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भारतीय मानक मसौदा
कंटशर नेल के लिए एक्सट्रैक्टर — विशिष्टि
भाग 1 हैंडल प्रकार
(IS 7105-1 का पहला पुनरीक्षण)

Draft Indian Standard
Extractor for Kuntscher Nail — Specification
Part 1 Handle Type
(*First Revision of IS 7105-1*)

ICS 11.040.30

Orthopaedic Instruments, Implants and
Accessories Sectional Committee, MHD 02

Last date for comments: **27 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 specifies dimensional and other requirements for handle type extractor for Kuntscher nail 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.

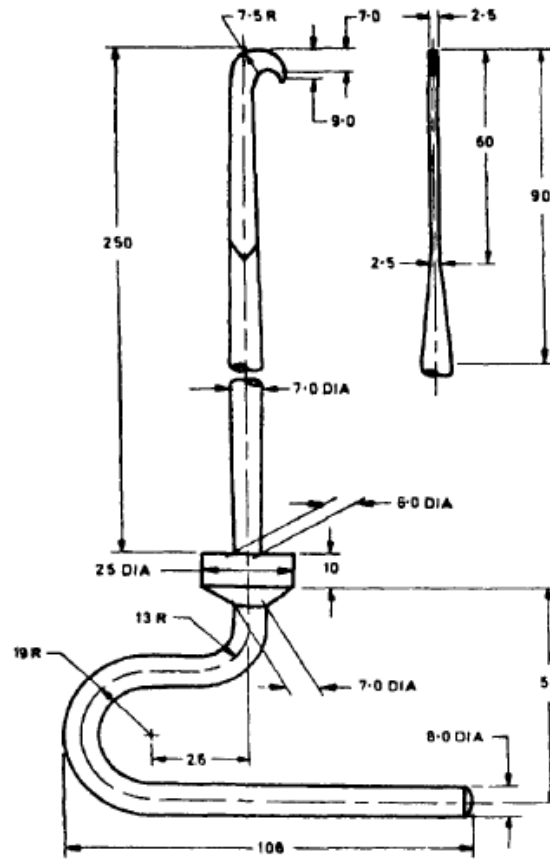
<i>IS No.</i>	<i>Title</i>
IS 6603 : 2024	Stainless Steel Semi-Finished Products, Bars, Wire Rods and Bright Bars — Specification (<i>second revision</i>)
IS 1070 : 2023	Reagent Grade Water — Specification (<i>fourth revision</i>)

3 MATERIAL

Shall be according to Designation 20Cr13 of IS 6603.

4 SHAPE AND DIMENSIONS

As shown in Fig 1



All dimensions in millimetres

FIG. 1 EXTRACTOR FOR KUNTSCHER NAIL

5 HEAT TREATMENT

Shall be hardened and tempered to 400 to 450 *HV*.

6 WORKMANSHIP AND FINISH

6.1 The extractor shall be formed in one piece.

6.2 The hook end shall be rounded as shown in Fig. 1.

6.3 All surfaces shall be free from pits, burrs, cracks and other surface contaminations.

6.4 It shall be passivated and polished bright.

7 TESTS

7.1 Performance Test

The handle end shall be gripped in suitable vice and the hook end shall be pulled by applying a load of 50 kg. The extractor shall not be damaged after completion of the test.

7.2 Corrosion Resistance Test

Scrub the instrument with soap and warm water, rinse in hot water and then dip in 95 percent ethyl alcohol. Dry the instrument, immerse in copper sulphate solution at room temperature for 6 minutes and wash with fresh water or wet cotton wool. The copper sulphate solution shall be made up as follows:

Copper sulphate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$)	4.0 g
Sulphuric acid (H_2SO_4) (sp gr 1.84)	10.0 g
Distilled water [<i>see</i> IS 1070]	90.0 ml

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

8 MARKING

Shall be marked with the manufacturer's name or recognized trade-mark.

8.1 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.

9 PACKING

The extractor shall be packed as agreed to between the purchaser and the supplier.