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भारतीय मानक मसौदा
ईएनटी सर्जरी उपकरण – सिर दर्पण- विशिष्टि
(First Revision of IS 13169)

Draft Indian Standard
ENT Surgery Instruments – Head Mirror-Specification
(First Revision of IS 13169)

[ICS 11.040.30]

Ear, Nose ,Throat, Head & 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 - HEAD
MIRROR-SPECIFICATION

1 SCOPE

This standard specifies requirements for head mirror used in ENT surgery for diagnostic purposes.

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 6603 : 2024	Stainless Steel Semi-Finished Products, Bars, Wire Rods and Bright Bars — Specification (<i>Second Revision</i>)
IS 6911 : 2017	Stainless Steel Plate, Sheet and Strip — Specification (<i>Second Revision</i>)
IS 7011 : 1973	Specification for back - Silvered mirrors used in instrument industry
IS 8916 : 1978	Specification for spherometbr
IS 10951 : 2020	Specification for Polypropylene (PP) Materials for Moulding and Extrusion (<i>Second Revision</i>)

3 TERMINOLOGY

3.1 Mirror Head

The assembly of concave mirror held in plastic sing with headband.

3.2 Reflecting Surface

A layer, usually metallic applied to the mirror for the purpose of reflecting light.

4 SHAPE AND DIMENSIONS

4.1 The shape and dimensions of the head mirror shall be as shown in Fig. 1.

4.1.1 Tolerances

The following tolerances on various dimensions shall be allowed:

a) ± 0.1 mm on dimensions up to 5.0 mm;

- b) ± 0.2 mm on dimensions above 5.0 mm and up to 10.0mm;
- c) ± 1.0 mm on dimensions and up to 50.0 mm; and
- d) ± 2.0 mm on dimensions and up to 100.0 mm.

5 REQUIREMENTS

5.1 Mirror

5.1.1 Construction

It shall comprise of a concave mirror with a reflecting surface conforming to IS 7011. The mirror shall be held in a metallic casing. If any packing is contained within the casing, it shall be of non-absorbent material.

5.1.2 Casing

It shall be made of light metal. The formed edge of the casing shall be below the level of the viewing surface of the glass and shall be free from irregularities, sharp edges and burrs. The casing shall be watertight.

5.1.3 Focal length

The focal length of the mirror: shall be 250 mm. The measurement shall be done with a spherometer conforming to IS 8916.

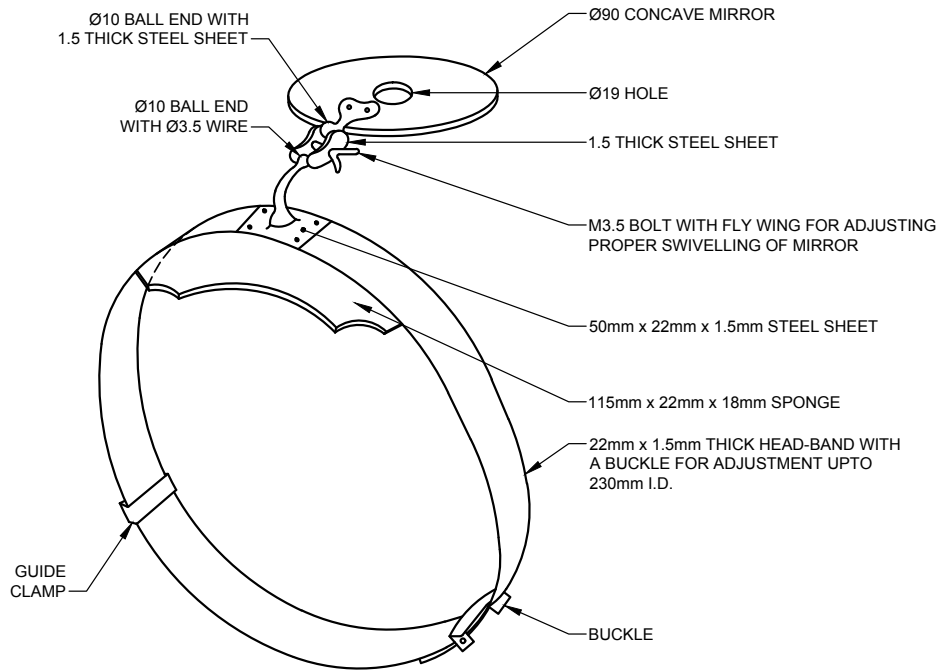
5.2 All the metal parts like ball end, bolt, sheet, guide clamp and buckle shall be made of stainless steel conforming to the Designation 30Cr13 of IS 6603. or IS 6911.

5.3 All edges shall be rounded off.

5.4 All the surfaces shall be free from imperfections and metal parts shall be polished bright and passivated.

5.5 Head Band

It shall be made of polypropylene conforming to IS 10951. with stainless steel buckle and guide clump for adjustments. A piece of sponge rubber as shown in Fig. I. shall be affixed to the headband.



All dimensions in millimetres.

FIG. 1 HEAD MIRROR, TYPICAL

6 MARKING

The instrument shall be marked with the indication of the source of manufacture and country of manufacture.

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 mirror shall be put in polyethylene bags and suitably packed to avoid damage during transit and storage. Alternatively, it may be packed as agreed to between the purchaser and the supplier. On the package of the product batch Number, Lot Number, and Serial Number shall be mentioned.