

**BUREAU OF INDIAN STANDARDS**

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भारतीय मानक मसौदा  
ईएनटी सर्जरी के लिए  
फ़्लूटेड/मिल्ड हैंडल के साथ मैलेट – विशिष्टि  
*(IS 5723: 1970 का पहला पुनरीक्षण)*

*Draft Indian Standard*

**Mallet with Fluted/Milled Handle  
for Ent Surgery – Specification**

*(First Revision of IS 5723: 1970)*

ICS 11.040.30

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Ear, Nose and Throat Surgery Instruments  
Sectional Committee, MHD 04

Last date for comments: 30 November, 2023

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**FOREWORD**

*(Formal clauses will be added later)*

This standard was originally published in 1970. The first revision of this standard has been brought out to align it with the recent developments and to bring the standard in line with the latest style and format of Indian Standards. The grade designation of stainless steel 316 has also been included. This revision incorporates all the amendments issued till date.

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 same as that of the specified value in this standard.

## 1 SCOPE

This standard specifies requirements for Mallet used in ENT surgery.

## 2 REFERENCES

The standards given 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 these standards.

<i>IS No.</i>	<i>Title</i>
IS 1501 (Part 1): 2020/ ISO 6507-1: 2018	Metallic materials – Vickers hardness test Part 1 Test method
IS 3642 (Part 1): 1990	Surgical instruments – Specification Part 1 Non-cutting, articulated instruments ( <i>second revision</i> )
IS 4218 (Part 3): 1999/ ISO 724: 1993	ISO general purpose metric screw threads Part 3 Basic dimensions ( <i>second revision</i> )
IS 6911: 2017	Stainless steel plate, sheet and strip — Specification ( <i>second revision</i> )
IS 7531: 1990	Surgical instruments – Corrosion resistance of stainless steel surgical instruments – Methods of tests ( <i>first revision</i> )

## 3 MATERIAL

The material for mallet shall be stainless steel of Grade X 04Cr17Ni12Mo2 (Alloy 316) as per IS 6911.

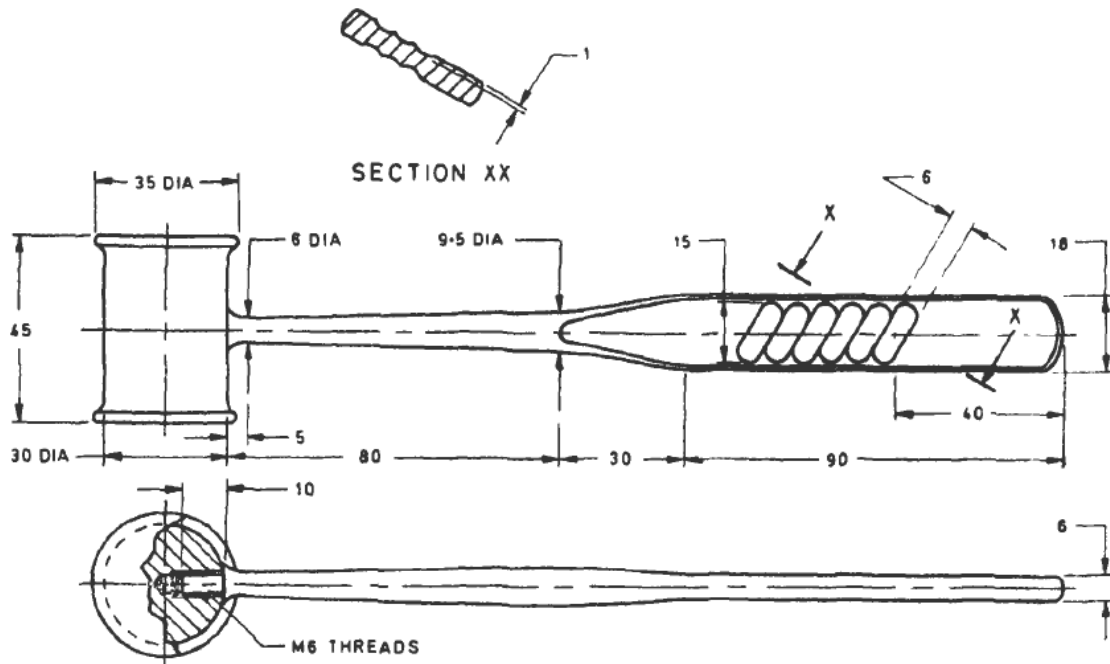
## 4 SHAPE AND DIMENSIONS

**4.1** The shape and dimensions of mallet shall be as shown in Fig. 1.

**4.2** The shape and dimensions of mallet with milled handle shall be the same as that specified in 4.1. However, the handle may be milled instead of fluted in that case.

**4.3** Tolerances shall be as per **4.2** of IS 3642 (Part 1).

**4.4** M6 threads shall be as per IS 4218 (Part 3).



Weight of mallet  $250 \pm 20$  g

All dimensions in millimetres

FIG. 1 MALLET WITH FLUTED HANDLE

## 5 WORKMANSHIP AND FINISH

- 5.1 All surfaces shall be smooth and the edges shall be even and rounded.
- 5.2 The handle shall be screwed securely into the head.
- 5.3 The mallet shall be passivated and finished dull.

## 6 HEAT TREATMENT

The mallet shall be hardened and tempered to 450 to 550 *HV*. The hardness shall be tested in accordance with IS 1501 (Part 1).

## 7 TESTS

### 7.1 Performance Test

Drive a 25 mm long flat-head wire nail into a piece of hard wood about 25 mm thick. The mallet head shall not become loose and the mallet shall not show any sign of damage.

### 7.2 Corrosion Resistance Test

The instrument shall satisfy the requirements of test for corrosion resistance as specified in 5 and 6 of IS 7531.

## 8 MARKING

**8.1** Each mallet shall be marked with the following:

- a. Manufacturer's name, initials or registered trade-mark;
- b. The weight of the mallet; and
- c. The words 'Stainless Steel' and grade.

**8.2 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 thereunder, and the product(s) may be marked with the Standard Mark.

**9 PACKING**

The packing shall be as agreed to between the purchaser and the supplier.