.1	Stacking Test, Bending Test and Corner Drop Test	9.1.3.1	IS 13664	S	One	Every 500 pallets	Applicable for Type C and Type D

ANNEX – D

Scope of the Licence

Licence is granted to use Standard Mark as per IS 13664:1993 with thefollowing scope:	
Name of the product	Poly-Pallets for Bag Storage Godowns
Type (A/B/C1/C2/D)	