



**उत्पाद मैनुअल
आई एस 2556 (भाग 14):1995 के अनुसार
काँचाभ स्वच्छता साधित्र (काँचाभ चीनी मिट्टी): भाग 14 - समकालीन स्कैटिंग
अथानो की विशिष्ट अपेक्षाएँ के लिए**

दस्तावेज संख्या – पी एम/ आई एस 2556 (भाग 14)/1/फ़रवरी 23

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 VITREOUS SANITARY APPLIANCES
(VITREOUSCHINA): PART 14 - SPECIFIC REQUIREMENTS OF
INTEGRATED SQUATTING PANS ACCORDING TO IS 2556 (Pt 14):1995**

Document No.- PM/ IS 2556 (Pt 14)/1/Feb 23

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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PRODUCT MANUAL FOR VITREOUS SANITARY APPLIANCES (VITREOUSCHINA): PART 14 - SPECIFIC REQUIREMENTS OF INTEGRATED SQUATTING PANS ACCORDING TO IS 2556 (Pt 14):1995

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1.	Product	:	IS 2556 (part 14) : 1995
	Title	:	Vitreous Sanitary Appliances (Vitreous China): Part 14 - Specific Requirements of Integrated Squatting Pans
	No. of Amendments	:	1
2.	Sampling Guidelines:		
a)	Raw material	:	-
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	2 Nos for all tests
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 :		
	(i) Construction (Clause 6)	(v) Holding capacity test (Clause 8.4)	
	(ii) Dimensions and tolerance (Clause 5)	(vi) Ball test (Clause 8.5)	
	(iii) Finish (Clause 7)	(vii) Smudge test (Clause 8.3)	
	(iv) Toilet paper test (Clause 8.2)		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 2556 (part 14) : 1995 with the following scope:		
	Name of the product	Vitreous Sanitary Appliances (Vitreous China): Part 14 - Specific Requirements of Integrated Squatting Pans	
	Patterns and Size	Long pattern 500/ Any other Pattern agreed between manufacturer and purchaser	

ANNEX A

Grouping Guidelines

1. IS 2556 (part 14) : 1995 covers Vitreous Sanitary Appliances (Vitreous China): Part 14 - Specific Requirements of Integrated Squatting Pans which are categorized as detail given below:

Long pattern 500

(The squatting pans may also be made in other patterns and sizes where so agreed to between the manufacturer and the purchaser. However, except for the functional dimensions, all other requirements as laid down in this standard shall be complied with.)

2. Considering the above, following grouping guideline developed for GoL/ CSoL:
‘Each pattern and size shall be tested for all requirements to cover that particular pattern and size in the scope of the licence’.
3. The Firm shall declare the patterns of varieties they intend to cover in the Licence.
4. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
5. 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***Major test equipment required to test as per the Indian Standard*

S. No.	Tests used in with Clause Reference	Test Equipment
1	Material and manufacture- Water absorption [Clause 4 of IS 2556 (Part 1)] Water absorption [Clause 9.3 of IS 2556 (Part 1)]	- Hot air oven - Weighing balance - Pressure vessel - Hot plate - Distilled water - Smooth cloth
2	Lead content in glaze material [Clause 5.2 of IS 2556 (Part 1)]	- Weighing balance - Hot air oven - Hydrochloric acid - Shaker machine
3	Permissible blemishes or defects [Clause 6.4 of IS 2556 (Part 1)]	- Steel scale - Observation platform with requisite lighting arrangement as per clause 6.4 of IS 2556 (Part 1) : 1994
4	Minimum thickness [Clause 7 of IS 2556 (Part 1)]	- Micrometer / vernier calliper
5	Warpage [Clause 9.1 of IS 2556 (Part 1)]	- Filler gauges
6	Crazing [Clause 9.2 of IS 2556 (Part 1)]	- Autoclave vessel - Solution of dye - Wetting agent
7	Modulus of rupture [Clause 9.4 of IS 2556 (Part 1)]	- Modulus of rupture test arrangement as per clause 10.4.2 of IS 2556 (Part 1) : 1994
8	Chemical resistance [Clause 9.5 of IS 2556 (Part 1)]	- Chemicals such as Acetic acid, Citric acid, Detergent, Hydrochloric acid, Sodium hydroxide, Sodium stearate, Sulphuric acid - Desiccator
9	Resistance to staining and burning [Clause 9.6 of IS 2556 (Part 1)]	- Chemicals as per clause C-2.2 of IS 2556 (Part 1) : 1994 - Distilled water' - Cloth - Cigarette

10	Dimensions and tolerance [Clause 6 of IS 2556 (part 14)]	- Vernier calliper - Steel scale - Measuring tape - Angle protractor - Radius gauges
11	Toilet paper test [Clause 8.2 of IS 2556 (part 14)]	- Toilet paper or polyethylene sheet
12	Smudge test [Clause 8.3 of IS 2556 (part 14)]	- Quartz powder - IS sieve 1.18 mm
13	Holding capacity test [Clause 8.4 of IS 2556 (Part 2)]	- Measuring cane - Steel scale
14	Ball test [Clause 8.5 of IS 2556 (part 14)]	- Ball as per Clause 8.5 of IS 2556 (part 14)
18	General test requirement [Clause 8 of IS 2556 (part 14)]	- Arrangement for installation of squatting pan with trap and low level flushing cistern with all connections for conducting test

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

ANNEX C

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 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. LABELLING AND MARKING – As per the requirements of IS 2556 (part 14) : 1995

4. CONTROL UNIT – For the purpose of this Scheme, control unit shall be as defined in Table 1 for respective test.

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 Standard 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

(1)				(2)	(3)			
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control			
Cl.	Requirement	Test Methods			No. of Sample	Control Unit	Frequency	Remarks
		Clause	Reference					
3	Material and Manufacture	4	IS 2556 (Part 1)	S	One	Lot received	Once in three months or whenever there is change in source of material	
3	Glazing	5.1	IS 2556 (Part 1)	R	-	Every appliance	-	-
3	Lead content (in case of glaze containing lead)	5.2, Annex A	IS 2556 (Part 1)	R	One	One mix of glazing material	-	-
3	Permissible blemishes or defects	6.0	IS 2556 (Part 1)	-	-	Every appliance	-	-
3	Minimum thickness	7.0	IS 2556 (Part 1)	R	One	Each trolley load after firing	One sample for each type of appliances shall be tested	
3	Warpage	10.1	IS 2556 (Part 1)	R	-	Every appliance	-	-
3	Crazing*	10.2	IS 2556 (Part 1)	R	Three sample pieces	One day's production	Twice a week	In case of failure in any one of the requirements, the material representing that day's production shall not be marked with ISI mark and immediate corrective measures initiated. Marking shall be
3	Water absorption*	10.3	IS 2556 (Part 1)	R	Three sample pieces	One day's production	Daily	
3	Modulus of rupture*	10.4	IS 2556 (Part 1)	R	Ten sample bars	Eight sample pieces	Twice a week	

3	Test for chemical Resistance*	9.5, Annex B	IS 2556 (Part 1)	R	Three sample pieces	-do-	Once a week	resumed only when tests carried out on further sample for that requirement are found satisfactory.
3	Test for resistance to staining and burning*	9.6, Annex C	IS 2556 (Part 1)	R	Two sample pieces	Once a week	-	
6	Construction	6	IS 2556(Part 14)	R	-	Every appliance	-	@
5	Dimensions and tolerances	5	IS 2556(Part 14)	R	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity			
7	Finish	7	IS 2556(Part 14)	R	-	Every appliances	-	@@
8.2	Toilet paper test,	8.2	IS 2556(Part 14)	R	5	100 squatting pans or less of same pattern and size produced in a day	-	#
8.3	Smudge test,	8.3						
8.4	Holding capacity test	8.4						
8.5	Ball test	8.5						

* For crazing, water absorption, test for chemical resistance, modulus of rupture and test for resistance to staining and burning, test pieces may be separately made using the same body and glazed materials as used in the making of appliance and put through the kiln along with the same appliance.

@ Each appliance shall be accurately moulded in accordance with the pattern or working drawings. After moulding operation 100 per cent inspection of the individual appliance shall be carried out. If any cast specimen is found defective in any way on visual inspection shall be repaired or scrapped.

@@ Every appliance shall be checked for finish and those found not conforming shall be rejected.

FLUSHING TEST TESTS – Five out of every 100 appliances or part thereof of same pattern produced in a day shall be selected and checked for these tests. In case any appliance fails, all the appliances shall be checked and those found failing shall be rejected.

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 BO Head.