Doc: MHD02 (26401) WC August 2024

#### **BUREAU OF INDIAN STANDARDS**

#### DRAFT FOR COMMENTS ONLY

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### भारतीय मानक मसौदा

## स्टीनमैन पिन डालने के लिए पिन चक — विशिष्टि

(IS 5847 का पहला पुनरीक्षण)

#### **Draft Indian Standard**

# Pin Chuck for Introducing Steinman Pins — Specification

(First Revision of IS 5847)

ICS 11.040.40

Orthopaedic Instruments, Implants and Last date for comments: 21 November 2024
Accessories Sectional Committee, MHD 02

#### **FOREWORD**

(Formal clauses will be added later)

This standard was first published in 1970. 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*)

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#### 1 SCOPE

This standard covers dimensional and other requirement for pin chuck for introducing Steinman pins in the bone.

#### 2 REFERENCES

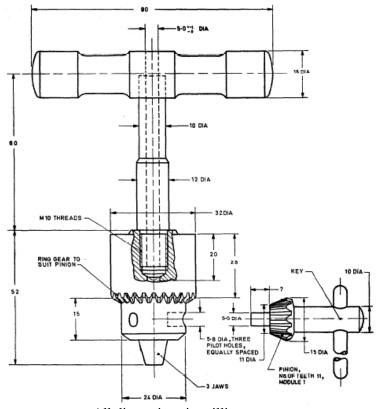
The standards given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards.

IS No. Title

IS 1068: 1993 Electroplated coatings of nickel plus chromium and copper plus nickel plus chromium - Specification (*third revision*)

#### **3 SHAPE AND DIMENSIONS**

As shown in Fig. 1.



All dimensions in millimetres.

FIG. 1 PIN CHUCK

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#### 4 MATERIAL

The body and components shall be made from carbon steel having minimum 0.45 percent carbon and the jaws from a suitable grade of wear-resistant steel properly heat-treated to give a hardness of 550 to 680 HV on the gripping portions.

#### 5 WORKMANSHIP AND FINISH

The teeth and threads, wherever provided, shall be neat and clean. The surfaces of the jaws, body and handle shall be free from cracks, draw marks, burrs, pits and other defects. The pilot holes in the body of the chuck shall lie on a common peripheral centre line. The position of the centre line with reference to the ring gear shall be such that full engagement is assured between the teeth of the pinion on the key and those of the ring gear. All the keys produced shall be interchangeable. The chuck and the handle shall be cannulated to receive the Steinman pin. The two holes shall be co-axial. The handle end of the chuck shall be plated chromium over nickel in accordance with Service Grade No. 2 of IS 1068.

#### 6 TEST FOR GRIP ON PIN

The chuck end of a Steinman pin shall be gripped by the chuck and the other end in a suitable vice. The handle of the chuck shall be twisted half round and then pulled by hand. The jaws of the chuck shall not slip the Steinman pin.

#### 7 MARKING

The chuck shall be marked with the name or trade-mark of the manufacturer on its body.

#### 7.1 BIS Certification Marking

The product(s) confirming 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.