भारतीय मानक Indian Standard IS 16314 : 2015

(Reaffirmed 2020)

साईकिल — सामान्य प्रयोजन के लिए बाईसिकल — विशिष्टि

Cycle — Bicycle For General Purpose — Specification

ICS 43.150

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भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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Bicycles Sectional Committee, TED 16

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards after the draft finalized by the Bicycles Sectional Committee had been approved by the Transport Engineering Division Council.

A number of standards have been published on bicycle parts and safety requirements of bicycles. In order to have a comprehensive standard on bicycle for general purpose which gives the cross reference of all such Indian Standards, this standard has been prepared which will help government departments and other agencies to order for bicycles as per this standard.

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, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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Indian Standard

CYCLE — BICYCLE FOR GENERAL PURPOSE — SPECIFICATION

1 SCOPE		IS No.	Title
This standard specifies the requirements of bicycle for general purpose. It applies to all bicycles intended for		1283 : 1995	Bicycles — Freewheels — Specification (second revision)
use on public roads and does not apply to specialized		2061 : 1995	Bicycle — Front forks — Specification (<i>first revision</i>)
bicycles such as tandems, toy bicycles, electric bicycles and bicycles for competitive events.		2414 : 2005	Cycle and rickshaw pneumatic tyres — Specification (fourth revision)
2 REFERENCES		2415 : 2004	Cycles — Rubber tubes — Specifi-
The following standards contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication, the editions		2973 : 1983	cation (third revision) Specification for bicycle steering head assembly (PH type) (first revision)
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 the standards indicated below.		3142 : 1993	Pulleys-V-grooved pulleys for endless V-belts sections Z, A, B, C, D and E and endless wedge belts sections SPZ, SPA, SPB and SPC—Specification
IS No.	Title	6218 : 2008	Bicycle — Mudguard — Specifi-
532 : 2006	Bicycle tube valves and valve-tubing — Specification (third revision)	IS/ISO 6742-2 : 1985	cation (first revision) Cycles — Lighting and retro- reflective devices — Photometric and
623 : 2008	Bicycle — Bicycle frames — Specification (third revision)	. 1963	physical requirements: Part 2 Retro-
624 : 2003	Bicycles — Rims — Specification (fourth revision)	6799 : 1987	reflective devices Specification for padlocks, bicycle (first raviolet)
625 : 2006	Bicycles — Handle bars — Specification (third revision)	8715 : 1978	bicycle (first revision) Code of practice for packaging of
626 : 2009	Bicycle — Seat pillars —	9225 : 1979	bicycles for export Specification for bicycle air pumps
628 : 1993	Specification (third revision) Bicycles — Pedal assembly — Specification (second revision)	10613 : 2004 / ISO 4210 : 1996	Cycles — Safety requirements for bicycles (<i>first revision</i>)
629 : 1988	Specification for bicycle hub assembly — R type (second revision)	12205 : 1988	Specification for bicycle hub assembly — PH type
630 : 2005	Bicycle spokes (plain) and nipples for spokes — Specification (third	12474 : 1988	Specification for bicycle steering head assembly (R type)
960 : 2005	revision) Specification for bicycle rim tapes and buckles (second revision)	14363 : 2009 / ISO 11243	Cycles — Luggage carriers for bicycles — Concepts, classification and testing (first remision)
1131 : 2006	Bicycle bottom bracket axle — Specification (third revision)	: 1994 15184 : 2002	and testing (first revision) Bicycles — Steel balls — Specification
1132 : 2009	Bicycle — Bottom bracket ball cups — Specification (third revision)	15511 : 2004 / ISO 9633	Cycle chains — Characteristics and test methods
1134 : 2004	Bicycle bottom bracket lock ring —	: 2001	
1281 : 1996	Specification (third revision) Bicycle—Cranks and chain wheels — Specification (second revision)	15533 : 2004 / ISO 8098 : 2002	Cycles — Safety requirements for bicycles for young children
1282 : 1968	Specification for bicycle cotter pins, washers and nuts (first revision)	16305 : 2014	Cycles—Glossary of terms used in the bicycle industry

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3 TERMS AND DEFINITIONS

For the purpose of this standard, the terms and definitions given in IS 16305, IS 10613 and IS 15533 shall apply.

4 COMPONENTS

4.1 The components of the different assemblies of bicycle used for bicycles for general purpose shall conform to their corresponding Indian Standards given in the following table:

Sl No.	Name of Assembly/Sub- Assembly	Name of Components	Confirming to IS
(1)	(2)	(3)	(4)
i)	Chassis	Bicycle frames	IS 623
		Front fork	IS 2061
		Mudguard	IS 6218
		Handle bar	IS 625
ii)	Steering device	Steering head assembly	IS 2973
iii)	Seating system	Seat pillar	IS 626
		Pedal assembly	IS 628
		Hub assembly	IS 629
		Cranks and chain wheel	IS 1281
		Freewheel	IS 1283
		Cycle chain	IS 15511
iv)	Driving system	V-Grooved pulleys for V-belts	
	5 .	and endless wedge belts	IS 3142
		Bottom bracket axle	IS 1131
		Bottom bracket ball cups	IS 1132
		Bottom bracket lock rings	IS 1134
		Steel balls	IS 15184
		Pneumatic tyres	IS 2414
		Rubber tubes	IS 2415
v)	Running system	Tube valve	IS 532
,		Rim	IS 624
		Spokes	IS 630
		Rim tapes and buckles	IS 960
vi)	Carrying system	Luggage carriers	IS 14363
vii)	Warning system	Retro-reflective device	IS/ISO 6742-2
viii)	Fasteners	Cotter pins, washers and nuts	IS 1282

4.2 Accessories

- **4.2.1** *Bicycle Air Pump* If supplied with bicycle shall conform to IS 9225.
- **4.2.2** *Bicycle Lock* Bicycle lock, if provided shall conform to IS 6799.

5 SAFETY AND PERFORMANCE REQUIREMENTS

Each bicycle shall conform to the safety and performance requirements as specified in IS 10613 or IS 15533.

6 MARKING

- **6.1** Each bicycle shall be visibly and durably marked with:
 - a) The manufacturer's name or trade-mark,

- b) The frame number, and
- c) Month and year of manufacture.

6.2 BIS Certification Marking

- **6.2.1** The cycle may also be marked with the Standard Mark.
- **6.2.2** The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of the Standard Mark may be granted to the manufacturers or producers may be obtained from the Bureau of Indian Standards.

7 PACKING

The cycles shall be packed as per IS 8715 or as agreed to between the purchaser and supplier.

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(Chairman)

ANNEX A

(Foreword)

COMMITTEE COMPOSITION

Bicycles Sectional Committee, TED 16

Organization	Representative(s)
Bicycle & Sewing Machines (R&D Centre), Ludhiana	Shri Paramjeet Singh (<i>Chairmai</i> Shri R. S. Bains (<i>Alternate</i>)
All India Bicycle Manufacturers Association, New Delhi	Ms Kanchan Zutushi

SH. B. S. DHIMAN (Alternate) Atlas Cycles (Haryana) Limited, Sonepat SHRI VIKRAM KAPUR

SHRI GIRISH KAPUR (Alternate) Avon Cycles Ltd, Ludhiana SHRI ONKAR SINGH PAHWA

SHRI B. S. DHIMAN (Alternate) Bhogal Sons (Regd), Ludhiana SHRI NAGINDER SINGH BHOGAL SHRI R. S. BHOGAL (Alternate)

Controllerate of Quality Assurance (Vehicles), Ahmednagar SHRI P. V. HARKARE SHRI B. G. SHINDE (Alternate)

Department of Industrial Policy & Promotion New Delhi

Shri M. Z. Khan (Alternate) Director of Industries, Ludhiana GENERAL MANAGER (BSMC)

SENIOR TECHNICAL OFFICER (QMC) (Alternate) Directorate General of Supplies and Disposals, New Delhi SHRI R. K. AGGARWAL

SHRI K. K. SINHA

Shri W. M. Wanjari (Alternate) Directorate of Industries, Government of Haryana, Chandigarh SHRI R. N. GOYAL

SHRI SUNIL CHOPRA (Alternate) Govind Rubber Ltd, Distt Ludhiana SHRI VINOD PODDAR Shri S. P. Sukhrani (Alternate)

Hamilton Industries Pvt Ltd, Ambarnath SHRI RAVI HALDIYA

Shri P. R. Ravikumar (Alternate) Hartex Rubber Ltd, Hyderabad SHRI T. R. KUKREJA Hero Cycles Ltd, Ludhiana SHRI S. K. RAI SHRI K. C. SHARVA (Alternate)

J. K. Cycles, Ludhiana SHRI JOGINDER KUMAR Kular Cycle Industries, Ludhiana SHRI AJIT SINGH SHRI DARSHAN SINGH (Alternate)

Metro Tyres Limited, Ludhiana SHRI L. K. MATHUR SHRI SANJEEV SOOD (Alternate)

Milton Cycle Industries, Sonepat SHRI RAHUL KAPUR SHRI S. N. SHARMA (Alternate)

Nova Bicycle Industries, Ludhiana SHRI HARMINDER SINGH PAHWA SHRI ROHIT PAHWA (Alternate)

Office of the Development Commissioner (SSI), New Delhi SHRI R. L. GARG Shri M. B. Jaya Kumar (Alternate)

Ralson (India) Limited, Ludhiana SHRI SANJEEV PAHWA T.I. Cycles of India, Chennai SHRI S. SADISH KUMAR Shri V. Durairaj (Alternate)

United Cycle & Parts Manufacturers Association, Ludhiana PRESIDENT GENERAL SECRETARY (Alternate)

SHRI T. V. SINGH, Scientist 'F' & Head (TED) BIS Directorate General [Representing Director General (Ex-officio)]

> Member Secretary SHRI P. S. MUJRAL Scientist 'F' (TED), BIS

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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