Doc: MHD13 (23523) WC

July 2024

## **BUREAU OF INDIAN STANDARDS**

#### **DRAFT FOR COMMENTS ONLY**

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# भारतीय मानक मसौदा

## गाय के लिए कैथेटर - विशिष्टि

(IS 10954 का पहला पुनरीक्षण)

## **Draft Indian Standard**

## **CATHER FOR COW - SPECIFICATION**

(First Revision of IS 10954)

ICS 11.220

Veterinary Hospital Planning and Surgical Instruments Sectional Committee, MHD 13

Last date for comments: **7 August 2024** 

#### **FOREWORD**

(Formal clauses will be added later)

This Indian Standard was originally published in 1984 with the title 'Specification for catheter, cow'. This revision has been brought out to align the cross-references to the latest editions.

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 Indian Standard covers requirements for double channel and two-way catheter, cow used in veterinary surgery.

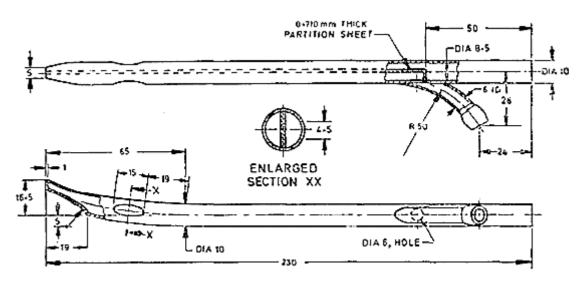
#### 2 REFERENCES

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.

IS No.	Title
IS 6911:2017	Stainless steel plate, sheet and strip - Specification (Second Revision)
IS 1070:1992	Reagent grade water - Specification (Third Revision)

## 3 SHAPE AND DIMENSIONS

**3.1** The shape and dimensions for cow catheter shall be the shown in Fig. 1 and 2.



All dimension in millimeters.

FIG. 1 CATHETER, COW, DOUBLE CHANNEL

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All dimension in millimeters.

## FIG. 2 CATHETER, COW, TWO- WAY

- **3.2** A deviation of  $\pm$  2.5 percent shall be allowed on all dimensions.
- **3.3** The tip of the catheter shall be blunt and smooth to avoid harm to the animal.

#### 4 MATERIAL

The Cow Catheter shall be made of stainless steel of designation 04Cr18Ni10 or 07Cr18Ni9 of IS 6911.

## **5 REQUIREMENTS**

- **5.1** All the surfaces of the catheter shall be free from burrs, pits, cracks, and other defects. The distal end of the catheter shall be provided with two eyes. The edges shall be even and rounded. All sharp corners shall be removed. The brazing if done shall be neat and sound. The inside of the catheter shall be clean and free from any dirt or dust.
- **5.2** The catheter shall be polished bright and passivated. The recommended method of passivation is given in **5.2.1**.
- **5.2.1** The catheter shall be treated in 10 percent (v/v) nitric acid solution for not less than 30 minutes at a temperature of not less than 10 °C and not exceeding 60 °C. The catheter shall then be rinsed with water and dried in hot air.

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#### 6 TESTS

#### **6.1 Corrosion Resistance Test**

The catheter shall be scrubbed with soap and warm water, rinsed in hot water and then dipped in 95 percent ethyl alcohol. It shall be dried and immersed in Copper Sulphate solution at room temperature for 6 minutes and then washed off with fresh water or wet cotton wool.

The Copper Sulphate solution shall be prepared as follows:

Copper Sulphate (CuSO <sub>4</sub> , 5H <sub>2</sub> O)	4.0 g
Sulphuric acid (H2SO4) (sp. gr. 1.84)	10.0 g
Distilled water (see IS 1070)	90.0 ml

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

#### **6.2 Performance Test**

The tubing mount of the catheter shall be connected to the free end of a syringe, enema, without nozzle. The inlet valve of the syringe shall be immersed in water and the bulb pressed and released. On doing so, the water shall omit from eye of the relevant channel only in case of double channel and there shall not be any sign of leakage in the other channel. In case of two-way catheter, the water shall omit from eyes only and there shall not be any sign of leakage.

#### 7 MARKING

- **7.1** Each catheter shall be marked with the following:
  - a) Name of manufacturer, its initials or recognized trade-mark and,
  - b) the words 'Stainless Steel' or letters 'SS'.

## 7.2 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 products may be marked with the Standard Mark.

#### 8 PACKING

The catheters shall be wrapped in moisture-proof paper or packed in polyethylene bags avoiding contact with one another or as agreed to between the purchaser and the supplier.