
वस्त्रादि — कार्ड गेज — विशिष्टि
(दूसरा पुनरीक्षण)

**Textiles — Card Gauges —
Specification**
(*Second Revision*)

ICS 59.120.10

© BIS 2024



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI - 110002
www.bis.gov.in www.standardsbis.in

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 [Annex A](#).

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:

<i>IS No.</i>	<i>Title</i>
IS 2500 (Part 1) : 2000/ISO 2859- 1 : 1999	Sampling procedure for inspection by attributes: Part 1 Sampling schemes indexed by acceptance quality limit (AQL) for lot- by-lot inspection (<i>third revision</i>)

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 col (2) of [Table 2](#) shall be within the tolerances specified in col (3) of [Table 2](#).

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.

To access Indian Standards click on the link below:

https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails/

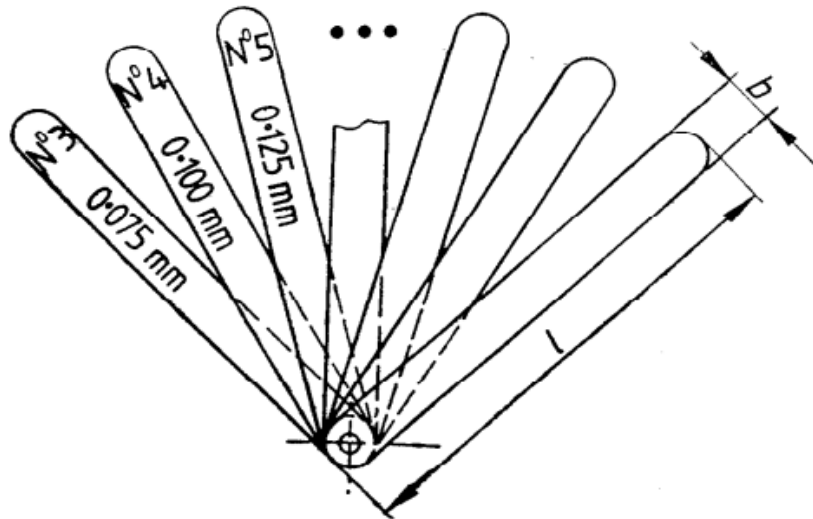


FIG. 1 GAUGE TYPE A

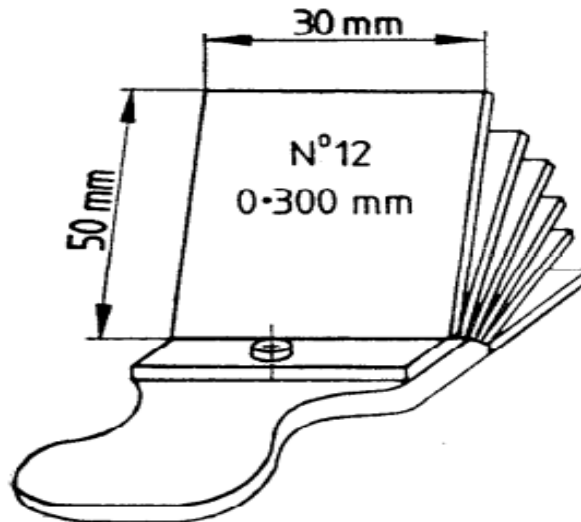


FIG. 2 GAUGE TYPE B

Table 1 Dimensions of Gauges Type A

(Clause 5)

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

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

Table 2 Number, Thickness and Tolerances of the Gauges*(Clause 6)*

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

ANNEX A

(Foreword)

COMMITTEE COMPOSITION

Textile Machinery and Accessories Sectional Committee, TXD 14

<i>Organization</i>	<i>Representative(s)</i>
Central Manufacturing Technology Institute, Bengaluru	DR NAGAHANUMAIAN (<i>Chairperson</i>)
ATE Enterprises Private Limited, New Delhi	SHRI ABHIJIT KULKARNI SHRI ANIL KUMAR SHARMA (<i>Alternate</i>)
Bajaj Industries Private Limited, Kolkata	REPRESENTATIVE
Bhowmick Calculator, Kolkata	SHRI GOUTAM BHOWMICK SHRI VIVEKANANDA BHOWMICK (<i>Alternate</i>)
Bombay Textile Research Association, Mumbai	SHRI VIJAY GAWDE SHRI R. A. SHAIKH (<i>Alternate</i>)
Central Manufacturing Technology Institute, Bengaluru	SHRI B. R. MOHANRAJ SHRI K. SARAVANAN (<i>Alternate</i>)
Confederation of Indian Textile Industry, New Delhi	SHRIMATI CHANDRIMA CHATTERJEE SHRI ANMOL GUPTA (<i>Alternate</i>)
ICAR - Central Institute for Research on Cotton Technology, Mumbai	DR N. SHANMUGAM DR T. SENTHIL KUMAR (<i>Alternate</i>)
India ITME Society, Mumbai	SHRI S. SENTHIL KUMAR SHRIMATI SEEMA SRIVASTAVA (<i>Alternate</i>)
Indian Jute Industries Research Association, Kolkata	SHRIMATI SAUMITA CHOUDHURY SHRI PARTHA SANYAL (<i>Alternate</i>)
Indian Jute Mills Association, Kolkata	SHRI BHUDIPTA SAHA SHRI TANMOY SINGHA (<i>Alternate</i>)
Indian Textile Accessories and Machinery Manufacturers Association, Mumbai	SHRI N. D. MHATRE SHRI CHANDRESH SHAH (<i>Alternate</i>)
Inspiron Engineering Private Limited, Ahmedabad	SHRI ANKUR SONI
Kusters Calico Machinery Limited, Karjan	SHRI DEVANG PARIKH SHRI SHUBHASIS SUR (<i>Alternate</i>)
Lagan Engineering Company Limited, Kolkata	REPRESENTATIVE
Lakshmi Machine Works Limited, Coimbatore	SHRIMATI KALPANA A. SHRIMATI DIVYA V. (<i>Alternate</i>)
Laxmi Shuttleless Looms Private Limited, Ahmedabad	SHRI KETAN SANGHVI
Ludlow Jute Limited, Kolkata	REPRESENTATIVE
Ministry of Heavy Industries and Public Enterprises, Department of Heavy Industry, New Delhi	SHRI SANJEEV GUPTA SHRI S. SUNDAR (<i>Alternate</i>)
National Safety Council, Navi Mumbai	SHRI LALIT R. GABHANE SHRI R. R. DEOGHARE (<i>Alternate</i>)
Office of the Textile Commissioner, Mumbai	SHRI N. K. SINGH SHRI NAROTTAM KUMAR (<i>Alternate</i>)

<i>Organization</i>	<i>Representative(s)</i>
Peass Industrial Engineers Private Limited, Navsari	SHRI RAVI S. RAO SHRI NAIMISHKUMAR RAMANLAL TANDEL (Alternate)
Synthetic and Art Silk Mills Research Association, Mumbai	DR MANISHA MATHUR SHRI SANJAY SAINI (Alternate)
Technocraft Industries India Limited, Mumbai	SHRI RAVINDER KUMAR SHRI R. MURALI (Alternate)
Truetzschler India Private Limited, Ahmedabad	SHRI PRAVIN KANDGE SHRI SHILADITYA JOSHI (Alternate)
Veermata Jijabai Technological Institute, Mumbai	DR SURANJANA GANGOPADHYAY DR S. P. BORKAR (Alternate)
BIS Directorate General	SHRI J. K. GUPTA, SCIENTIST 'E'/DIRECTOR AND HEAD (TEXTILES) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary
SHRI SWAPNIL
SCIENTIST 'B'/ASSISTANT DIRECTOR
(TEXTILES), BIS

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 2016* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Head (Publication & Sales), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the website-www.bis.gov.in or www.standardsbis.in.

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

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402

Website: www.bis.gov.in

Regional Offices:

Central : 601/A, Konnectus Tower -1, 6th Floor,
DMRC Building, Bhavbhuti Marg, New
Delhi 110002

Telephones

{ 2323 7617

Eastern : 8th Floor, Plot No 7/7 & 7/8, CP Block, Sector V,
Salt Lake, Kolkata, West Bengal 700091

{ 2367 0012
2320 9474

Northern : Plot No. 4-A, Sector 27-B, Madhya Marg,
Chandigarh 160019

{ 265 9930

Southern : C.I.T. Campus, IV Cross Road, Taramani, Chennai 600113

{ 2254 1442
2254 1216

Western : Manakalya, 5th Floor/MTNL CETTM, Technology Street, Hiranandani Gardens, Powai
Mumbai 400076

{ 25700030
25702715

Branches : AHMEDABAD, BENGALURU, BHOPAL, BHUBANESHWAR, CHANDIGARH, CHENNAI, COIMBATORE, DEHRADUN, DELHI, FARIDABAD, GHAZIABAD, GUWAHATI, HARYANA (CHANDIGARH), HUBLI, HYDERABAD, JAIPUR, JAMMU, JAMSHEDPUR, KOCHI, KOLKATA, LUCKNOW, MADURAI, MUMBAI, NAGPUR, NOIDA, PARWANOO, PATNA, PUNE, RAIPUR, RAJKOT, SURAT, VIJAYAWADA.