

पीटीएफई पिस्टन कटिंग जिग — विशिष्टि  
( पहला पुनरीक्षण )

PTFE Piston Cutting Jig —  
Specification  
( First Revision )

ICS 11.040.30

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## FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards after the draft finalized by the Ear, Nose, Throat and Head & Neck Surgery (ENT - H&N) Instruments Sectional Committee had been approved by the Medical Equipment and Hospital Planning Division Council.

This standard was first published in 1981. This 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.

The composition of the Committee responsible for formulation of this standard is given in [Annex A](#).

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***PTFE PISTON CUTTING JIG — SPECIFICATION***( First Revision )***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 edition of these standards.

<i>IS No.</i>	<i>Title</i>
IS 1501 (Part 1) : 2020/ ISO 6507-1 : 2018	Metallic materials — Vickers hardness test: Part 1 Test method ( <i>fifth revision</i> )
IS 6603 : 2024	Stainless steel semi-finished products, bars, wire rods and bright bars — Specification ( <i>second 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)  $\pm 0.05$  mm on dimensions up to 5 mm; and
- b)  $\pm 0.1$  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. All the surfaces shall be free from scales, burrs, cracks, tool-marks and other defects and shall be finished smooth.

**6 HEAT TREATMENT**

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

**7 MARKING**

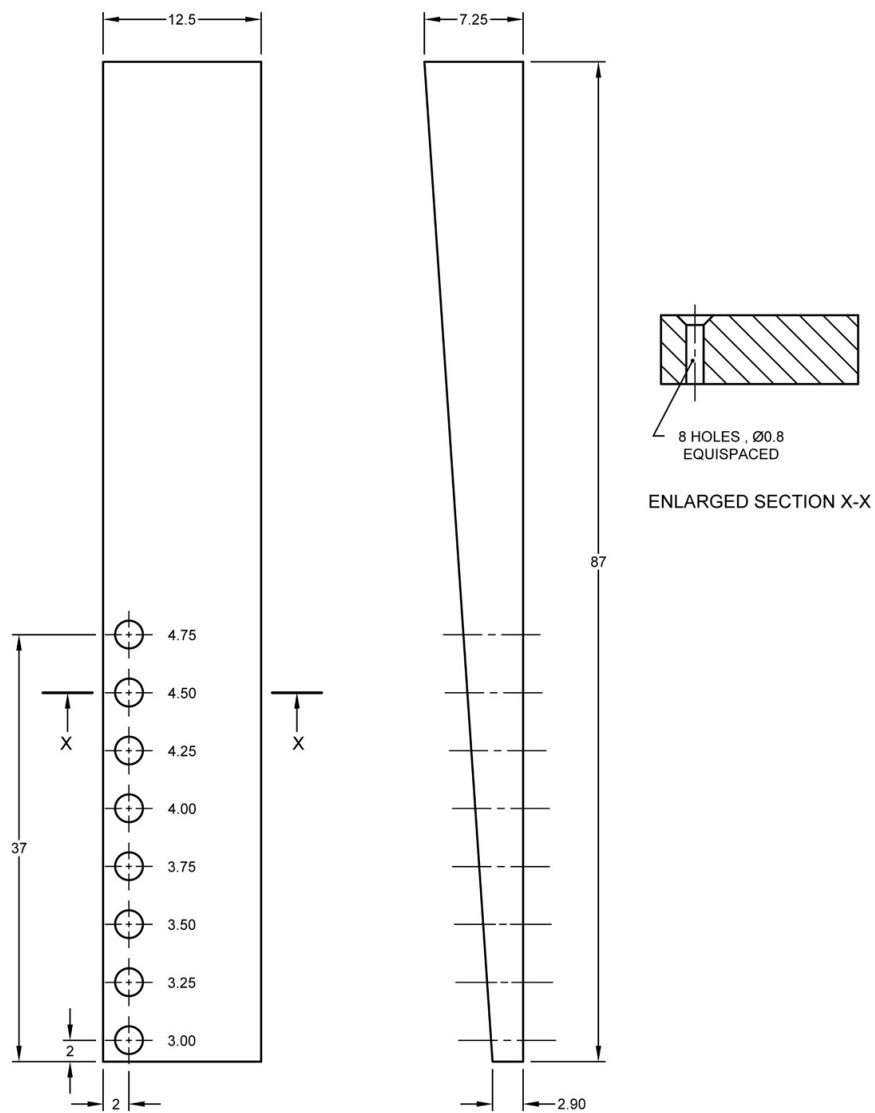
**7.1** The jigs shall be marked clearly and indelibly with the manufacturer's name, initials or registered trademark, serial number, batch number and lot number.

**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 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.



All dimensions in millimetres.

FIG.1 PTFE (TEFLON) PISTON CUTTING JIG

## ANNEX A

*(Foreword)*

## COMMITTEE COMPOSITION

Ear, Nose, Throat and Head & Neck Surgery (ENT - H&N) Instruments Sectional Committee, MHD 04

<i>Organization</i>	<i>Representative(s)</i>
All India Institute of Medical Sciences, New Delhi	DR RAKESH KUMAR ( <b>Chairperson</b> )
ALPS International, New Delhi	SHRI ALOK NARANG, SHRI KARAN NARANG ( <i>Alternate</i> )
All India Institute of Medical Sciences, New Delhi	DR PREM SAGAR DR ARVIND KUMAR ( <i>Alternate I</i> )
All India Institute of Medical Sciences, Bhopal	DR VIKAS GUPTA DR GANAKALYAN BEHERA ( <i>Alternate I</i> )
Association of Indian Medical Device Industry, New Delhi	SHRI TARLOCHAN DEV SHRI ANKUR BHARGAVA ( <i>Alternate I</i> ) DR C. S. PRASAD ( <i>Alternate II</i> )
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### Amendments Issued Since Publication

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