



उत्पाद मैनुअल
सामान्य प्रयोजनों के लिए प्लास्टिक कुर्सियाँ के लिए
आई एस 13713:2021 के अनुसार

PRODUCT MANUAL
PLASTIC CHAIRS FOR GENERAL PURPOSES
ACCORDING TO IS 13713:2021

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 13713 : 2021
	शीर्षक Title	:	Plastic Chairs for General Purposes
	संशोधनों की संख्या No. of amendments	:	Nil
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Plastic chairs shall be made from filled and unfilled reinforced thermoplastic and thermosetting plastics. Steel tubes used shall conform to IS 7138. Conformity of steel tubes may be established through the supplier test certificate/test report from BIS recognized lab/ empanelled lab or any other lab having accreditation as per IS/ISO/IEC 17025. 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	:	10 chairs 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 (incase of market surveillance, effort may be made to procure therequired 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		
	(i) Dimensions (Cl 6), (ii) Mass (Cl 7), (iii) Workmanship & Finish (Cl 8), (iv) Free Fall Drop Test (Cl 9.1.3), (v) Handle Impact Test (Cl 9.1.5), (vi) Rigidity Test for Chair Shell (Cl 9.1.7) 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:		
	“Licence is granted to use Standard Mark as per IS 13713:2021 with the following scope:		
	Name of the product	Plastic Chairs for General Purposes	
	Model (by name/number/code)	1 st Lead Model : xxxxx,	
		Models of this Family : xxxx, xxxx, xxxx, xxxx, xxxx	
		2 nd Lead Model : xxxxx,	
		Models of this Family : xxxx, xxxx, xxxx, xxxx, xxxx	

भारतीय मानक ब्यूरो
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ANNEX A

Grouping Guidelines

1. Plastic Chairs for general purposes as per IS 13713:2021 are categorized based on the following parameters:
 - (a) Type of Chair :
 - (i) one-piece plastic moulded chairs
 - (ii) Chairs made of plastic materials in combination with steel tubes
 - (b) Construction of Chair :
 - (i) With Arms
 - (ii) Without Arms
2. **Family of models and Lead model in a family:**
 - (a) The manufacturer shall declare all the models (by name/ number/ code, as uniquely defined by the manufacturer) of the plastic chairs along with following essential parameters and drawing of each model:
 - (i) Type of Chair (Clause 1 of IS 13713:2021)
 - (ii) Construction of Chair (Clause 6 of IS 13713:2021)
 - (iii) Weight of chair (Clause 7 of IS 13713:2021)
 - (iv) Dimensions of chair (as per Table 1 read with Clause 6 of IS 13713:2021))
 - (b) The manufacturer shall identify and declare **Family of models** and the **lead model** in each family of models of plastic chairs. **Lead model** represents a family of models declared by manufacturer. A **Family of models** is defined as a group of models having same Type and Construction of chairs; and having weight and dimensions in the range of $\pm 5\%$ of weight and dimensions of the declared lead model.
3. For GoL/CSoL of plastic chairs, the grouping guidelines as given below are to be followed:
 - (a) Sample of the declared Lead model of a family of models of plastic chair shall be tested to cover all the models in that family of models.
 - (b) All the Models of Plastic chairs that fall under the scope of family of declared lead model, shall be covered in the scope of licence without separate testing of those models, if sample of lead model is tested.
4. The Firm shall declare the models of plastic chairs they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.

5. During operation of the licence if any new model is intended to be covered within the existing families of lead models that are already covered in the scope of licence, firm is required to submit the details as per para 2(a) above along with its drawing. On receipt of the details, BO to review the request of firm and to take action for inclusion of these new models and the endorsements to be issued accordingly. In such cases, there is no requirement to collect charges towards inclusion.
6. During the operation of the Licence, BO shall ensure that all the models covered in the Licence are tested in rotation, to the extent possible.

ANNEX B

List of Test Equipment

(INDICATIVE LIST, FOR GUIDANCE ONLY)

S No	Tests used in with Clause Reference	Test Equipment
1.	Dimensions, (Cl 6)	- Vernier caliper - Measuring tape
2.	Mass, (Cl 7)	- Weighing balance
3.	Free Fall Drop Test (Cl 9.1.3)	- Flat and hard surface - Measuring tape
4.	Static Load Test for Leg Slippage and Distortion (Cl 9.1.4)	- Granite platform/high gloss tiles platform, - Five bags of 25 kg each, permanent marker
5.	Handle Impact Test (Cl 9.1.5)	- impact platform, - rope tied sand bag (15 kg) - Measuring tape
6.	Vibration Test (Cl 9.1.6)	- 3 bags (25 kg each), - rope, vibration testing machine - stop watch - tachometer
7.	Rigidity Test for Chair Shell (Cl 9.1.7)	- Plane rigid mounting surface, - Rubber sheet (6mm), - Rigid bow for applying force of 300N, - Equipment to measure force in Newton (e.g. Newton meter, spring scale, etc.) - Vernier caliper - Stop watch

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 : All plastic chairs of same model 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**.

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.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated indelibly and legibly on each plastic chairs provided always that the material 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 material shall also be marked with the following additional requirement on the product/ packing:

- a) Model (name/number/code)
- b) “For BIS certification details please visit www.bis.gov.in”

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)

(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				
4	Material	4	IS 13713:2021		One	Every batch of raw material consignment received	
6	Dimensions	Table 1, Cl 6	IS 13713:2021	R	One	Every control unit	
7	Mass	7	IS 13450 (Part 1)	R	One	Every control unit	
8	Workmanship And Finish	8.1 8.2	IS 13450 (Part 1)	R	One	Every control unit	
9.1.1	Strength Test	Table 3	IS 5416 (Part 1)	S	One	Once in six months for each model	
9.1.2	Stability Test	9.1.2	IS 5416 (Part 2)	S		Once in six months for each model	
9.1.3	Free Fall Drop Test	Annex A	IS 13450 (Part 1)	R	One	Every control unit	
9.1.4	Static Load Test for Leg Slippage and Distortion	Annex B	IS 13450 (Part 1)	R	One	Every control unit	
9.1.5	Handle Impact Test	Annex C	IS 13450 (Part 1)	R	One	Every control unit	
9.1.6	Vibration Test	Annex D	IS 13450 (Part 1)	S	One	Once in six months for each model	
9.1.7	Rigidity Test for Chair Shell	Annex E	IS 13450 (Part 1)	R	One	Every control unit	
9.1.8	Colour Fastness to Daylight	9.1.8	IS 13360 (Part 8/ Sec 13) : 2018	S	One	Once in six months for each model	
9.1.9	Determination of Flammability by Oxygen Index	9.1.9	IS 13360 (Part 6/ Sec 6)	S	One	Once in a year for each model	