

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

(Not to be reproduced without permission of BIS or used as an Indian Standard)

भारतीय मानक मसौदा

**ईएनटी सर्जरी उपकरण - ट्रेकियोस्टोमी ट्यूब, शेवेलियर जैक सन्स
पैटर्न - विशिष्ट**

(First Revision of IS 13179)

Draft Indian Standard

**Ent Surgery Instruments -Tracheostomy Tubes, Chevaliar Jack
Son's Pattern-- Specification**

(First Revision of IS 13179)

[ICS 11.040.30]

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

Last date for comments: **25 July, 2024**

FOREWORD

(Formal clause will be added later)

This standard was originally published in 1991. The First revision of this standard has been brought out to align it with recent developments and to bring the standard in line with the latest style and 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

ENT SURGERY INSTRUMENTS -TRACHEOSTOMY TUBES, CHEVALIAR JACK SON'S PATTERN-- SPECIFICATION

1 SCOPE

This standard covers dimensional and other requirements for Chevaliar Jackson's pattern, tracheostomy tubes 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 1067 : 1981	Specification For Electroplated Coatings of Silver for Decorative and Protective Purposes (<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 2112 : 2014	Silver and Silver Alloys, Jewellery/Artefacts - Fineness and Marking - Specification (<i>Third Revision</i>)

3 SHAPE AND DIMENSIONS

The shape and dimensions of tracheostomy tubes shall be as shown in Fig. 1.

3.1 Tolerances

Tolerances on various dimensions shall be as follows:

- a) ± 0.1 mm for dimensions up to 10.0 mm,
- b) ± 0.5 mm for dimensions above 10.0 mm and up to 50.0 mm, and
- c) ± 1.0 mm for dimensions above 50.0 mm.

4 MATERIAL

4.1 Tubes of 1.0 mm thickness shall be made of silver alloy (92 percent Ag, 8 percent Cu) conforming to IS 2112. The tubes may also be made of German silver (52-80 percent Cu, 10-35 percent Zn, 5-35 percent Ni) or silver coated. Alternatively, stainless steel conforming to Designation 30Cr13 of IS 1570 (Part 5) may be used.

4.2 The thickness of silver coating in case of silver coated tubes shall conform to Grade 6 of IS 106s

5 REQUIREMENTS

5.1 The external surfaces shall be smooth, free from flaws or surface irregularities and shall be polished bright.

5.2 The soldered surfaces shall be finished smooth.

5.3 All edges shall be rounded and finished smooth.

5.4 The inner tube shall fit snugly and smoothly in the outer tube.

5.5 The inner tube shall project out of the outer tube by about 2 mm.

6 Marking

The tubes shall be marked with the following:

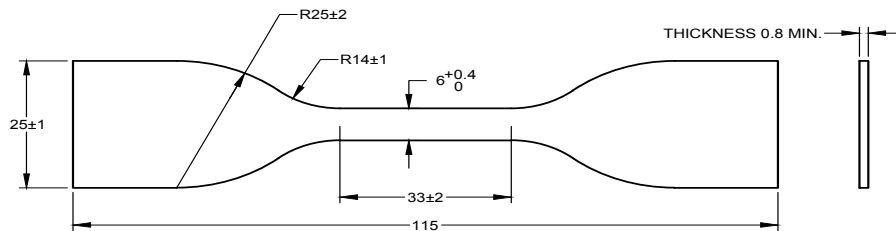
- a) Indication of the source of manufacture, and
- b) The size of the tube on the flange.

7 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 tubes shall be packed suitably in cardboard cartons. The tubes may also be packed as agreed to between the purchaser and the supplier.



All dimensions in millimetres.

FIG. 1 DIMENSIONS OF DUMB-BELL TEST PIECE

Size	Diameter of the Outer Tube A	Length (L)			Radius of Curvature
		Long	Regular	Short	
0	4	45	-	-	36.5
1	5	50	-	-	36.5
2	6	55	50	45	36.5
3	7	60	55	50	36.5
4	8	65	60	55	36.5
5	9	70	65	60	39.0
6	10	75	70	65	40.5
7	11	80	75	70	41.5
8	12	85	80	75	43.0
9	13	90	85	80	47.5