



**PRODUCT MANUAL FOR
REHABILITATION EQUIPMENT — WHEELCHAIRS, FOLDING,
ADULT SIZE — SPECIFICATION
ACCORDING TO IS 7454:1991**

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.	Product	:	IS 7454:1991
	Title	:	Rehabilitation Equipment — Wheelchairs, Folding, Adult Size — Specification.
	No. of Amendments	:	5
2.	Sampling Guidelines:		
a)	Raw material	:	As per Cl 6 of IS 7454
b)	Grouping guidelines	:	Not Applicable
c)	Sample Size	:	One Wheelchair
3.	List of Test Equipment	:	Please refer ANNEX –A
4.	Scheme of Inspection and Testing	:	Please refer ANNEX –B
5.	Possible tests in a day :		All tests
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 7454:1991 with the following scope:		
	Name of the product		Wheelchairs, Folding, Adult Size
	Type		Type 1/ Type 2

ANNEX A**List of Test Equipment***Major test equipment required to test as per the Indian Standard*

Sr. No.	Test Equipment	Tests Used with clause reference
1	Dial/digital vernier caliper Steel scale Weighing Scale Bevel protractor	Shape & Dimensions – Cl 5.1, Table 1
2	Load 100 kg	Test for wheeling- Cl 9.1
3	Load arrangement 100 kg Test platform with hazard having a vertical drop of 10mm Speedometer for measuring speed	Hazard running test- Cl 9.2
4	Load 100 kg	Load test- Cl 9.3
5	9° slope, Load 100 kg	Test for Stability- Cl 9.5

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

1.1The manufacturer shall prepare a calibration plan for the test equipments.

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

3. LABELLING AND MARKING – As per the requirements of IS 7454.

4. 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.

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

5 . 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

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Clause	Test Methods Reference		No. of Sample	Frequency	Remarks
6	Materials	6	IS 7454	S	One	Each consignment	No further testing is required, if accompanied with test certificate or ISI marked.
7	Requirements	5.1, 7, Table 1	IS 7454	R	Each Wheel chair		
8	Finish	8	IS 7454	R	Each Wheel chair		
9.1	Test for wheeling	9.1	IS 7454	R	Each Wheel chair		
9.2	Hazard running Test	9.2	IS 7454	R	One	Once in three months or every 500 chairs, whichever is earlier	
9.3	Load Test	9.3	IS 7454	R			
9.4	Test for folding	9.4	IS 7454	R	Each Wheel chair		
9.5	Stability Test	9.5	IS 7454	R	Each Wheel chair		

Note-1: 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 B.O. Head.