



**PRODUCT MANUAL FOR
DRUMS LARGE, FIXED ENDS, GRADE 'A' DRUMS
ACCORDING TO IS 1783 (Part 1): 2014**

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 1783(Part 1): 2014
	Title	:	DRUMS LARGE, FIXED ENDS, GRADE 'A' DRUMS
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	Cold reduced carbon steel sheet Grade CR1,CR2 or CR 3 of IS 513 (Part 1) :2016
b)	Grouping guidelines	:	Each Type of construction (Type 1 and Type 2) is to be tested for GOL and Inclusion.
c)	Sample Size	:	2 drums and 5 closures
3.	List of Test Equipment	:	Please refer ANNEX – A.
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – B.
5.	Requirements which can be tested in a day :		
	(i) Capacity (<i>clause 4</i>) (ii) Dimensions (<i>clause 5</i>) (iii)Construction (<i>clause 7</i>) (iv)Finish (<i>clause 8</i>) (v) Leakage Test, Drop Test, Hydraulic Pressure Test (<i>clause 9</i>)		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 1783 (Part 1): 2014 with the following scope:		
	Name of the product	Drums Large, Fixed ends, Grade 'A' Drums	
	Type	Type 1/ Type 2	

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ANNEX - A**List of Test Equipments**

Major test equipment essentially required to test as per the Indian Standard

Sl. No.	Tests used in with Clause Reference	Test Equipment
1.	Capacity as per <i>clause 4</i>	a) Platform Balance b) Depth Gauge c) Flow meter
2.	Dimensions as per <i>clause 5</i>	a) Vernier calliper b) Depth gauge c) Steel measuring tape/steel scale d) External micrometer
3.	Leakage Test as per <i>clause 9.1</i>	a) Arrangement for pressurizing the drum b) Pressure Gauge c) Stopwatch d) Soap solution e) Water Tank
4.	Drop Test as per <i>clause 9.2</i>	a) Concrete Floor or Steel Plate at least 40 mm thick b) Arrangement for suspending the drum
5.	Hydraulic Pressure Test as per <i>clause 9.3</i>	a) Arrangement for pressurizing the drum b) Pressure Gauge c) Stopwatch

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 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 1783 (Part 1): 2014.

4. CONTROL UNIT – All drums manufactured in a day, from coil of same heat shall be constitute a control unit.

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) Test Details			(2) Test equipment requirement	(3) Levels of Control			
Cl.	Requirement	Test Methods		R: required (or) S: Sub-contracting permitted	No. of Sample	Frequency	Remarks
		Clause	Reference				
4	Capacity	4	IS 1783 (Part 1)	R	One	Every 5000 drums	
5	Dimensions	5	IS 1783 (Part 1)	R	Two	Every 100 drums	If any sample fails all drums shall be checked and those found non- conforming shall not be marked.
6	Material	6	IS 1783 (Part 1)	S	Five	Each Consignment	#
7	Construction	7.1 to 7.5	IS 1783 (Part 1)	R	Each drum		
	Closures	7.6	IS 1784	Please See Annex-C			#
8	Finish	8	IS 1783 (Part 1)	R	Each drum		
9.1	Leakage Test	9.1	IS 1783 (Part 1)	R	Each drum		
9.2	Drop Test	9.2	IS 1783 (Part 1)	R	One	Every 2000 drums	For Grade A, Type 1 drums, Air leakage test as per <i>clause 9.1</i> shall also be conducted after Drop Test
9.3	Hydraulic Pressure Test	9.3	IS 1783 (Part 1)	R	One	Every 2000 drums	

ANNEX - C

(1)				(2)	(3)		
Test Details				Test equipment requirement	Levels of Control		
Clause	Requirement	Test Methods		R: required (or) S: Sub-contracting permitted	No. of Sample	Frequency	Remarks
		Clause	Reference				
4	Materials	4	IS 1784	S	-	Each Consignment	#
5	Manufacture	5	IS 1784	R	Each closure		
6	Dimensions and Tolerances	6	IS 1784	R	Each closure		'GO' 'NO-GO' gauge may be used
7	Finish	7	IS 1784	R	Each closure		
8	TESTS						
8.1	Interchangeability	8.1	IS 1784	R	Five	Each lot of 1000 pieces or part thereof	
8.2	Air Pressure Test	8.2	IS 1784	R	Five		
8.3	Torque Test for Steel Bungs	8.3	IS 1784	R	One		
8.4	Curling Test for Flanges	8.4	IS 1784	R	One		

No further testing is required, if accompanied with the Test Certificate or ISI Marked.

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.