



**PRODUCT MANUAL FOR
METAL GAUGE (LENGTH GAUGE, THICKNESS
GAUGE), WIRE BASKET, PYCNOMETER AND
CYLINDRICAL METAL MEASURE
ACCORDING TO IS 2386 (PART I AND PART III): 1963**

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 2386(Part I and Part III): 1963
	Title	:	Methods of Test for Aggregates for Concrete – Part I - Particle Size and Shape Part III – Specific Gravity, Density, Voids, Absorption and Bulking
	No. of Amendments	:	4 Amendments – IS 2386 (Part 1) : 1963 1 Amendment – IS 2386 (Part 3) : 1963
2.	Sampling Guidelines:		
a)	Raw material	:	Not Applicable
b)	Grouping guidelines	:	Metal Gauge (Length Gauge and Thickness Gauge) as per Cl 4.2(b) and Cl 5.2 (b) respectively of IS 2386 (Part 1) and, Cylindrical Metal Measure as per Cl 3.2 (b), Wire basket as per Cl 2.2.1 (c) and Pycnometer as per Cl 2.4.1 (c) (1) of IS 2386 (Part 3) are under certification at present. Sample of each variety shall be tested separately for all requirements to cover that variety in the scope of licence.
c)	Sample Size	:	1 No
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 :	:	Please refer ANNEX – C

BUREAU OF INDIAN STANDARDS
Manak Bhawan, 9, Bahadur Shah Zafar
Marg, New Delhi – 110002

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.	Dimension of gauges [Clause 4.2 (b) of IS 2386 (Part I) : 1963], [Clause 5.2(b) of IS 2386 (Part I) : 1963] and [Clause 3.2(b) of IS 2386 (Part III) : 1963]	- Vernier Caliper - Micrometer
2.	Calibration of cylindrical measure [Clause 3.3 of IS 2386 (Part III) : 1963]	- Weighing balance - 1 Liter measuring jar - Arrangement to maintain temperature of 27 ° C
3.	Wire Basket [Clause 2.2.1 (c) of IS 2386 Part III: 1963]	- Vernier Calipers - Micrometer - Go/No gauges
4.	Pycnometer [Clause 2.4.1 (c) (1) of IS 2386 Part III: 1963]	- Vernier caliper - Digital Balance or Calibrated Jar/ Cylinder - Washing bottle - Go/No gauges

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.

1.1 The 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 – The following markings shall be stamped on each equipment:

- a) Manufacturers name or Trademark
- b) Name of equipment
- c) Reference to clause number and IS number
- d) Batch number or identification code for traceability.
- e) BIS Standard Mark

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	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
3.2	Dimension of gauges	4.2 (b)	IS 2386 (Part I)	R	Each equipment	-	-
		5.2 (b)	IS 2386 (Part I)				
		3.2 (b)	IS 2386 (Part III)				
3.3	Calibration of cylindrical measure	3.3	IS 2386 (Part III)	R	Each equipment	-	-
2.2.1 (c)	Wire Basket requirements	2.2.1 (c)	IS 2386 (Part III)	R	Each equipment	-	-
2.4.1 (c) (1)	Pycnometer requirements	2.4.1 (c) (1)	IS 2386 (Part III)	R	Each equipment	-	-

Note-1: The control unit and levels of control as decided by the Bureau are obligatory, to which the licensee shall comply with.

ANNEX – C**SCOPE OF THE LICENCE**

“Licence is granted to use Standard Mark as per the following scope:	
Indian Standard with clause (As applicable)	• Clause 4.2 (b) of IS 2386 (Part I) : 1963 • Clause 5.2 (b) of IS 2386 (Part I) : 1963 • Clause 3.2 (b) of IS 2386 (Part III) : 1963 • Clause 2.2.1 (c) of IS 2386 (Part III): 1963 • Clause 2.4.1 (c) (1) of IS 2386 (Part III) : 1963
Name of the product (As applicable)	• Length Gauge • Thickness Gauge • Cylindrical Metal Measure • Wire Basket • Pycnometer
Capacity (where applicable)	