

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

कंटशर, डायमंड पॉइंटेड ओल — विशिष्टि

(IS 6976 का पहला पुनरीक्षण)

Draft Indian Standard

Kuntscher, Diamond Pointed Awl — Specification

(First Revision of IS 6976)

ICS 11.040.40

Orthopaedic Instruments, Implants and
Accessories Sectional Committee, MHD 02

Last date for comments: **21 November 2024**

FOREWORD

(Formal clauses will be added later)

This standard was first published in 1973. The first revision of this standard has been brought out to align the cross references to latest 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*)'

1 SCOPE

This standard covers dimensional and other requirement of Kuntscher, diamond pointed awl used in orthopaedic surgery.

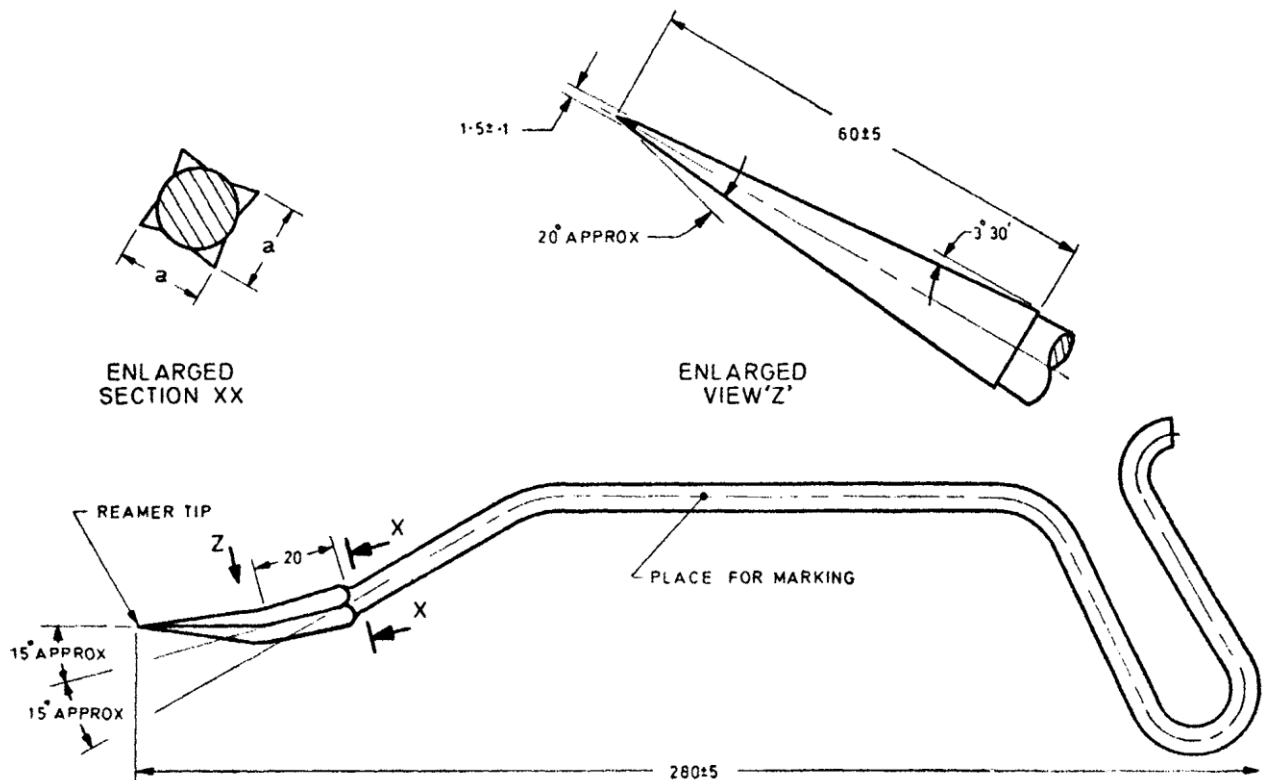
2 REFERENCES

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 6603 : 2001	Stainless steel bars and flats - Specification (<i>first revision</i>)
IS 1070 : 2023	Reagent Grade Water Specification (<i>fourth revision</i>)

3 SHAPE AND DIMENSIONS

As shown in Fig. 1.



<i>a</i>	<i>Weight</i>
± 0.2	g approx
8	160
10	180

All dimensions in millimetres.

FIG. 1 KUNTSCHER, DIAMOND POINTED AWL

3.1 Deviation of ± 2.5 percent shall be permitted on all dimensions except where otherwise specified.

4 MATERIAL

The awl shall be made of stainless steel conforming to Designation X30Cr13 of IS 6603.

HEAT TREATMENT

The awl shall be hardened and tempered to 450 to 500 *HV*.

5 MANUFACTURE, WORKMANSHIP AND FINISH

5.1 The awl shall be made in one piece.

5.2 All the surfaces of the awl shall be free from pits, burrs, cracks and other surface defects.

5.3 The cutting edge of the instrument shall be properly sharpened and shall be free from nicks and waviness.

5.4 All other edges shall be even.

5.5 The awl shall be passivated and finished smooth and bright.

6 TESTS

6.1 Performance Test

The awl shall be held firmly in one hand and five consecutive holes shall be made by it in a fresh sheep bone of about 8 to 10 mm thickness. The awl shall make the holes easily and cleanly without any sign of damage.

6.2 Corrosion Resistance Test

Scrub an awl sample with soap and warm water, rinse in hot water and then dip in 95 percent ethyl alcohol. Dry the sample. Immerse in copper sulphate solution at room temperature for 6 minutes and wash off with fresh water or wet cotton wool. Prepare the solution as follows:

Copper sulphate (CuSO ₄ .5H ₂ O)	4.0 g
Sulphuric acid (H ₂ SO ₄) (sp gr 1.84)	10.0 g
Distilled water [<i>see</i> IS 1070]	90.0ml

There shall be no red stains or spots on the sample but dulling of the polished surface may be permitted.

7 MARKING

The awl shall be marked with the manufacturer's name, initials or recognized trade-mark.

7.1 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

As agreed to between the purchaser and the supplier.