

**BUREAU OF INDIAN STANDARDS**

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भारतीय मानक मसौदा  
**स्नेयर, टॉन्सिल, ईव्स पैटर्न के लिए विशिष्टि**  
*(IS 7710 का पहला पुनरीक्षण)*

*Draft Indian Standard*  
**Specification for Snare, Tonsil, Eves Pattern**  
*(First Revision of IS 7710)*

[ICS 11.040.30]

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Ear, Nose ,Throat, Head & Neck Surgery  
Instruments Sectional Committee, MHD 04

Last date for comments: **4 Aug 2024**

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FOREWORD

*(Formal clause will be added later)*

This standard was originally published in 1975. The First revision of this standard has been brought out to align it with updated references, test methods and to bring the standard in line with the latest format of Indian Standards.

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.

*Indian Standard*  
Specification For Snare, Tonsil, Eves Pattern

**1 SCOPE**

Dimensional and other requirements for Eve's pattern tonsil snare used in E.N.T 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 4170 : 1967	Specification for brass rods for general engineering purposes
IS 6603 : 2024	Stainless Steel Semi-Finished Products, Bars, Wire Rods and Bright Bars — Specification ( <i>second revision</i> )
IS 1570 (Part 5) : 1985	Schedules for wrought steels: Part 5 stainless and heat — Resisting steels ( <i>second revision</i> )
IS 6528: 1995	Stainless steel wire — Specification ( <i>first revision</i> )
IS 1068 : 1993	Electroplated coatings of nickel plus chromium and copper plus nickel plus chromium — Specification ( <i>third revision</i> )
IS 7531 : 1990	Surgical instruments— corrosion resistance of stainless-steel surgical instruments — methods of tests ( <i>first revision</i> )
IS 1070 : 2023	Reagent Grade Water — Specification ( <i>fourth revision</i> )

**3 SHAPE AND DIMENSIONS**

As shown in Fig.1.

**3.1** A deviation of  $\pm 2.5$  percent shall be allowed on all dimensions.

**4 MATERIAL**

**4.1** All the metallic components except the plunger and wire shall be manufactured from bras; conforming to Designation CuZn40 of Table 1 of IS: 4170 or stainless steel conforming to Designation 04Cr18Ni10 or 07Cr18Ni9 of Table 5 of IS: 1570 (Part V).

**4.2** The plunger shall be manufactured from stainless steel conforming to Designation 80Cr13 of IS: 6603.

**4.3** The wire shall be of suitable hard drawn stainless steel conforming to Designation 07Cr18Ni9 or 04Cr18Ni10 of Table 8 of IS: 6528.

## **5 WORKMANSHIP AND FINISH**

**5.1** The snare shall be finished smooth and free from burrs, pits cracks and surface flaws.

**5.2** The loop of the thumb shall be removable so that the sliding component may be withdrawn to replace the wire.

**5.3** The sliding shall be smooth and without jerk.

**5.4** The finger loops shall be smooth and properly rounded.

**5.5** The wire shall be of uniform diameter and shall be free from kinks, rust and other defects.

**5.6** The stainless steel parts shall be brightly polished and passivated.

**5.7** The brazing or silver soldering shall be neat and sound.

**5.8** The tube shall be force fit or screwed to the body and brazed or silver soldered.

**5.9** All components except the wire and plunger if made of brass shall be plated chromium over nickel conforming to Service Grade 2 of IS: 4827.

**5.10** The hardness of the plunger shall be 410 to 470 *HV*.

## **6. TEST**

### **6.1 Corrosion Resistance**

The instrument shall satisfy the boiling and autoclaving test as mentioned in IS: 7531.

**6.2** Subject to agreement between the purchaser and the supplier the instrument may be put to the following test:

### **6.3 Copper Sulphate Test**

Scrub the sample with soap and warm water, rinse in hot water and then dip in 95 percent ethyl alcohol. Dry the sample. Immerse in copper sulphate solution at room temperature for 6 min and wash off with fresh water or wet cotton wool. Composition of the solution shall be as follows:

Copper sulphate ( $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ )	4.0g
Sulphuric acid ( $\text{H}_2\text{SO}_4$ ) ( sp gr 1.84)	10.0 g

Distilled water [see IS : 1070

90.0 ml

No red stains or spots on the sample shall be allowed but dulling of the polished surface may be permitted.

## **7. MARKING**

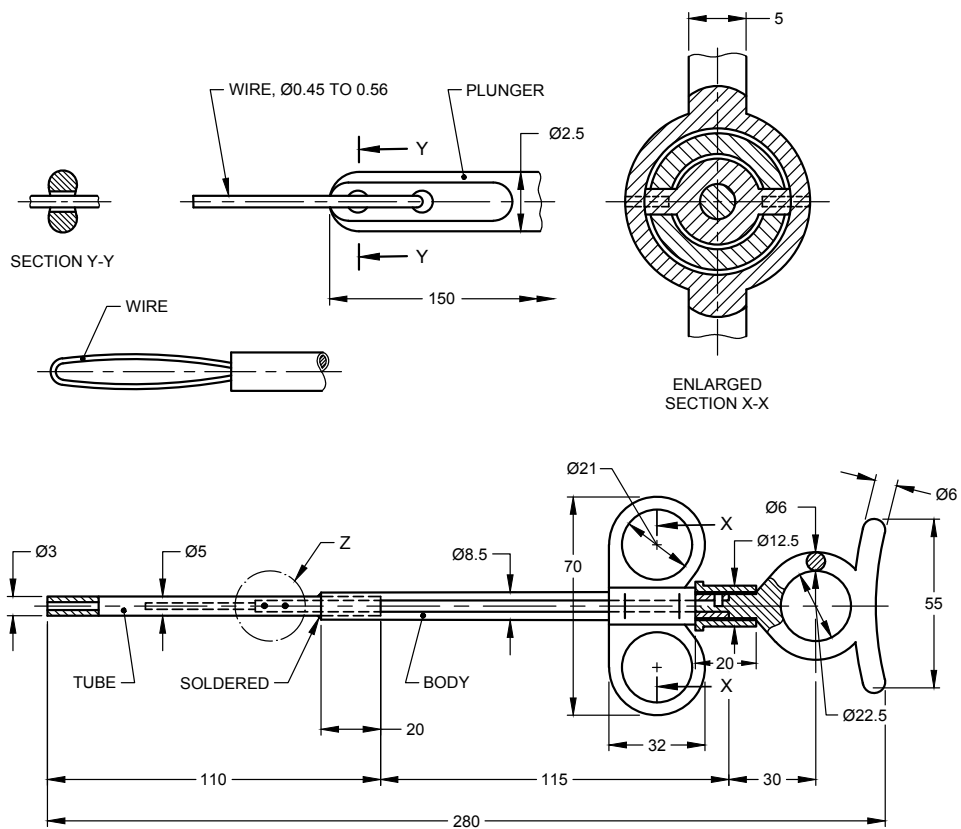
The snare shall be clearly and indelibly marked with the manufacturer's name, initials, recognized trade-mark, serial number, batch number and lot number.

### **7.2 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.

## **8. PACKING**

The wire for the snare shall be coated with a thin film of non-corrosive mineral oil. The snare shall be wrapped in moisture proof paper and packed in cardboard cartons. The instrument may also be packed as agreed to between the purchaser and the supplier.



All dimensions in millimetres.

FIG. 1 SNARE, TONSIL, EVE'S PATTERN