भारतीय मानक Indian Standard

# वस्त्रादि — कार्ड गेज — विशिष्टि

( दूसरा पुनरीक्षण )

## Textiles — Card Gauges — Specification

(Second Revision)

ICS 59.120.10

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September 2024

**Price Group 4** 

Textile Machinery and Accessories Sectional Committee, TXD 14

#### FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Textile Machinery and Accessories Sectional Committee had been approved by the Textiles Division Council.

Card gauges are used in the carding process of spinning to measure the gap between the cylinder and the flats.

This standard was first published in 1972 and subsequently revised in 1987 to align dimensions, thickness and gauge number with ISO 2572 'Textile machinery and accessories — Card gauges' issued by the International Organization for Standardization (ISO). The present revision has been made to incorporate the following changes:

- a) Marking clause has been modified;
- b) Sampling clause has been incorporated; and
- c) Reference clause has been incorporated.

The composition of the Committee responsible for the formulation of this standard is given in <u>Annex A</u>.

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 the same as that of the specified value in this standard.

#### Indian Standard

## TEXTILES — CARD GAUGES — SPECIFICATION

(Second Revision)

#### **1 SCOPE**

This standard prescribes the requirements for two types of card gauges currently used to set the distance between the working elements of cards.

#### **2 REFERENCES**

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

IS 2500 (Part 1) : Sampling procedure for 2000/ISO 2859-1 : 1999 Part 1 Sampling schemes indexed by acceptance quality limit (AQL) for lotby-lot inspection (*third revision*)

#### **3 MATERIAL**

The gauges shall be made from suitable material so as to attain hardness of 55 HRC to 60 HRC.

#### **4 WORKMANSHIP AND FINISH**

The gauges shall have smooth scratch-resistant surface with ground and lapped finish. The gauges shall be flexible.

#### **5 TYPES**

The gauges shall be of two types as shown in Fig. 1 and Fig. 2. The dimensions of Type A gauges used for setting of elements, other than flats to the cylinder, shall be as given in Table 1. The dimensions of Type B gauges normally used

for setting flats to the cylinder shall be as shown in Fig. 2.

#### **6 NUMBER, DIMENSIONS AND TOLERANCES**

The number of the gauge corresponds to the thickness of the gauge expressed in multiples of 0.025 mm (initially in  $1/1 \ 000$  inch). The thickness of the gauges specified in co1 (2) of <u>Table 2</u> shall be within the tolerances specified in co1 (3) of <u>Table 2</u>.

#### 7 SAMPLING

Unless otherwise agreed to between the buyer and the seller, to ascertain the conformity of product(s) to the requirements of this specification, or as specified in IS 2500 (Part 1) shall be followed.

#### **8 MARKING**

- **8.1** The gauge shall be marked with the following:
  - a) Nominal size;
  - b) Gauge type and number of this standard;
  - c) Manufacturer's name or trade-mark; and
  - d) Serial number.

#### 8.2 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 thereunder, and the products may be marked with the Standard Mark.

#### 9 PACKING

The gauges shall be coated with rust-preventive agent and wrapped in oil paper. Gauges shall be protected against climatic conditions by application of any anti-corrosive coating. Packing should be suitable to prevent damage in transit.

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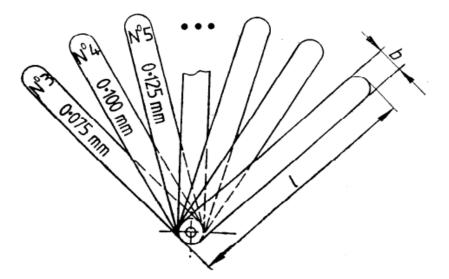


FIG. 1 GAUGE TYPE A

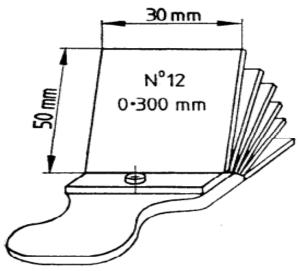


FIG. 2 GAUGE TYPE B

Table 1 Dimensions of Gauges Type A

#### (*Clause* <u>5</u>)

SI No.	b	L
	mm	mm
(1)	(2)	(3)
i)	30	300 (240)
		(240)
ii)	45	300
		300 400

NOTE — The value in bracket to be avoided, as far as possible.

Sl No.	Number	(Clause <u>6</u> ) Thickness	Tolerance
51 140,	Number	mm	mm
(1)	(2)	(3)	(4)
i)	1	0.025	$\pm 0.004$
ii)	2	0.050	$\pm 0.005$
iii)	3	0.075	$\pm 0.005$
iv)	4	0.100	$\pm 0.005$
v)	5	0.125	$\pm 0.005$
vi)	6	0.150	$\pm 0.005$
vii)	7	0.175	$\pm 0.005$
viii)	8	0.200	$\pm 0.005$
ix)	9	0.225	$\pm 0.005$
x)	10	0.250	$\pm 0.005$
xi)	12	0.300	$\pm 0.005$
xii)	20	0.500	$\pm 0.008$
xiii)	40	1.000	$\pm 0.010$
xiv)	80	2.000	$\pm 0.015$
xv)	120	3.000	$\pm 0.020$
xvi)	200	5.000	$\pm 0.025$

### Table 2 Number, Thickness and Tolerances of the Gauges

#### ANNEX A

#### (Foreword)

#### **COMMITTEE COMPOSITION**

Textile Machinery and Accessories Sectional Committee, TXD 14

Organization

Central Manufacturing Technology Institute, Bengaluru

ATE Enterprises Private Limited, New Delhi

Bajaj Industries Private Limited, Kolkata

Bhowmick Calculator, Kolkata

Bombay Textile Research Association, Mumbai

Central Manufacturing Technology Institute, Bengaluru

Confederation of Indian Textile Industry, New Delhi

ICAR - Central Institute for Research on Cotton Technology, Mumbai

India ITME Society, Mumbai

Indian Jute Industries Research Association, Kolkata

Indian Jute Mills Association, Kolkata

Indian Textile Accessories and Machinery Manufacturers Association, Mumbai

Inspiron Engineering Private Limited, Ahmedabad

Kusters Calico Machinery Limited, Karjan

Lagan Engineering Company Limited, Kolkata

Lakshmi Machine Works Limited, Coimbatore

Laxmi Shuttleless Looms Private Limited, Ahmedabad

Ludlow Jute Limited, Kolkata

Ministry of Heavy Industries and Public Enterprises, Department of Heavy Industry, New Delhi

National Safety Council, Navi Mumbai

Office of the Textile Commissioner, Mumbai

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REPRESENTATIVE

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SHRI VIJAY GAWDE SHRI R. A. SHAIKH (*Alternate*)

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SHRI LALIT R. GABHANE SHRI R. R. DEOGHARE (*Alternate*)

SHRI N. K. SINGH SHRI NAROTTAM KUMAR (Alternate)

#### Organization

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Synthetic and Art Silk Mills Research Association, Mumbai

Technocraft Industries India Limited, Mumbai

Truetzschler India Private Limited, Ahmedabad

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SHRI J. K. GUPTA, SCIENTIST 'E'/DIRECTOR AND HEAD (TEXTILES) [REPRESENTING DIRECTOR GENERAL (*Ex-officio*)]

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This Indian Standard has been developed from Doc No.: TXD 14 (24696).

#### **Amendments Issued Since Publication**

Amend No.	Date of Issue	Text Affected

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