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भारतीय मानक मसौदा
पीटीएफई पिस्टन कटिंग जिग – विशिष्टि
(IS 9718 का पहला पुनरीक्षण)

Draft Indian Standard
PTFE Piston Cutting Jig – Specification
(First Revision of IS 9718)

[ICS 11.040.30]

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

Last date for comments: 21 October, 2023

FOREWORD

(Formal clauses will be added later)

This standard was originally published in 1981. The first revision of this standard has been brought out to align the standard with the latest style and format of Indian Standards. In this revision, the grade designation of stainless steel 316 has been included in the material clause and a test for hardness has been included.

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 covers the requirement for PTFE (Teflon) piston cutting Jig used by ENT surgeons while cutting PTFE pistons of suitable size.

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 1501 (Part 1): 2020/ ISO 6507-1: 2018	Metallic Materials – Vickers hardness test Part 1 Test method
IS 6603: 2001	Stainless steel bars and flats – Specification (<i>first revision</i>)
IS 12937: 1990	Engineering metrology – Methods of testing straightness, flatness and perpendicularity

3 MATERIAL

The material shall be stainless steel of grade X 04Cr17Ni12Mo2 (Alloy 316) of IS 6603.

4 SHAPE AND DIMENSIONS

4.1 The shape and dimensions shall be as per Fig. 1.

4.2 The tolerances on various dimensions shall be permitted as given below:

- a. ± 0.05 mm on dimensions up to 5 mm, and
- b. ± 0.1 mm on dimensions above 5 mm and below 10 mm.

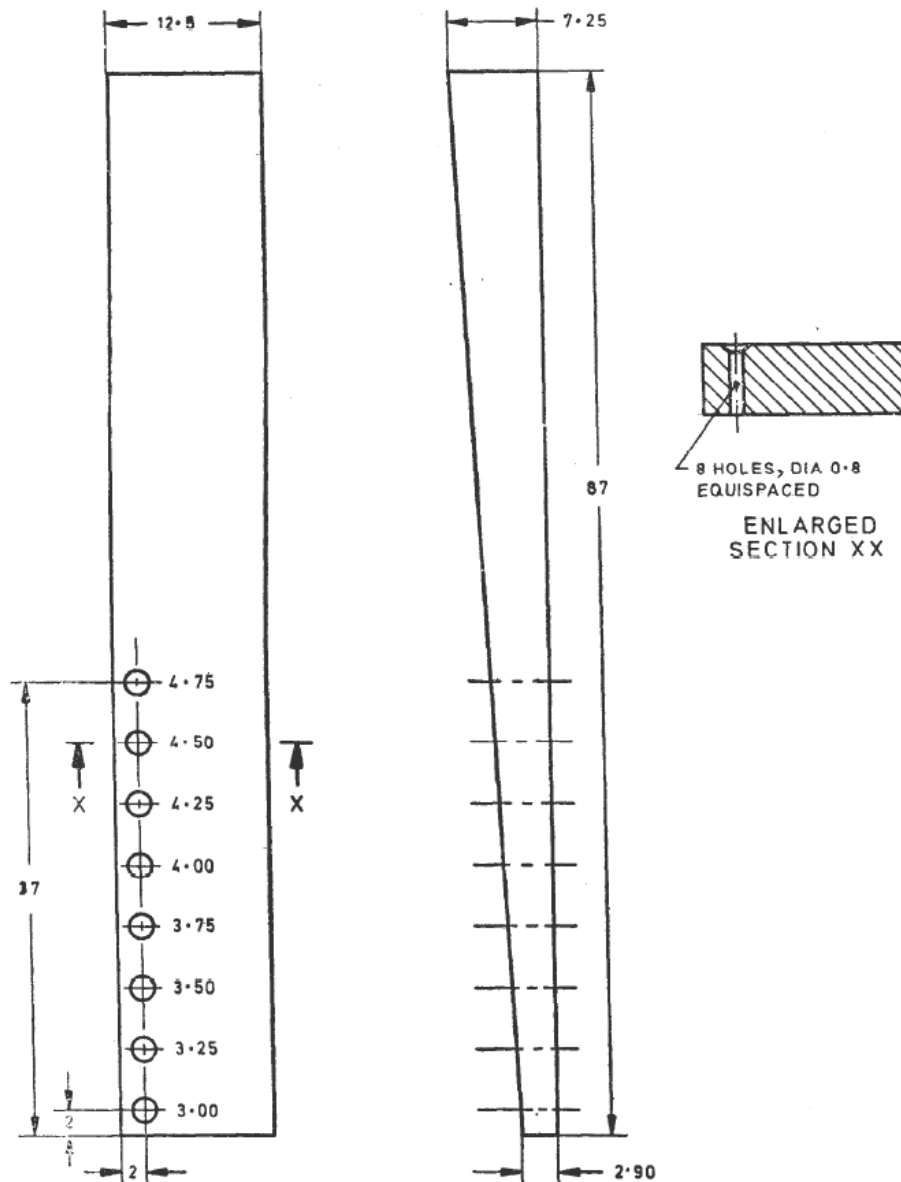
5 WORKMANSHIP AND FINISH

5.1 The flatness of measuring surface shall be checked with a knife straight edge. There shall be no visible clearance between the surface and the edge. Alternatively, flatness can be tested in accordance with IS 12937.

5.2 The marking depicting depth of the holes shall be clearly and uniformly etched as shown in **Fig. 1**. Etching may be done by laser.

5.3 The central line of holes shall be parallel to the longitudinal axis of the jig.

5.4 All the surfaces shall be free from scales, burrs, cracks, tool-marks and other defects and shall be finished smooth.



All dimensions in millimetres

Fig. 1 PTFE PISTON CUTTING JIG

6 HEAT TREATMENT

The jig shall be uniformly hardened and tempered to a hardness of 450 to 550 HV. It shall be tested for hardness in accordance with IS 1501 (Part 1).

7 MARKING

7.1 The jigs shall be marked clearly and indelibly with the manufacturer's name, initials or registered trade-mark.

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

8 PACKING

The surfaces shall be coated with a suitable anticorrosive coating and shall be wrapped in a moisture proof paper or any other suitable packing material. Jigs may also be packed as agreed to between the supplier and the purchaser.