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*भारतीय मानक मसौदा*

**बिटुमेन ड्रम — विशिष्टि**  
(IS 3575 का चौथा पुनरीक्षण)

*Draft Indian Standard*

**Bitumen Drums — Specification**

*(Fourth Revision of IS 3575)*

ICS 55.140

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Metal Containers Sectional Committee, PGD 38    Last Date for Comments: **31 July 2024**

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Metal Containers Sectional Committee, PGD 38

**FOREWORD**

*(Formal clauses will be added later.)*

Bitumen drums are containers used to pack and transport bitumen, a type of petroleum-based product primarily used for road construction and water-proofing applications.

This standard was first published in 1977 and revised in 1989 and 1993. In this revision, following changes have been made:

- a) References have been updated.
- b) Amendments have been incorporated.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## **BITUMEN DRUMS — SPECIFICATION**

*(Fourth Revision)*

### **1 SCOPE**

This standard specifies the requirements of steel drums, with fixed ends of nominal capacities 160 l and 200 l, used for packing of bitumen having penetration value 225 and below.

### **2 REFERENCES**

The standards listed below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below:

<i>IS No.</i>	<i>Title</i>
IS 513 (Part 1) : 2016	Cold reduced carbon steel sheet and strip: Part 1 Cold forming and drawing purpose ( <i>sixth revision</i> )
IS 1079 : 2017	Hot rolled carbon steel sheet, plate and strip — Specification ( <i>seventh revision</i> )
IS 1394 : 1984	Glossary of terms relating to metal containers ( <i>third revision</i> )
IS 1993 : 2018/ ISO 11949 : 2016	Cold-reduced tinmill products — Electrolytic tinplate ( <i>fifth revision</i> )
2471 : 1963	Methods of test for metal containers
3259 : 1966	Methods of sampling of metal containers

### **3 TERMINOLOGY**

For the purpose of this standard, the definitions given in IS 1394 shall apply.

### **4 DIMENSIONS**

#### **4.1 Drums**

The drums shall be manufactured in two sizes conforming to the dimensions shown in Fig. 1.

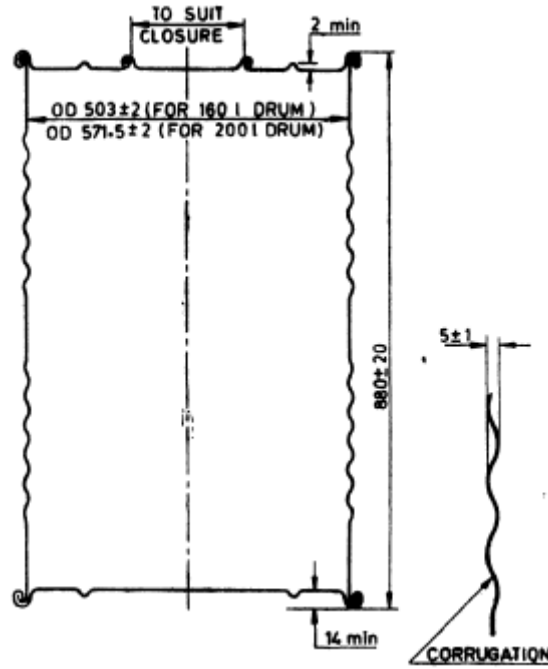
#### **4.2 Closure**

The closure shall have dimensions as shown Fig. 2.

### **5 MATERIAL**

#### **5.1 Body and Ends**

The body and ends of the drums shall be made from steel sheets of nominal thickness 0.63 mm conforming to IS 513 (Part 1) or IS 1079.



All dimensions are in millimeters.

FIG. 1 DIMENSIONS FOR BITUMEN DRUM

## 5.2 Closures

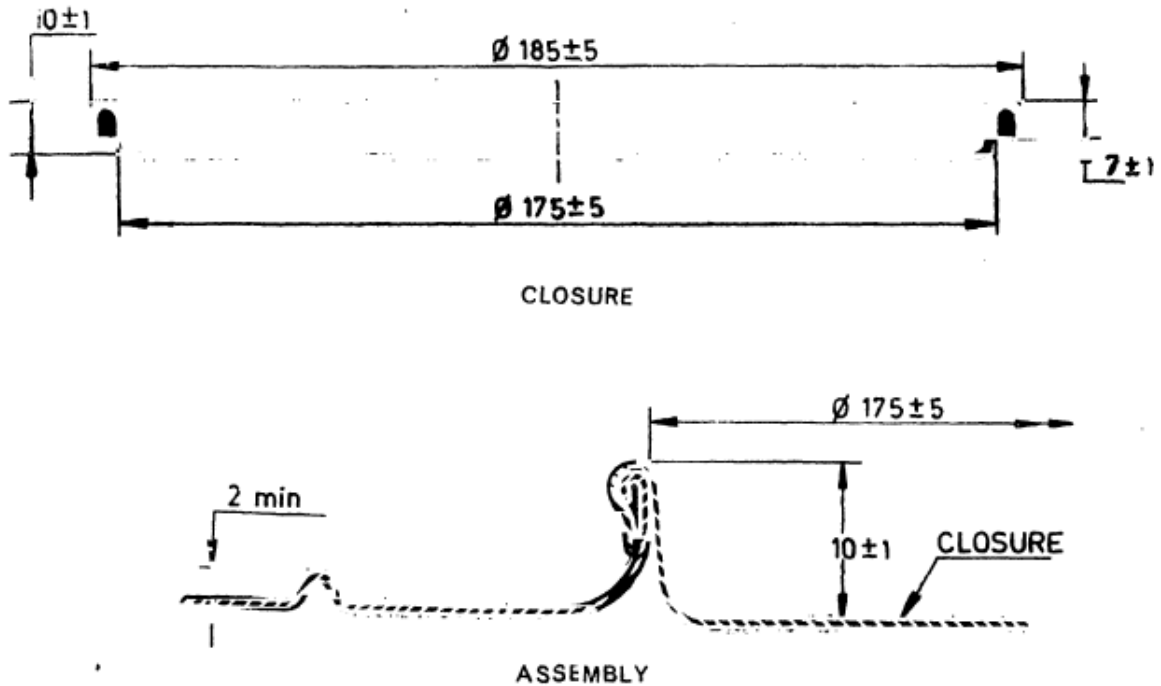
The closures shall be made from steel sheets of nominal thickness 0.30 mm conforming to IS 513 (Part 1) or tinsplate conforming to IS 1993 for crimping.

## 6 CONSTRUCTION

**6.1** The sheets after blanking, or trimming, or both shall be free from cracks, dents, pittings, rush and other defects.

**6.2** The body side seam shall be continuously resistance welded. The top and bottom end in seams shall be double seamed with five fold chimes or spiral seams. A suitable sealing compound may be used.

**6.3** The body shall be strengthened by 12 corrugations which shall be symmetrical to the centre line as shown in Fig. 1. The depth of corrugation shall be measured from the top of their crest to the root of their trough.



All dimensions are in millimeters.

FIG. 2 CLOSURE AT CENTRE

6.4 The bottom and top ends may have strengthening corrugations.

### 6.5 Closure

The drums shall be provided with an aperture at the centre to suit the closure. Closure shall be crimped on to the central aperture of the drums by the purchaser. The assembly details for closure are shown in Fig. 2. The closure diameter shall be so, as to fit on the drum aperture in snug fitting position.

## 7 FINISH

7.1 The drums shall be new, thoroughly clean and free from rust, loose scales, moisture and other foreign matter.

7.2 The outside surface of the drums may be painted or left unpainted as agreed to between the purchaser and the supplier.

## 8 AIR PRESSURE TEST

8.1 Each drum shall be subjected to the air pressure test according to the provisions of IS 2471. The drum shall not show any sign of leakage when subjected to an internal air pressure of 20 kPa (0.2 kgf/cm<sup>2</sup>) for a minimum period of 5 s.

8.2 If there is a minor leakage found during leakage test it may be manually welded and the drum shall be retested for leakage test. If the leakage is found again, the drum shall be rejected.

## **9 SAMPLING**

Representative samples of the drums for tests regarding dimension, capacity, construction, finish shall be drawn according to the provisions of IS 3259.

## **10 MARKING**

**10.1** The drums shall be marked indelibly with the following particulars:

- a) Indicating the source of the manufacturer,
- b) Year of manufacture, and
- c) Any other marking as agreed to between the purchaser and the supplier.

The marking may be done by embossing on the drum ends or closure or by lithography on the closures or by painting on the drum or by any other agreed method.

### **10.2 BIS Certification Marking**

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed there under, and the product(s) may be marked with the Standard Mark.