

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा
एंडोट्रेकिअल ट्यूब लगाने के लिए मागिल्स पैटर्न वाले संदंश के लिए
विशिष्टि

(IS 8312 का पहला पुनरीक्षण)

Draft Indian Standard

Specification for Forceps of Magill's Pattern to place
Endotracheal Tube

(First Revision of IS 8312)

ICS 11.040.10

Anaesthetic, Resuscitation and Allied Equipment
Sectional Committee, MHD 11

Last date for comments:
04 October 2024

FOREWORD

(Formal clauses will be added later)

This standard was first published in 1977 and amendment 1 published in 2016. The first revision of this standard has been brought out to align the cross references to the latest standards to incorporate the updated designation of steel and the currently used methods of performance and corrosion resistance.

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 Indian standard specifies the dimensional and other requirements for Magill’s pattern, endotracheal tube introducing forceps.

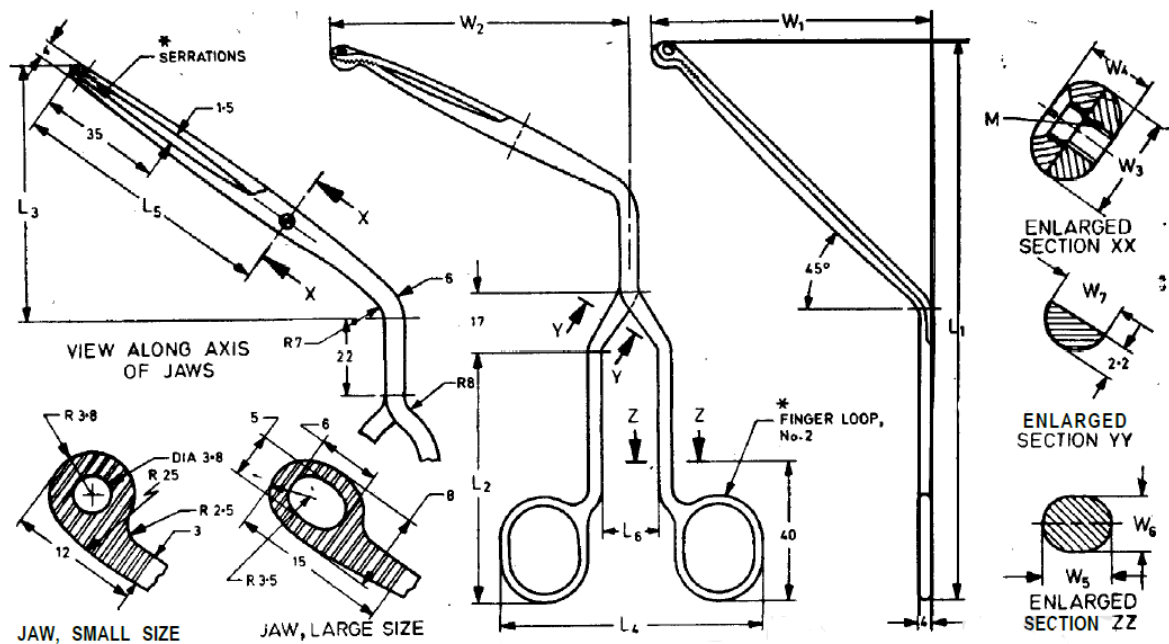
2 REFERENCES

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.

IS No.	Title
IS 3642 (Part 1): 1990	Surgical instruments - Specification: Part 1 non - Cutting, articulated instruments (Second Revision)
IS 6603 : 2024	Stainless Steel Semi-Finished Products, Bars, Wire Rods and Bright Bars — Specification (Second Revision)
IS 7531 : 1990	Surgical Instruments - Corrosion Resistance of Stainless Steel Surgical Instruments - Methods of Tests (First Revision)

3 SHAPE AND DIMENSIONS

As shown in Fig. 1.



	L_1	L_2	L_3	L_4	L_5	L_6	W_1	W_a	W_3	W_4	W_5	W_6	W_7	M
Small	160	72	72	75	75	16	80	85	7.5	5.0	4.0	3.3	4.5	2.5

Large	190	80	90	85	95	19	88	95	8.2	5.5	5.5	4.5	5.0	3.0
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*See IS 3642 (Part 1)

All dimensions in millimeters.

FIG. 1 FORCEPS, INTRODUCING, ENDOTRACHEAL TUBE, MAGILL'S PATTERN

4 MATERIAL

Stainless steel bars conforming to Designation 20Cr13 or 30Cr13 of IS 6603.

5 WORKMANSHIP AND FINISH

5.1 forceps shall be free from rough edges, pits, cracks, burrs, seams and other surface defects.

5.2 All edges shall be smooth and even.

5.3 The serrations shall be well formed and clean.

5.4 The joints shall work smoothly and shall not have any undue play.

5.5 The forceps shall satisfy the requirements given in Section 2 of IS 3642 (Part 1).

5.6 The forceps shall be polished bright and passivated.

6 HEAT TREATMENT

The forceps shall be hardened and tempered to give a hardness of 430 to 490 HV.

7 TESTS

7.1 Flexibility Test

Hold a piece of wood of approximately 30 mm cube size in between the two jaws of the forceps. Apply maximum manual force at the end of the finger loops so as to press it fully. After the test, the forceps shall not be damaged.

7.1.1 Hold one arm of the forceps in a suitable vice on the side of finger loops in such a way that a length of 100 mm in case of bigger size and 75 mm in case of smaller size from the jaws protrudes outside the vice. Apply a force at right angles to the plane of the jaws so that the jaws deflect by 5 mm. The same test to be repeated on the other arm also. After completion of the test, no permanent set shall be observed.

7.2 Corrosion Resistance Test

The forceps in accordance with IS 7531, The forceps shall show no sign of corrosion after test.

8 MARKING

8.1 The forceps shall be marked with the manufacturer's name, initials or recognized trade-

mark.

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 there under, and the product(s) may be marked with the Standard Mark.

9 PACKING

As agreed to between the purchaser and the manufacturer.