ANNEXURE 1

(Item 2.3)

AUTOMOTIVE TYRES, TUBES AND RIMS SECTIONAL COMMITTEE, TED 7

SCOPE — Standardization of automotive tyres, tubes, rims, and related Co-ordination of work with ISO/TC 31 and its relevant subcommittees, Co-ordination of work with ISO/ TC 22 and its Sub-committee ISO/TC 22/SC 33.

Meeting No.	Date	Venue
40th Meeting	1st December 2023	Physical Meeting (BIS HQ, New Delhi)
41st Meeting	4th March 2024	Virtual Meeting
42nd Meeting	14th May 2024	Virtual Meeting

Sl. No.	Name of the Organization	REPRESENTED BY *Principal member (P)* *Alternate member (A)* *Young professional (YP)*	Attendance			
			40th	41st	42nd	Total
1)	IN INDIVIDUAL CAPACITY	Shri D. P. Saste (Chairperson)	Y	Y	Y	3/3
2)	All India Motor Transport Congress, New Delhi	Shri Naveen Gupta (P) Shri Pramod Bhavsar (A)	N	Y	N	1/3
3)	Ashok Leyland Limited, Chennai	Shri Muthukumar N (P) Shri Ved Prakash Gautam (A)	Y	Y	Y	3/3
4)	Automotive Component Manufactures Association of India, New Delhi	Shri Sanjay Tank (P) Ms. Seema Babal (A)	Y	Y	Y	3/3
5)	Automotive Research Association of India, Pune	Shri A Akbar Badusha (P) Shri Vyanktesh S. Khairatkar (A) Shri Pranab Devrajan (YP)	Y	Y	Y	3/3
6)	Automotive Tyres Manufacturers Association, New Delhi	Shri Rajiv Budhraja (P) Shri T. C. Kamath (A)	Y	Y	N	2/3
7)	Bajaj Auto Limited, Pune	Shri Milind J Pagare (P) Shri Arvind V. Kumbhar (A) Shri. Parmeshwar Mane (YP)	Y	Y	Y	3/3
8)	Central Institute of Road Transport, Pune	Shri Farukh S Makhdoom (P) Shri Sanjay B Salunkhe (A) Shri Nilesh Barmukh (YP)	Y	N	Y	2/3
9)	Controllerate of Quality Assurance (Materials), Kanpur	Shri Asoka Kumar MN (A)	-	Y	N	1/2
10)	Department for Promotion of Industry and Internal Trade, New Delhi	Shri Rajesh Rawat (P) Shri K. Raj Kumar (A)	-	-	N	0/1
11)	Directorate General of Quality Assurance, New Delhi	Shri Devendra Khapekar (P) SR Jadhav (A)	N	N	N	0/3
12)	ENKEI WHEELS (INDIA) LIMITED, Maharashtra	Shri Vikramsinh Kakade (P) Shri Tomoyoshi Seki (A) Shri Sachin Utpat (YP)	Y	N	N	1/3
13)	Global Automotive Research Centre, Oragaram	Dr. A. S. Ramadhas (P) Shri V M Dhanasekkar (A) Shri S. Nagarajan (YP)	-	Y	Y	2/2
14)	Hero Motocorp Limited, New Delhi	Shri Piyush Chowdhry (P) Shri Feroz Ali Khan (A) Shri Mohd. Danish Gazali (YP)	Y	Y	Y	3/3

Sl. No.	Name of the Organization	REPRESENTED BY *Principal member (P)* *Alternate member (A)* *Young professional (YP)*	Attendance			
			40th	41st	42nd	Total
15)	Honda Cars India Research and Development Limited, Noida	Shri S. MUTHU KUMAR (P) Shri Gagan Manral (A) Ms. Neha Gaba (A)	**Y**	**Y**	**Y**	**3/3**
16)	Honda Motorcycle and Scooter India Private Limited, Gurgaon	Shri Vipin Sharma (P) Shri Arpan Shukla (A)	**-**	**Y**	**Y**	**2/3**
17)	International Centre for Automotive Technology, Manesar	Shri Keshav Kumar Tripathi (P) Shri Harish Joshi (A) Shri Jayant Raj (YP)	**Y**	**Y**	**Y**	**3/3**
18)	India Yamaha Motor Private Limited, Noida	Shri Mohit Kansal (P) Shri Navneet Kaushik (YP)	**Y**	**Y**	**Y**	**3/3**
19)	Indian Foundation of Transport Research and Training, New Delhi	Shri S. P. Singh (P) Shri J. S. Walia (A)	**Y**	**N**	**N**	**1/3**
20)	Indian Rubber Manufacturers Research Association, Thane	Shri Bharat Kapgate (P) Shri Sachin Barve (A)	**Y**	**Y**	**Y**	**3/3**
21)	Indian Tyre Technical Advisory Committee, New Delhi	Shri V. K. Misra (P) Shri Niteesh Shukla (A) Shri Vinay Vijayvargia (YP)	**Y**	**Y**	**Y**	**3/3**
22)	Kalyani Maxion Wheels Chakan, Pune	Shri Sunil Bhatambrekar (P)	**Y**	**Y**	**Y**	**3/3**
23)	Mahindra and Mahindra Limited, Mumbai	Shri Ram Singh (P) Shri Kulkarni Shailesh (A) Ms. Pathak Pushpanajali (YP)	**Y**	**Y**	**Y**	**3/3**
24)	Maruti Suzuki India Limited, Gurugram	Shri Gururaj Ravi (A) Shri Raj Kumar Dwivedi (YP) Shri Manoj Prabagar (YP)	**Y**	**Y**	**Y**	**3/3**
25)	Michelin India Private Limited, Pune	Shri Ashish Agrawal (P) Shri Saravanan Chinniah (A)	**-**	**Y**	**Y**	**2/2**
26)	Minda Kosei Aluminum Wheels Pvt. Ltd, Bawal	Shri Hemant Parkhi (P) Shri Dushyant Chauhan (A)	**Y**	**Y**	**Y**	**3/3**
27)	National Automotive Testing and R and D Infrastructure Project, Indore	Shri S J SRIHARI (P) Shri J K Chakrabarty (A)	**N**	**Y**	**Y**	**2/3**
28)	Renault Nissan Technology and Business Centre India Private Limited, Chennai	Shri Rajendra Khile (P) Shri S.Vivekraj (A) Shri C V Girish Chandh (YP)	**N**	**Y**	**Y**	**2/3**
29)	Skoda Auto Volkswagen India Pvt.Ltd, Mumbai	Shri Makarand Brahme (P) Shri Milind Jagatp (A) Ms. Saily Smarth (YP)	**Y**	**Y**	**Y**	**3/3**
30)	Sonil Ventilfabrik, Jamnagar	Shri Himesh Shah (P) Shri Maulik Shah (A)	**-**	**-**	**Y**	**1/1**
31)	Steel Strips Wheel Limited, Chandigarh	Shri Vimal P. Anand (P)	**N**	**Y**	**Y**	**2/3**
32)	Suzuki Motorcycle India Private Limited, Gurugram	Shri Avinash Khot (P) Shri Ramkrishna Ahire (A)	**Y**	**Y**	**N**	**2/3**
33)	TREA-Tyre Retreading Education Association, Mumbai	Shri Rahul Saxena (A) Shri Karun Sanghi (A)	**Y**	**Y**	**Y**	**3/3**
34)	TVS Motor Company Limited, Hosur	Shri Winney K Mathews (P) Shri S Gururajan (A)	**-**	**-**	**Y**	**1/1**
35)	Tata Motors Limited, Pune	Shri Gowrishankar P. S. (P) Shri Pataloba Nagane (A)	**Y**	**Y**	**Y**	**3/3**

Sl. No.	Name of the Organization	REPRESENTED BY *Principal member (P)* *Alternate member (A)* *Young professional (YP)*	Attendance			
			40th	**41st**	**42nd**	**Total**
36)	Toyota Kirloskar Motor Private Limited, Bidadi	Shri Raju. M (P) Shri Vijeth Gatty (A) Shri Dinesh G. M. (YP)	**Y**	**Y**	**Y**	**3/3**
37)	Tractor and Mechanization Association, New Delhi	Shri Philip Koshy (P) Shri PRADEEP SHINDE (A)	**Y**	**N**	**Y**	**2/3**
38)	Triton Valves Limited, Bengaluru	Shri Bharath Chandrashekar (P) Shri Somaiah KA (A)	**Y**	**Y**	**Y**	**3/3**
39)	Vehicle Research and Development Establishment, Ahmednagar	Shri Vinod Kumar (P)	**-**	**-**	**-**	**NA**
40)	Volvo Trucks, VE Commercial Vehicles Limited, Bengaluru	Shri Challapalli Nithin Roy (P) Shri Gedela Chaitanya (A)	**Y**	**Y**	**Y**	**3/3**
41)	Wheels India Limited, Chennai	Shri Vimalraj T (P) Shri Senthil kumar (A) Shri Shiv Narayan Giri (YP)	**Y**	**Y**	**Y**	**3/3**

ANNEXURE 2

(Sl No 1 of Item 3)

DRAFT DOCUMENT RECEIVED FROM ITTAC FOR IS 15633

A-2.1 MAIL FROM ITTAC

In continuation of mail below, please find enclosed the proposed draft Amendment #2 to IS 15633:2022 which incorporates the following changes:

1. Removal of EMT as structure from clause 3.1.1 (d) based on the discussion in last TED 7 meeting.
2. Inclusion of High Load Capacity (HLC) tyres in line with Amendment # 11 to ECE R30.
3. Inclusion of Run Flat as Structure in clause 6.2.5.2 (f).
4. Changes in Annex J in Sl. No. 9 and insertion of new clause for EMT.

You are requested to circulate the draft among Members for review / feedback.

A-2.2 DRAFT FROM ITTAC

Amendment No. 2

To

IS 15633 : 2022 AUTOMOTIVE VEHICLES — PNEUMATIC TYRES FOR PASSENGER CAR VEHICLES — DIAGONAL AND RADIAL PLY — SPECIFICATION

(First Revision)

(Page 1, clause 3.1.1) — Substitute the following for the existing:

‘3.1.1 Type of Pneumatic Tyre — It means a category of pneumatic tyres which do not differ in such essential respects as:

a)Manufacturers name and brand name;

b)Tyre-size designation;

c)Category of use:

1)Normal — Normal road use tyres;

2)Special — Special-use tyre, for example, tyre for mixed use (both on and off the road) at restricted speed;

3)Snow tyre; and

4)Temporary use spare tyre;

d)Structure [diagonal (bias-ply), bias-belted, radial, run flat];

e)Speed category;

f)Load-capacity index or maximum load and ply rating; and

g)Nominal cross-section — Dimension when fitted to a specified rim.’

(Page 5, clause 5.1 m) — Substitute the following for the existing:

5.1 (m) REINFORCED / REINF / EXTRA LOAD / XL for reinforced tyres. Optionally the letters "HL" in front of the nominal section width in the case of Extra Load tyres.

(Page 9, clause 6.2.5.2 f) — Substitute the following for the existing:

6.2.5.2 (f) Structure [diagonal or radial or bias belted or run flat];

(Page 33, Annex J, Sl. No. 9) - Substitute the following for the existing:

‘9. Structure: [diagonal (bias-ply), bias-belted, radial, run flat];’

(Page 33, Annex J – Insert the following after Sl. No. 9 as Sl. No. 10 and renumber the subsequent:

Whether the tyre is an EMT

ANNEXURE 3

[item 3 (Sl No 1, 5 to 7, and 15 to 22, 35) , 5.1.2, 5.1.3, 5.3.1, 5.3.2, and 5.3.4]

AGENDA AND MINUTES OF PANEL 1 MEETING

A-3.1 AGENDA OF PANEL 1 MEETING (18 JUNE 2024)

Agenda points:

1. ARAI and IRMRA comments on minutes of last panel 1 meeting, held on 29.04.2024 *(please refer the attached comments*)

2. IRMRA proposal on testing of temporary use spare tyres. (*Proposal enclosed*)

Following pending items from last panel 1 meeting, held on 29.04.2024 *(please refer the attached MoM)*

a. TKM proposal on review of scope of IS 15633:20022.

b. Comments from Michelin on IS 15636:2022 : Michelin has shared the sought ECE document. (Copy enclosed)

c. Use of recommended or alternate rims for testing of tyres as per IS 15627:2022, IS 15633:2022 & IS 15636:2022.

d. IRMRA comments on mandatory markings in IS: 15633/15636 standards in comparison with AIS 142:

Following points evolved from 42nd meeting of TED-7, held on 14.05.2024 *(Please refer the attached MoM)*

a. Clarification received from FMCD (BIS) on IS 15636:: MPT category of tyres.

Recommendation of TED-7 Committee: *The Committee deliberated at length and asked ITTAC and SIAM to review the international standards and necessity of Indian Industries. It requested these organizations to provide detailed information to Panel 1 on additional tyre categories that should be included in Indian Standards to ensure the timely fulfilment of the requirements of Indian industries.*

b. Comment received from CIRT on IS 13098: (Committee deliberated and requested Panel 1 to deliberate in detail and provide its recommendation for further deliberation.)

Attachment 1: ARAI Comment on Minutes of panel 1 meeting (29.1.2024)

For definition clause ARAI had made a comment that changes in definition need to be reflected in standard's applicable tables and clauses.

This needs to be verified and confirmed for changes in standard.

For marking clause requirements added for temporary and t type tyre ARAI can confirm once design and other relevant inputs are tabled during forthcoming meeting.

Comments for your kind perusal please.

A-3.2 MOM OF PANEL 1 MEETING (18 JUNE 2024)

Minutes of Panel 1 Meeting: 25.06.2024

Meeting Title	Panel 1 Meeting for discussion on review of different IS Standards
Convener	Mr. Niteesh K. Shukla, Director, ITTAC
Day & Date	Tue, 18th June. ’24
Time	2:00 PM to 4.30 PM
Mode	MS Teams

Agenda points:

- ARAI and IRMRA comments on minutes of last panel 1 meeting, held on 29.04.2024.
- ITTAC & IRMRA proposal on testing of temporary use spare tyres.

Following pending items from last panel 1 meeting, held on 29.04.2024

- TKM proposal on review of scope of IS 15633:2022.
- Comments from Michelin on IS 15636:2022
- Use of recommended or alternate rims for testing of tyres as per IS 15627:2022, IS 15633:2022 & IS 15636:2022.
- IRMRA comments on mandatory markings in IS: 15633/15636 standards in comparison with AIS 142:

Following points evolved from 42nd meeting of TED-7, held on 14.05.2024

- Clarification received from FMCD (BIS) on IS 15636: MPT category of tyres.
- Comment received from CIRT on IS 13098: (Committee deliberated and requested Panel 1 to deliberate in detail and provide its recommendation for further deliberation.)
- **IS 9168**
- **Other points**

Key summary on the discussed agenda points is as under:

Agenda point	Discussion	Recommendation by Panel 1

Review of ARAI and IRMRA comments on minutes of last panel 1 meeting, held on 29.04.2024.	Director, ITTAC explained that the comments from ARAI (*changes in definition need to be reflected in standard's applicable tables and clauses*) have already been take care in the ITTAC proposal on testing of temporary use spare tyres, which is aligned as per ECE R30. Director, ITTAC explained that IRMRA's comments on aligning definitions of IS 15633 with AIS 142 and additional speed marking of 80 Km/h for temporary use spare tyres are the part of discussion in 18th June meeting. Mr Niteesh K Shukla added that, as the comments from ARAI and IRMRA are already the part of discussion points in 18th June meeting, therefore, there is no need to revisit the minutes of meeting, held on 29th April 24.	Panel noted and agreed with the observation made by Director, ITTAC on recording of minutes of last panel 1 meeting.
ITTAC & IRMRA proposal on testing of temporary use spare tyres.	Panel 1 discussed & deliberated at length to address the **additional marking of speed (80 Km/h)** on sidewalls of the T type and temporary use spare tyres and finally concluded to add below foot note under the clause no of 5.1 n) **Manufacturers may mark additional speed in Km/h lower than max speed rating marked on the tyre as recommended by vehicle manufacturer.** Panel further reviewed other points of ITTAC proposal ***(Annex-1)*** including the applicability of endurance test and found them in the order.	Panel agreed with proposed changes to take care of additional speed marking (80Km/h) or other, if any. Copy of the finalized proposal by Panel 1 on testing of temporary use of spare is attached as **Annex-1.**
Pending items from last panel 1 meeting, held on 29.04.2024		
TKM proposal on review of scope of IS 15633:2022	Panel did not agree with the ITTAC proposal on inclusion for **M4 category of vehicles** in the scope of IS 15633 due to the involvement of lengthy administrative process for change in **CMVR rules**. Mr Sachin from IRMRA and Mr Salunke from CIRT highlighted the change in the test & its conditions (duration & speed of endurance test, IP for endurance & dimension test, etc.) for the said tyres to be tested as per IS 15633 and IS 15636 and were of opinion that all the precautionary measures to be taken up for proposing fitment of PCR tyres in N1 category of vehicles.	**Panel advised TKM to come out with new proposal** (*considering N1 derived from M1 vehicles with a very limited and controlled manner or any other option/proposal)* for its discussion and review in next panel 1 meeting.

Comments from Michelin on IS 15636:2022	Panel reviewed the presented ECE R 54 document **(Series 00, Supplement 26)** by Mr Aashish from Michelin on category of use	Panel noted and agreed to consider the proposed changes: "For the tyres belonging to the category of use "**special use tyre"** may bear the inscription **M+S or M.S or M&S)** to align IS 15636 with ECE R 54. **Panel advised ITTAC/Michelin to share the draft document with Mr August Dubey for the needful at his end**.
Use of recommended or alternate rims for testing of tyres as per IS 15627:2022, IS 15633:2022 & IS 15636:2022.	ITTAC proposed to maintain the existing status **on use of recommended or alternate rims** for testing of tyres as per **IS 15627, IS 15633 & IS 15636** on following grounds: ''Bead-unseating and plunger Test to be performed on recommended rim as both tests are dependent on the curvature of tyre''	Panel noted and agreed to ITTAC proposal for maintaining the existing status on use of recommended or alternate rims for testing of tyres as per IS 15627, IS 15633 & IS 15636. **Panel advised Mr August Dubey, member secretary, TED-7 to forward the minutes of 18th June 24 meeting to FMCD enabling them to clear the pending tyre approvals on this subject.**
IRMRA comments on mandatory markings in IS: 15633/15636 standards in comparison with AIS 142:	Mr Sachin from IRMRA highlighted that IS 15633 and IS 15636 do not cover following marking requirements illustrated in AIS 142:2019. o The "Alpine" symbol for snow tyre for use in severe snow conditions" o MPT" (or alternatively "ML" or "ET"), POR" tyres.	Panel noted the observation made by IRMRA and advised test agencies **(IRMRA and ICAT)** to do the Gap analysis for aligning marking & other requirements of IS 15633 & IS 15636 with AIS 142:2019. Post receipt of the inputs/details/information from the test agencies, the same to be discussed in next panel 1 meeting.
Points evolved from 42nd meeting of TED-7, held on 14.05.2024		
Clarification received from FMCD (BIS) on IS 15636: MPT category of tyres.	Panel discussed the received clarification from FMCD and TED -7 committee advised for inclusion of MPT tyres in IS 15636:2022. **ITTAC proposed, in line with ECE R54, MPT category of tyres can be included in IS 15636:2022.**	Panel agreed to ITTAC proposal for inclusion of MPT category of tyres in IS 15636 to align with ECE R54. **Panel advised ITTAC to share the draft document with Mr August Dubey for the needful at his end.**
Comment received from CIRT on IS 13098.	Mr Dahiya from CIRT briefed the comments before the Panel. Mr August Dubey mentioned that CIRT comments have already been discussed in **42nd meeting of TED-7** *(Item 4.2 of MoM)*	Panel noted the status shared by Mr August Dubey on CIRT comments on IS 13098.
Shri Arvind from BAL mentioned that in the scope of IS 13098, quadricycle is not included, it should also be included.	Panel discussed the proposal of BAL and found it in the order.	Panel agreed to include **quadricycle in the scope of IS 13098.**
IS 9168	Mr August advised panel to discuss the received comments of IS 9168, as decided in **42nd meeting of TED-7** *(Item 4.6 of MoM)*	Panel noted and advised for its discussion in next meeting.
Other agenda points		
Review of Table 07 and Table 08 of IS 15633:2022 for EMT and Run flat tyres	**Mr August Dubey,** TED-7 mentioned panel that existing table 07 and 08 of IS 15633:2022 needs to be reviewed for additional load speed test requirements for Run flat and EMT tyres. Panel proposed following draft: • If tyres identified by means of letter code 'ZR', 5th tyre shall be required for	Panel advised ITTAC *(based on the discussed direction/grounds)* to review the **Table 07 and Table 08 of 15633:2022 to take care of additional load speed test requirements for Run flat and EMT**.

	performing additional load/speed test as per 4.2.2 • If tyres are identified by means of letter code 'ZR' and speed more than 300 km/h & additional EMT and Run flat tyres, **6th tyre** shall be required for performing additional load/speed test as per 4.2.2.	Panel also advised ITTAC to review the requirements for IS 15636:2022. **(for speed rating Q and above)**
Comments received from **Mr T Chakravarty**	Mr August Dubey highlighted the comments from Mr T Chakravarty on the review of few standards in Panel 1 has not yet been addressed.	**Panel noted and agreed to discuss the comments of Mr T Chakravarty** in next meeting, where in Mr T Chakravarty to be present.
Formulation of Standard for the Off-road tyres	Mr August Dubey informed the Panel regarding initiative taken by TED-7 on formulation of Standard for the Off-road tyres. Mr Niteesh K Shukla, Dir, ITTAC informed Mr August Dubey that, ITTAC has discussed this subject internally and will provide all its support in the formulation of Standard.	**Panel noted and advised ITTAC come out with the draft proposal for its discussion in next meeting.**

Pending actionable items/subjects by Panel 1 on concluded points in last panel 1 meeting, held on 29.04.2024

Introduction of HLC (High Load Capacity) tyres in IS 15633:2022	Panel reviewed and agreed to include HLC (High Load Capacity) tyres in IS 15633:2022. **ITTAC to provide the details.**

Comments from Michelin on IS 15633:2022

Clause 5.1/ Page 8	Marking requirements of Run flat and EMT	**According to IS 15633:2022 Amendment 1,** (Page 8, clause 5.1) — Insert the following after 5.1(c)(4): 5) On run flat tyres the letter 'F' placed in front of the rim diameter marking.'	Align the marking requirement with R30 (Series 02, Supplement 25), Clause 2.25.3.5. on run flat or self-supporting tyres, the letters "RF" placed in front of the rim diameter marking (for example, "235/45 RF 17").	**To Align the marking requirement with ECE R30**	**Ok/Agreed** **Panel 1 to provide draft wording to address this clause.**

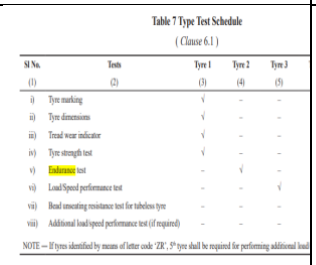
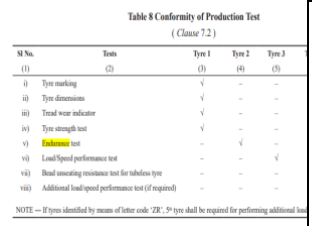
Comments from ICAT on IS 15633:2022

Annex J	**New Clause**	n) Fabric material - Nylon (polyamide)/polyester/ rayon etc. (one type).	Fabric Material to be declared in Annex J.	Same is available in IS 15627 annex K. This is required since fabric material is not part of mandatory marking but is required for extension cases.	**Ok/Agreed**

Attachment: Reviewed ITTAC proposal on testing & certification of temporary use spare tyres as per IS 15633:2022

Cl. No.	Title	IS 15633:2022	Proposal by ITTAC	Justification	Recommendation of Panel 1

3.33/ 3.33.1	**Definition**	3.33 Temporary Use Spare Tyre — Tyre different from a tyre intended to be fitted to any vehicle for normal driving conditions but intended only for temporary use under restricted driving conditions. 3.33.1 T-type Temporary Use Spare Tyre — A type of temporary use spare tyre designed for use at inflation pressures higher than those established for standard and reinforced tyres	**3.33**: Same as existing. Replace the existing sub clause 3.33.1 with the new clause 3.34 **3.34** T-type Temporary Use Spare Tyre — A type of temporary use spare tyre designed for use at inflation pressures higher than those established for standard and reinforced tyres.	To align with ECE R30. To improve clarity in definition for Temporary-use spare	**Ok/Agreed**
3.1.1	**Definitions**	Type of Pneumatic Tyre — It means a category of pneumatic tyres which do not differ in such essential respects as: a) Manufacturers name and brand name; b) Tyre-size designation; c) Category of use: 1) Normal — Normal Road use tyres; 2) Special — Special-use tyre, for example, tyre for mixed use (both on and off the road) at restricted speed; 3) Snow tyre; and 4) Temporary use spare tyre	**Existing Sr no 04 to be replaced with following:** 4) *Temporary use spare tyre and T-type temporary use spare tyre*	Improvement in the definition clarity for the category of use	**Ok/Agreed**
5.1	**Marking requirements**	5.1 n) For T-type temporary use spare tyre following additional markings are required: 1) TEMPORARY USE ONLY. (The height of upper-case characters shall be at least 12.7 mm high); 2) INFLATE TO 420 kPa (60 psi) *(The height of upper-case characters shall be at least 12.7 mm high*); and 3) T in front of the nominal section width. (The height of characters shall be as specified for tyres size designation) NOTE – The above markings may be marked in the upper area of the tyre.	Existing clause 5.1 n) to be replaced with following: n) For Temporary use spare tyre and T-type Temporary use spare tyre additional marking of **TEMPORARY USE ONLY** *(The height of upper-case characters shall be at least 12.7 mm high)* and manufacturers may mark additional speed in Km/h lower than max speed rating marked on the tyre as recommended by vehicle manufacturer**.** **For T-type temporary use spare tyre following additional markings are required:** 1) INFLATE TO 420 kPa (60 psi).(The height of upper-case characters shall be at least 12.7	**To align with ECE R30**. To include the marking requirements for the Temporary-use spare tyre. To inform end users regarding restricted driving condition for additional marked speed on tyres	**Ok/Agreed.**

			mm high. 2) T in front of the nominal section width. (The height of characters shall be as specified for tyres size designation) NOTE – 1) The above markings may be marked in the upper area of the tyre.		
6.1 / 4.3.1/ Table 7	**Type Test Schedule**	 Table 7 Type Test Schedule (*Clause* 6.1) Sl No. / Tests / Tyre 1 / Tyre 2 / Tyre 3 (1) / (2) / (3) / (4) / (5) i) Tyre marking √ – – ii) Tyre dimensions √ – – iii) Tread wear indicator √ – – iv) Tyre strength test √ – – v) Endurance test – √ – vi) Load/Speed performance test – – √ vii) Bead unseating resistance test for tubeless tyre – – – viii) Additional load/speed performance test (if required) – – – NOTE — If tyres identified by means of letter code 'ZR', 5th tyre shall be required for performing additional load NOTE — If tyres identified by means of letter code 'ZR', 5th tyre shall be required for performing additional load/speed test as per 4.2.2.	NOTE — a) If tyres identified by means of letter code 'ZR', 5th tyre shall be required for performing additional load/speed test as per 4.2.2	Clause 6.1 is mandatory clause and need to merge the requirement of clause 4.3.1 in clause 6.1 To imply **only for T-type temporary spare, endurance test is exempted and applicable for all other types of tyres.**	As discussed in the meeting, ITTAC to review the **Table 07 and Table 08 of 15633:2022 to take care of additional load speed test requirements for Run flat and EMT**
7.2/4.3.1/ Table 8	**Conformity of Production**	 Table 8 Conformity of Production Test (*Clause* 7.2) Sl No. / Tests / Tyre 1 / Tyre 2 / Tyre 3 (1) / (2) / (3) / (4) / (5) i) Tyre marking √ – – ii) Tyre dimensions √ – – iii) Tread wear indicator √ – – iv) Tyre strength test √ – – v) Endurance test – √ – vi) Load/Speed performance test – – √ vii) Bead unseating resistance test for tubeless tyre – – – viii) Additional load/speed performance test (if required) – – – NOTE — If tyres identified by means of letter code 'ZR', 5th tyre shall be required for performing additional load NOTE — If tyres identified by means of letter code 'ZR', 5th tyre shall be required for performing additional load/speed test as per 4.2.2.	NOTE — If tyres identified by means of letter code 'ZR', 5th tyre shall be required for performing additional load/speed test as per 4.2.2.	To imply only for T-type temporary spare, endurance test is exempted and applicable for all other tyre types	
Table no 15 & 16	**Title**	Temporay Use Spare Tyre	**T Type Temporay Use Spare Tyre**	Sizes belong to T type temporary use spare tyre	**OK/Agreed**
New footnote for Table 14	New proposal	NA	"For temporary use spare other than T-type temporary spare tyres, refer Table 9 to Table 14 for dimension, load and inflation pressure details."	To take care for development of tyre sizes mentioned in Table 9 to Table 14	**OK/Agreed**

List of Participant in Panel 1 meeting

A-3.3 AGENDA OF PANEL 1 MEETING (21ST AUG 24)

Agenda points:

1. ARAI and IRMRA comments on the minutes of **last Panel 1 meeting**, held **on 18.06.2024** (*please refer the attached comments on testing & certification of Temporary use spare tyres*)
2. BIS comments/observation on reviewed Re-treading Standards, IS 15731, IS 15524, IS 15780 & IS 15725 (*please refer the attached comments from TED-7*)
3. Comments from **FMCS, BIS** on use of recommended & alternate rims for tests covered in IS 15633:2022. (please refer the attachment for details)
4. IRMRA?s comments on **applicability of clause no. 4.2.5 & 4.2.6** of **IS 15633:2022** during flat tyre running mode test(test procedure :C3/C4) { *please refer the attachment for details*)
5. Comments from CQAV on service and storage life of the tyres. (Please refer the attachment)

Following pending items from last panel 1 meeting, held on 18.06.2024 *(please refer the attached MoM)*

1. TKM proposal on review of scope of IS 15633:2022 (*TKM will present their new proposal*)
2. **Aligning marking requirements of IS 15633 & 15636 with AIS 142**.

- ICAT has done a comprehensive review of marking requirements of IS Standards (IS 15633 & IS 15636) with **ECE R 30, ECE R 54, ECE R 117 and AIS 142.**
- Copy of the Gap Analysis document (***as received from ICAT***) is enclosed for your ready reference.

3. Review of Table 07 and Table 08 of IS 15633:2022 for **EMT and Run flat tyres**.
4. Comments received from **Mr T Chakravarty** on reviewed Standards.
5. **Formulation of Standard for the Off-road tyres.**

Attachment 1: ARAI Comment on MoM

Dear Sh. Shukla,

Greetings from ARAI.

As discussed some time ago, we have following points to be considered during discussions in TED 7, Panel – 1 members.

This would help proposer to prepare proposal.

1. **Alignment of requirements for temporary spare tyre should be aligned to AIS 110 and corresponding requirements from UNECE R 64.**
2. **Marking of additional speed requirement can be discussed considering safety and legal issues and compliance to regulations.**

As suggested we may seek proposer to prepare and share his comments in detail for panel 1 consideration.

We can discuss same in suitable forum.

Hope this clarifies.

Attachment 2: IRMRA Comment on MoM

Comments on applicability of endurance test for temporary use spare tyres:

1. As per current notified standard i.e. AIS 110, endurance test is not applicable for all types of temporary spare tires (Copy attached).

2. If it is be mandated for subject new category of temporary spare tires in IS: 15633 considering more safety aspect then it should be mandated for all types of temporary spare tires including T type also due to similar intended for use.

To avoid any confusion, wording in additional speed marking can be modified to

Proposed & finalized by Panel 1: Manufacturers may mark additional speed in Km/h lower than max speed rating marked on the tyre as recommended by vehicle manufacturer.

Proposed by IRMRA: Manufacturers may mark additional speed in Km/h lower than *speed category symbol* (given in 3.29) marked on the tyre as recommended by vehicle manufacturer.

Panel may deliberate and discuss this point.

Attachment 3: IRMRA comments on Reg. applicability of clause no. 4.2.5 & 4.2.6 during flat tyre running mode test(test procedure C3C4) (1)

Please refer below clause, we need to clarify **whether 4.2.5 & 4.2.6 clauses will be applicable while doing flat tyre running mode test or not (test procedure: C3/C4).**
'4.2.1 The sample shall conform to the requirements given in 4.2.3 (new 4.2.5) and 4.2.4(new 4.2.6) when tested as per the method given in Annex C (Table 13: to be corrected table 17). Run flat and extended mobility tyres, additionally shall conform to the requirement given in 4.2.7 (test procedure: C3) and 4.2.8 (Test procedure: C4) respectively.'
Please find images of visual observation after the said test for information.

Attachment 4: Mail from FMCS
This has reference to the Agenda point "*Use of recommended or alternate rims for testing of tyres as per IS 15627:2022, IS 15633:2022 & IS 15636:2022*" as per the trailing mail. In this regard, following is observed:
1. For Load speed performance test, IS 15633 prescribes the following: *Mount the tyre on the measuring rim specified by the manufacturer and inflate it to a pressure of 3 to 3.5 bar*. The manufacturer declares the rim size as per the format in Annex-J. Whether any rim size other than that specified in Annex-J in the measuring rim/test rim can be used for testing.
2. For Endurance test, there is no specific rim size mentioned in IS 15633. Whether the test can be carried out on any of the recommended rim size or alternate rim size.

Attachment 5: Marking Comparison
NOTE: Due to size issue, it could not be added here, it is attached as separate document.

Attachment 6: CQAV Comment
Brigadier Rajiv Chawla from (DGQA- CQAV) requested to specify the requirement of **storage life of tyre** and **Service life of tyre,** in existing standard or formulate a new Indian Standard for reference/guide.

Committee deliberated and mentioned that rubber has self-deteriorating tendency, and life of tyre depends not only on operating conditions, so generating the limit value or guideline could be difficult. However, **it requested Panel 1 to deliberate in detail review international reference and practices and provide its input for further discussion.**

Attachment 7: Observation from BIS on Retreading Standards

IS 15731: 2018

1. Draft document for amendment 1 has been issued into WC. However following observation is made by Member Secretary on draft document:

	Sentence in WC document	Observation
Cl 3.1.1	In addition to properly functioning tyre spreaders, adequate lighting is necessary. The tyre inspection area, in general, shall be well lighted. The place where tyres are being inspected should have internal lighting of not less than 200 foot-candles. The recommended lighting is 300 foot-candles or above 3200 lux recommended. A simple light meter can measure the effectiveness of the actual lighting.	Recommended lighting is 300 foot -candles or above 3200 lux. It seems contradictory, as in 1st part of sentence, fixed value is given (300 foot-candles), in 2nd part of the sentence it says above 3200 lux without specifying the limit.

- **IS 15524**: Following was approved by Panel 1

5.6		Building and Trend Application		Building and Tread Application New clauses: (i)Cut the tread to approximately the same length as the center line circumference of the tyre. Tread design should match as closely as possible at the splice (ii) Cut tread ends squarely to ensure a proper match. Then, tread ends should be texturized, cemented, and a layer of cushion gum applied between the ends. (iii) The splice should be made with the tread in a relaxed condition or under slight compression. A blunt tool should be used to force the precured tread ends against the splice gum to ensure good adhesion at the splice. To ensure the splice remains closed, use staples as necessary. Stitch down the complete tread with a stitcher or builder-applicator to avoid trapping air, pulling the tread off centre, and distorting, folding or wrinkling in the shoulders. Also, to ensure stitching is done from crown to shoulder.	Process Improvement to get quality finished product.

Observation: Currently under clause 5.6, 7 sub-clause (5.6.1 to 5.6.7) are there and each are with some title. It is not clear from the above that the proposed clauses should be placed directly under 5.6 or where?

IS 15780

1. **Clause 4.1**

Current Sentence Mentions (tube, if applicable).

Proposed Change Deletes the word "tube"; however clause 4 refers Annex A, which includes specifications for "Tube" (A-3).

2. **Clause 9.2 c:**

Proposed Change Suggests deleting items 1, 2, and 3 under 9.2 c). If deleted, the sentence would be incomplete, as highlighted below:

- ***Current Text***

c) Ensuring that reinforced patches for tyres, if correctly applied in completed carcass repairs, are capable of withstanding a pressure not less than the following:
1) Car tyres: five times the highest inflation pressure, appropriate to the tyre size.
2) Commercial vehicle tyres: three times the highest inflation pressure, appropriate to the tyre size. 3) Motor cycle and scooter tyre. three times the highest inflation pressure, appropriate to the tyre size.

NOTE — The capability outlined in 9.2(c) necessitates special test facilities for the patch manufacturer or supplier. The tyre repairer should not attempt to carry out the test unless he is ako a patch manufacturer

4. Annex E:

- Proposal to add two tables under Annexure E. However, no reference of clause is made in the proposal. A reference clause is required to add the tables.

5. Annex G:

- Proposal to add a figure under Annex G. However, no reference of clause is made in the proposal. A reference clause is required to add the figure.

6. Annex H:

- Proposal to add a new clause under Annex H. Clarification needed on where to add it – directly as H-3 or under another clause.

7. Figure 7:

Proposal to delete Figure 7; however, Figure 7 is referenced in clauses D-2.3 and F-2.

8. Figure 9:

- Justification for deletion is given as: The figure is incorrect. Rather than deleting it, a corrected figure may be substituted.

9. Figure 11:

- Proposal to delete Figure 11. Rather than deleting it, a corrected figure may be substituted.

Additional Comment on IS 15780:

Clause 6.1 d of IS 15780 is as follows:
Tubes and valves shall be repaired such that they retain their original performance capabilities (see IS 9081).
Comment: For Tube, IS 13098 is applicable and for Valve, IS 9081 is applicable. Panel/Committee may please deliberate.

IS 15725:

1. For info: For reference of ISO 17464 in place of IS 3400 Part 13-> Mail has been sent to CIRT to provide the detail of meeting of Meeting Number.
2. No panel recommendation is mentioned in front of clause 4 b) proposal.

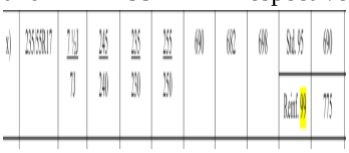
Attachment 8: ITTAC Comments on IS 15633, and amendment 01 to IS 15636:2022

ITTAC Comments on amendment no 01 to IS 15636:2022

Marking Clause	Existing	Proposed changes	Justification
5.3	Markings given in 5.1 shall be permanently moulded into or permanently engraved/etched on the tyres. These shall be clearly legible and situated in the lower area of the tyre on at least one of its sidewalls, **except for the inscription mentioned in paragraph 5.1 (a)**	**Tread wear indicators marking covered under 5.1(k)** should be also excluded from the items to be marked **in the lower area of the tyre.**	**To align with IS 15633:2022.**

ITTAC Comments on IS 15633:2022.

Tyre size designation	Existing	Proposed changes	Justification

Table 14, Page no 14, row (x)	For the tyre size: **235/55 R17,** Std. and Reinf. Load index is 95 and 99 respectively 	Existing Std. (95) and Reinf. Load (99) to be replaced with **99 and 103** respectively. Load against indices 99 and 103 are **775 kg** and **875 kg** respectively.	To align with the ETRTO and ITTAC Manual. Editorial correction.

A-3.4 MINUTES OF PANEL 1 MEETINGS (21 AUGUST 2024)

Minutes of Panel 1 Meeting: 03.09.2024

Meeting Title	**Panel 1 Meeting for discussion on review of different IS Standards**
Convener	Mr. Niteesh K. Shukla, Director, ITTAC
Day & Date	Wed, 21st Aug. '24
Time	2:00 PM to 4.30 PM
Mode	MS Teams

Agenda points:

- ARAI and IRMRA comments on minutes of last panel 1 meeting, held on 18.06.2024.
- BIS comments/observation on reviewed Re-treading Standards, IS 15731, IS 15524, IS 15780 & IS 15725.
- Comments from **FMCS, BIS** on use of recommended & alternate rims for tests covered in IS 15633:2022.
- IRMRA's comments on **applicability of clause no. 4.2.5 & 4.2.6** of **IS 15633:2022** during flat tyre running mode test (test procedure: C3/C4)
- ITTAC comments on IS 15636 & IS 15633:2022
- Comments from CQAV on service and storage life of the tyres.

Following pending items from last panel 1 meeting, held on 18.06.2024

1. TKM proposal on review of scope of IS 15633:2022 (*TKM will present their new proposal*)

2. **Aligning marking requirements of IS 15633 & 15636 with AIS 142**.

   - ICAT has done a comprehensive review of marking requirements of IS Standards (IS 15633 & IS 15636) with **ECE R 30, ECE R 54, ECE R 117 and AIS 142.**

3. Review of Table 07 and Table 08 of IS 15633:2022 for **EMT and Run flat tyres**.
4. Comments received from **Mr T Chakravarty** on reviewed Standards.
5. **Formulation of Standard for the Off-road tyres.**

Key summary on the discussed agenda points is as under:

Agenda point	Discussion	Recommendation by Panel 1

Review of ARAI's comments on MoM	Director, ITTAC, Convener in his opening remarks, requested members to share their comments/inputs on any proposal in the meeting itself NOT after the circulation of minutes of meeting. Additional speed marking on tyres for temporary use spare tyres was discussed, deliberated and finalized by the Panel 1 meeting, held on 18.06.2024. **Mr Rajendra Khile from SIAM** & other members also seconded the statement made by Convener. Convener, requested **Mr Rajendra Khile, SIAM** to share comments/remarks of SIAM through a presentation to address the below comments from ARAI on proposal finalized by Panel on testing of temporary use spare tyres. 3. Alignment of requirements for temporary spare tyre should be aligned to AIS 110 and corresponding requirements from UNECE R 64. 4. Marking of additional speed requirement can be discussed considering safety and legal issues and compliance to regulations. Mr Khile though his presentation *(copy of the presentation is attached)* made it clear to the Panel that safety, legal issues and compliances to AIS 110 regulation are not being compromised with the additional speed marking ***(for awareness to the end users)*** which is lower than the maximum speed rating marked on the tyre and having compliance to it.	Panel noted and agreed to the finalized proposal (in last meeting) **on additional speed marking** for temporary use spare tyres as under: **Manufacturers may mark additional speed in Km/h lower than max speed rating marked on the tyre as recommended by vehicle manufacturer.**
IRMRA comments on MoM	Panel 1 discussed & deliberated the below comments of IRMRA. 3. As per current notified standard i.e. **AIS 110, endurance test is not applicable for all types of temporary spare tires.** 4. If it is be mandated for subject new category of temporary spare tires in IS: 15633 considering more safety aspect then it should be mandated for all types of temporary spare tires including T type also due to similar intended for use. Director, ITTAC informed that ITTAC has internally reviewed IRMRA's comments and is OK **to exclude endurance test for temporary use spare tyres** like T type temporary use spare tyres **to get it aligned with AIS 110**. SIAM and Test agencies were also aligned with the proposal.	**Panel noted and agreed to exclude endurance test of temporary use spare tyres.**
MSIL comments on marking requirements of temporary use spare tyres	During the discussion on applicability of endurance test for temporary use spare tyres, **MSIL highlighted that temporary use marking should NOT be mandatory for spare tyres as proposed below** Existing clause 5.1 n) to be replaced with following: n) For Temporary use spare tyre and T-type Temporary use spare tyre additional marking of **TEMPORARY USE ONLY *** *(The height of upper-case characters shall be at least 12.7 mm high)* and manufacturers may mark additional speed in Km/h lower than max speed rating marked on the tyre as recommended by vehicle manufacturer**.** **Post discussion & deliberations at length and taking the inputs from the all stakeholders, panel proposed to add one footnote to take care of OEMs requirements/application.** The proposed foot note is as under:	Panel noted and advised to share the proposed footnote with the members for their comments/inputs for its discussion & finalization in next meeting.

	*In case, tyre is approved as normal tyre and used as temporary use by Vehicle Manufacturers, **'temporary use only'' marking on tyre is not mandatory. However, the basis application by OEM requirements of AIS 110 shall comply.**	
Michelin comments on **max inflation pressure marking for T type temporary use spare tyres**	Michelin informed to panel regarding the max inflation pressure marking on tyres for **T Type temporary use spare tyres,** submitted to IRMRA for testing against its export requirements. **Mr Sachin from IRMRA** mentioned that max inflation pressure marking is **not required for T temporary use spare tyre as per IS 15633:2022 and max permissible inflation pressure marked on the tyre is 350 kPa.** As this subject was not the part of agenda, panel advised to take up this subject in next meeting after receipt of all the details from Michelin and IRMRA.	Panel advised Michelin and IRMRA to share their comments/remarks on the said subject to Panel 1 for its discussion in next meeting.
BIS comments/observation on reviewed Re-treading Standards, IS 15731, IS 15524, IS 15780 & IS 15725.	Director, ITTAC presented the remarks of Mr **August Dubey, TED-7** on reviewed re-treading IS Standards (IS 15731, IS 15524, IS 15780 & IS 1725) and ITTAC comments on the remarks made by Mr August.	Panel noted and agreed with **the ITTAC comments on remarks of Mr August Dubey** on the reviewed re-treading IS Standards (IS 15731, IS 15524, IS 15780 & IS 1725) On request of Mr August Dubey, **Panel advised ITTAC to provide the draft document against each reviewed Standards to TED-7 for the needful.**
Comments from **FMCS, BIS** on use of recommended & alternate rims for tests covered in IS 15633:2022.	Panel reviewed the below presented comments **(received from Mr Vikas Kumar, FMCS, BIS.** 1. For Load speed performance test, **IS 15633** prescribes the following: ***Mount the tyre on the measuring rim specified by the manufacturer and inflate it to a pressure of 3 to 3.5 bar***. The manufacturer declares the rim size as per the format in Annex-J. Whether any rim size other than that specified in **Annex-J** in the measuring rim/test rim can be used for testing. 2. For Endurance test, **there is no specific rim size mentioned in IS 15633.** Whether the test can be carried out on any of the recommended rim size or alternate rim size. ITTAC proposed to maintain the existing status **on use of recommended or alternate rims** for testing of tyres as per **IS 15627, IS 15633 & IS 15636** on following grounds: ''Bead-unseating and plunger Test to be performed on recommended rim as both tests **are dependent on the curvature of tyre''** Test agencies informed that for the list tyre sizes, the rim size mentioned in the IS 15633 are used for the dimension & other tests. Recommended rims are used ***(as specified in IS 15633:2022)*** for dimension, plunger and bead unseating test. Load speed	**Panel advised to include the details of rims for both measuring dimension and others tests in the Annex-J** (to be submitted by the manufacturers) 17. Rim on which tyre can be mounted 18. Measuring rim and test rim 18. **Measuring rim** (Tyre dimension-----) and **test rim** (Plunger, --------, Load speed ----- Endurance -------, Bead unseating ------)
IRMRA's comments on **applicability of clause no. 4.2.5 & 4.2.6** of **IS 15633:2022** during flat tyre running mode test (test procedure: C3/C4)	Panel reviewed IRMRA's comments on applicability of clause no 4.2.5 & 4.2.6 of amendment no 01 to IS 15633:2022 for the 2nd load speed test for Run flat and EMT tyres.	Panel noted and agreed with the observation by IRMRA and advised to exclude the Clauses 4.2.5 and 4.2.6 (required for 2nd load speed test for run flat and EMT) **from amendment no 01 to IS 15633:2002**

<table>
<tr><td>ITTAC comments on amendment no 01 IS 15636:2022 for tread wear indicator markings.</td><td>Panel reviewed the ITTAC comments:
• Tread wear indicators marking covered under 5.1(k) should be also excluded from the items to be marked in the lower area of the tyre to get aligned as per IS 15633:2022.</td><td>Panel noted and agreed to observation made by ITTAC. Panel advised ITTAC to share the draft document with Mr August Dubey for the needful at his end.</td></tr>
<tr><td>ITTAC comments on amendment no 01 IS 15633:2022 for the editorial correction on load for tyre size 235/55 R17</td><td>Director, ITTAC informed the panel that, for the tyre size 235/55 R17, covered under Table 14, Page no 14, row (x), existing Std. load (95) and Reinf. Load (99) to be replaced with 99 and 103 respectively.
Load against indices 99 and 103 as 775 kg and 875 kg respectively to be also changed.</td><td>Panel noted and agreed to observation made by ITTAC.
Panel advised Mr August Dubey; member secretary do the needful at his end.</td></tr>
<tr><td>TED 7 comments on amendment no 01 IS 15633:2022.</td><td>Mr August Dubey informed about the anomaly in the dimension values (SW and outer diameter) for the tyre size 215/55 R18.
Existing section width in mm (design width-233, min width -224 and max width -242) to be replaced with section width (design width-217, min width -226 and max width -235)
<table><tr><td></td><td></td><td></td><td>Design Width</td><td>Minimum Width</td><td>Maximum Width</td><td>Design Diameter</td><td>Minimum Diameter</td><td>Maximum Diameter</td></tr><tr><td>(1)</td><td>(2)</td><td>(3)</td><td>(4)</td><td>(5)</td><td>(6)</td><td>(7)</td><td>(8)</td><td>(9)</td></tr><tr><td>xi)</td><td>215/55R18</td><td>7J
6½ J</td><td>233
228</td><td>224
219</td><td>242
237</td><td>705</td><td>697</td><td>713</td></tr></table>Existing over diameter in mm mm (design dia-705, min dia -697 and max dia -713) to be replaced with overall diameter (design dia-693 min dia -686 and max dia -700)
<table><tr><td>xi)</td><td>215/55R18</td><td>7J
6½J</td><td>226
221</td><td>217
212</td><td>235
230</td><td>693</td><td>686</td><td>700</td></tr></table></td><td>Panel noted and agreed to observation made by TED-7.

Panel advised Mr August Dubey, member secretary do the needful at his end.</td></tr>
<tr><td>Comments from CQAV on service and storage life of the tyres.</td><td>Panel reviewed the observation made by CQAV on service & storage life of the tyres in existing standard or formulate a new Indian Standard for reference/guide.

Director, ITTAC informed the panel that, for Storage of tyres, BIS Standard 11178:2023 can be referred. However, service life of the tyres cannot be recommended, as it depends on lot of factors incl. road condition, driving habits, maintenance practice etc.</td><td>Panel noted and agreed to observation made by ITTAC.</td></tr>
<tr><td colspan="3">Pending items from last panel 1 meeting, held on 18.06.2024</td></tr>
<tr><td>TKM proposal on review of scope of IS 15633:2022.</td><td>Panel reviewed the below new proposal, presented by TKM in the meeting.
This standard specifies the general, dimensional and performance requirements of new diagonal and radial ply pneumatic tyres designed primarily for vehicles in categories M1, T1, T2 and at the request of alternatively for N1 vehicles (in agreement with OEM, Test Agency and Tyre makers).
Mr Salunke from CIRT highlighted that the product meant for N1 vehicles should be tested & certified as per IS 15636 and NOT as per IS 15633.
ITTAC mentioned that wording in agreement with OEM, test agencies and tyre makers is not adequate.
Director, ITTAC informed the panel that, new proposal from TKM will be discussed in its next ITTAC Main Committee meeting to get the inputs/advice from its members.</td><td>Panel advised TKM to revisit their proposal and share with Panel 1 for its discussion in next meeting.
The revised proposal submitted by TKM is as under:

This standard specifies the general, dimensional and performance requirements of new diagonal and radial ply pneumatic tyres designed primarily for vehicles in categories M1, T1 and T2. Also, at the request of manufacturer’s the test agencies may grant approval to the tyres for N1 category vehicles by ensuring, the compliance to requirements of fitment of tyres on vehicles for provisions of AIS-051</td></tr>
</table>

Aligning marking requirements of IS 15633 & 15636 with AIS 142.	Panel reviewed the comprehensive analysis done by ITTAC on aligning marking requirements of IS Standards (IS 15633 & IS 15636) with **ECE R 30, ECE R 54, ECE R 117 and AIS 142.** Convener explained that panel needs to review only the key marking required such as o The "Alpine" symbol for snow tyre for use in severe snow conditions" o MPT" (or alternatively "ML" or "ET"), POR" tyres. Director, ITTAC mention that reviewed document by ITTAC is being reviewed by its expert Group, will revert back with its remarks/comments in next meeting.	Panel noted and agreed to discuss and finalize the required marking requirements of AIS 142 with IS 15633 & IS 15636 in next meeting. Panel advised ITTAC, IRMRA and ARAI to review the document and share their comments for its discussion in next meeting.
Review of Table 07 and Table 08 of IS 15633:2022 for **EMT and Run flat tyres**.	Director ITTAC presented the Table • 5th tyre shall be required, if the speed is more **than 300 km/h** or for run flat and EMT tyres with speed less than or equal to 300 Km/h. • **6th tyre** shall be required, if the tyre is Run flat or EMT with **speed grater than 300 km/h.**	**Panel noted and agreed to the proposal of ITTAC for Table 07 and Table no 08 of amendment no 01 to IS 15633:2022.** **Panel advised ITTAC to share the draft document with TED-7 for the needful.**
Comments received from **Mr T Chakravarty** on reviewed Standards.	Panel reviewed the comments received from Mr T Chakravarty on the different reviewed IS standards **(IS 11178, IS 11031, etc.)** Director, ITTAC informed the panel that references, provided by Mr Chakravarty are not any national or international standard BUT those are being followed/practiced by individual company, therefore, it cannot be considered to include the Indian Standard. Mr Chakravarty could not present his remarks in the meeting, therefore, ITTAC advised to maintain the status.	Panel noted and agreed to the observation/remarks by ITTAC to maintain the status.
Formulation of Standard for the Off-road tyres	Mr Niteesh K Shukla, Dir, ITTAC informed panel that, ITTAC has discussed this subject internally and will provide all its support in the formulation of Standard.	**Panel noted and advised ITTAC come out with the draft proposal for its discussion in next meeting.**

Attachment 1: Presentation from Mr Khile (Renault)

Speed Marking on Tyres

RG

Interpretation for Temp use tires marked with Temp usage speed limit – agreed and concluded by Panel 1

- ❑ Tyres developed for Temp use application, however it's of standard size
- ❑ Tyres Meeting standard regulatory requirement of IS 15633, however Tyre Mfr / OEMs want precautionary marking over and above regulation by mentioning reduced speed limit for real life usage
- ❑ Panel 1 already agreed for Testing tyre for higher speed and precautionary marking for Limiting Max Speed

AIS 110 Marking requirements for temporary use spare unit (in vehicle level):

- **80 km/h maximum speed warning symbol; OR a single warning symbol as below; OR an 120 km/h maximum speed warning symbol.**

	Tyre Test Speed	Mandatory Marking	Additional Precautionary Marking	Safety Impact
Case-I	Tyre tested as per marked Speed Category Symbol (of IS 15633) Ex: R→170km/h	Tyre marked with Speed Category Symbol (IS)	NO	No
Case-ii	Tyre tested as per marked Speed Category Symbol (of IS 15633) Ex: L→120km/h; or R→170km/h	Tyre marked with Speed Category Symbol (IS)	Tyre marked with additional Max. speed warning symbol (AIS) 80	No, more info to driver as precaution is progressive

- → **In last panel meeting of 18-Jun'24, it is accepted to allow additional speed marking on tyres with lesser speed than tested**
- → **Regulations do not prohibit additional precautionary information / markings**
- → **Instead of lesser speed term refer to AIS 110 – if okay with BIS.**
- → **Request members to make conclusion as this was linked to testing of tyre.**

Annexure

Marking Requirements as per IS 15633 (Tyre level)

RG

5 MARKINGS

5.1 Tyre shall be permanently and legibly marked on both the sides of their sidewalls in the case of symmetrical tyre and at least on the outer sidewall in the case of asymmetrical tyre shall bear following markings:

a) Make (manufacturers name) or trade name shall be placed at least on one side wall;

b) Tyre size designation given in **3.17**;

c) An indication of the structure as follows:

1) On diagonal (bias-ply) tyres: no marking or character '—', or the letter 'D' placed in front of the rim-diameter marking

2) On radial-ply tyres: the letter 'R' placed in front of the rim-diameter marking and, optionally, the word 'RADIAL'

3) On bias – belted tyres, the letter 'B' placed in front of the rim-diameter marking , and in addition the word 'BIAS-BELTED'

4) On radial – ply tyres suitable for speeds higher than 240 km/h the letter 'R', placed in front of the rim diameter marking, may be replaced with 'ZR'.

d) The speed-category symbol (or symbols):

1) An indication of the tyre's nominal speed category in the form of the symbol given in **3.29**;

2) Tyres suitable for speeds in excess of 300km/h shall be marked with the service description (load index and speed symbol) corresponding to the performance up to 300 km/h

[Clause 3.29] Speed Category — Maximum speed which the tyre can sustain, expressed by speed category symbol given in Table 2.

Table 2 Speed Category Symbol and Maximum Speed (km/h)

(*Clause* 3.29)

Sl No.	Speed Category Symbol	Maximum speed km/h
(1)	(2)	(3)
i)	L	120
ii)	M	130
iii)	N	140
iv)	P	150
v)	Q	160
vi)	R	170
vii)	S	180
viii)	T	190
ix)	U	200
x)	H	210
xi)	V	240
xii)	W	270
xiii)	Y	300

Presentation title

Renault

Attachment 2: TKM Revised Proposal

TKM Revised proposal: 28-Aug-2024

Earlier Proposal (21-08-2024)

SCOPE:

This standard specifies the general, dimensional and performance requirements of new diagonal and radial ply pneumatic tyres designed primarily for vehicles in categories M1, T1, T2 and at the request of **alternatively for N1 vehicles (in agreement with OEM , Test Agency and Tyre makers) .**

However, it does not apply to temporary use spare tyres, run flat tyres, and tyres designed for:

a) the equipment of vintage cars, and

b) competitions (racings).

Revised Proposal (28-08-2024)

SCOPE:

This standard specifies the general, dimensional and performance requirements of new diagonal and radial ply pneumatic tyres designed primarily for vehicles in categories M1, T1 and T2. Also, at the request of manufacturer's the test agencies may grant approval **to the tyres for N1 category vehicles by ensuring , the compliance to requirements of fitment of tyres on vehicles for provisions of AIS-051.**

However, it does not apply to temporary use spare tyres, run flat tyres, and tyres designed for:

a) the equipment of vintage cars, and

b) competitions (racings).

ANNEXURE 4

[items 3 (Sl No 3 and 36), 5.1.1, 5.1.6, and 5.1.9]

PANEL 3 MEETING AGENDA AND MINUTES

PANEL 3 COMPOSITION

Panel 3	IS 16192 Part 1, Part 2, Part 3 and IS 10694 Part 1,4,5,and 7	Convenor: ARAI Chair: Shri D P Saste	Expert from- ARAI, ICAT, CIRT ACMA, SIAM, YAMAHA, HERO, BAL, MAXION, ITTAC

ITEM 1: IS 10694 Part 1 AUTOMOTIVE VEHICLES — RIMS — GENERAL REQUIREMENTS

(*ref.: Sl No 3 of Item 3 of 41st meeting minutes*)

Decision in 41st meeting: Shri Sunil from Maxion mentioned that he has been working on draft and it will take 2 months' time. Committee deliberated and requested Shri Sunil to expedite the review and submit it to Panel 3 for further deliberation.

Committee deliberated and observed that definition of spoke given in IS 10694 Part 1 is not as per the international references and Industry practice.

As IS 10694 Part 1 is referred in various parts of IS 16192 for definition purpose, and its revision may take longer time, committee decided to address the definitions of wired spoke and spoke through amendment in IS 10694-1: 2009. It requested Shri V S Khairatkar (ARAI) to provide the draft document for definition of spoke and wired spoke.

Further committee decided to issue the received draft document from Shri V S Khairatkar into WC of 30 days with approval of Chairperson.

Status in Panel 1 meeting dated 28.6.2024:

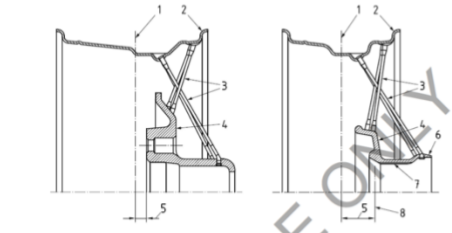
Draft document from Maxion is awaited.

Input received from ARAI is as follows:

Dear August Ji,
PFB definition of wire wheel for reference –

Wire wheel – wheel (3.1 wheel - rotating load-carrying member between the tyre and the axle, usually consisting of two major parts, the rim and the wheel disc, which may be integral, permanently attached or detachable) so constructed that its rim is joined to the centre member (shell) by a series of wire spokes.

Please refer screen shot of ISO 3911 : 2021 for ref.



a) Conventional mounting type b) Centre mounting type

Key
1 rim centreplane
2 rim
3 wire spokes
4 centre member (shell)
5 inset
6 cone seat for retaining nut
7 spline
8 hub seat reference plane

Figure 4 — Wire wheels — Nomenclature

We can discuss same.

Panel may deliberate.

Decision in Panel 1 meeting(28.6.2024):

Panel deliberated and mentioned that the subject is under discussion since long time, it requested Maxion to expedite the review and submit the draft document to BIS.

Member Secretary mentioned that the subject has been assigned to intern also for review, committee noted and requested industries to provide the necessary input to intern for completion of review.

Further on ARAI input, panel deliberated and requested ARAI to relook the proposed definition and provide the definition for following:

1) Wired Spoke:

2) Wired Spoke Wheel:

Present Status : Draft document is awaited from Maxion and ARAI. However input submitted by intern is attached at Annexure-2

Panel may deliberate
Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting
ITEM 2: Revision of IS 10694(Part 7):1983 General requirements for rims for automotive vehicles Part 7 Industrial truck rims

(*ref.: Sl No 14 of Item 3 of 41st meeting minutes*)

Decision in 41st meeting: Shri Felix Prasad from Wheels India briefed the submitted comments. Committee deliberated and requested Wheels India to provide the updated draft after detailed review for further deliberation in panel 3.
Committee requested Panel 3 to deliberate on draft document, once received from Wheels India and provide its recommendation to the committee.

Status in Panel 1 meeting dated 28.6.2024:
Draft document from Wheels India is awaited. Wheels India may share the updated draft and panel may deliberate.
Decision in Panel 1 meeting(28.6.2024):
Panel requested Wheels India to expedite the review.
Member Secretary mentioned that the subject has been assigned to intern also for review, committee noted and requested industries to provide the necessary input to intern for completion of review.
Present Status : Draft document is still awaited from Wheels India. However input submitted by intern is as below:
IS 10694 Part 7 may be continued as it is and be revised when any input is received
Panel may deliberate
Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

ITEM 3: IS 10694 : Part 4 : 1983 General requirements for rims for automotive vehicles: Part 4 scooter and scooter derivative rims
(*ref:. Sl No 25 of Item 3 of 41st meeting minutes*)

Decision in 41st meeting: Committee deliberated and requested UNO Munda, Rockman and Klassic Wheel to provide the updated drafts after detailed review for further deliberation in panel 3.
Committee requested panel 3 to deliberate on draft document, once received from Wheels India and provide its recommendation to the committee.

Status in Panel 1 meeting dated 28.6.2024:
Draft document from is awaited. Concerned members may share the draft document. Panel may deliberate.
Decision in Panel 1 meeting(28.6.2024): Panel requested UNO Minda, Rockman and Klassic Wheel to expedite the review.
Member Secretary mentioned that the subject has been assigned to intern also for review, committee noted and requested industries to provide the necessary input to intern for completion of review.
Present Status : Draft document is still awaited from Rockman, UNO Minda and Klassic Wheels Wheel. However input from intern is as below:
IS 10694 Part 4 may be continued as it is and be revised when any input is received
Panel may deliberate

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting
ITEM 4: Comment received from CMD on IS 16192 Part 1, Part 2 and Part 3 (regarding change in thickness):
(ref.: *Sl No 25 of Item 3 of 41st meeting minutes*)

Decision in 41st meeting: Shri Rakesh Kumar from CMD-III briefed the comment. Committee deliberated and mentioned that variation in thickness as design parameter can affect the performance. It further decided to continue the subject under discussion in Panel 3 and committee.

Status in Panel 1 meeting dated 28.6.2024:
Panel may deliberate.

Decision in Panel 1 meeting(28.6.2024): Panel deferred the subject for discussion in next meeting.

Present Status: Panel may deliberate.

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

ITEM 5: Hybrid Wheel Rim (IS 16192 Part 1 and IS 16192 Part 2)

(*ref.: Item 5.1.2 of 41st meeting minutes and Sl No 2 of Item 2 of 42nd meeting minutes*)

Decision in 41st meeting:

a) Committee deliberated and accepted the Panel recommendation. Further, committee deliberated on draft document prepared by sub-panel and modified it. Modified draft document, prepared by committee is attached at **Annexure- 2.**

Committee observed that Figure of Composite wheel is incorrect in draft document. It requested Klassic Wheels to provide the correct figure for Composite wheel. It further requested Steel Strip to provide a figure for Hybrid Wheel rim, where casing, ring etc can be marked in a single figure for better clarity and understanding of stakeholders.

Committee decided to issue the draft amendment document into Wide Circulation of 30 days, for amendment in IS 16192 Part 2, once the figures are received from Steel Strip and Klassic Wheels.

Shri Sachin from Carbon Wheelz mentioned that his organization does manufacture alumunium rim for hybrid wheel (Alumunium rim+ Alumunium ring + Alumunium Casing+Motor) and supply it to Motor manufacturer (EMF, Toll Mobility, Anand Mando and others) who does assembly and supply it to OEM. He further mentioned that Hybrid wired spoke wheel, is available in Indian Market, which is manufactured by various wheel manufacturer and used by various OEMs. Provision of these hybrid wheels should also be included in suitable standards. Committee deliberated on comments from Carbon Wheelz and ARAI. Committee mentioned that present standard IS 16192 Part 3 deals with rim only. After due deliberation it decided to introduce Hybrid wheel in IS 16192 Part 1 and Part 3, through amendment/revision. It requested Panel 3 to deliberate in detail and provide the draft before next committee meeting, for further deliberation.

b) Committee noted the information given in the agenda.

For decision of 42nd meeting minutes, please refer the minutes of 42nd meeting

Status in Panel 1 meeting dated 28.6.2024:

- Draft document TED 7 (24493) for amendment 2 to IS 16192 Part 2 is under Publication stage.
- Draft document for IS 16192 Part 1 (for agreed comments) is under preparation and will be shared shortly.

Committee may deliberate for the points requested by the committee.

Decision in Panel 1 meeting(28.6.2024): Panel noted the information given in agenda.

For incorporation of Hybrid wheel into IS 16192 Part 1 and Part 3, panel requested ICAT to prepare the draft documents, in line with amendment 2 to IS 16192 Part 2 (which is under publication). Panel requested BIS to share the draft amendment 2 to IS 16192 Part 2, to ICAT for preparing the draft amendment in IS 16192 Part 1 and Part 3.

Present Status:

- Amendment 2 to IS 16192 Part 2 has been published
- Draft Amendment 1 to IS 16192 Part 1 have been issued into WC for 30 days.
  Doc No: TED 7 (24492)
  WC Date: 30/7/2024
- For incorporation of Hybrid wheel into IS 16192 Part 1 and Part 3, Draft amendment documents prepared by ICAT is attached at Annexure 3

Panel may deliberate

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

ITEM 6: Wire spoke wheel rim

(ref.: *Item 5.1.5 of 41st meeting minutes*)

In 40th meeting, committee decided that since ISO standard (ISO 4210-2) for wired spoke wheel rims for cycle specifies dynamic test committee decided to continue this subject under discussion for betterment of standard. For detail please refer the minutes of 40th meeting.

In 41st meeting, Committee deliberated and requested Panel 3 to deliberate in detail while taking reference of direction given in item **5.1.2** and provide its recommendation before the next committee meeting.

Status in Panel 1 meeting dated 28.6.2024:

- Draft document TED 7 (24491) for amendment 2 to IS 16192 Part 3 is under Publication stage.

Panel may deliberate for the points requested by the committee.

Decision in Panel 1 meeting(28.6.2024): Please refer ITEM 5.
Present Status:

- As decided in 40th meeting, panel may deliberate on dynamic test.
- For incorporation of Hybrid Wheel in IS 16192 Part 3, draft from ICAT is attached at Annexure 3

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

ITEM 7: Unification of terminologies used in IS 16192, 9436 and 9438 for wheel rims

(ref.: *Item 5.1.6 of 41st meeting minutes*)

Decision in 41st meeting: Committee requested Sub-panel 2 (Maxion, WIL, TML) to provide the input for IS 9436 and IS 9438. It requested Panel 3 to deliberate on inputs of Subpanel 1 and subpanel 2, and provide the recommendation for further deliberation.

Status in Panel 1 meeting dated 28.6.2024:
: Input from Sub-panel 2 is awaited. Panel may deliberate on Sub-panel 1 input (mail attached with agenda).

Decision in Panel 1 meeting(28.6.2024): Panel requested Sub-panel 2(Maxion, WIL, TML) to expedite the review. It further decided that once the input from Sub-panel 2 is received, panel will deliberate on it along with sub-panel 1 input.
Present Status: Input from Sub-panel 2 is awaited. Sub-Panel may brief the status.

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

ITEM 8: Clarification request received from Arihant Udyog

(ref.: *Sl No 8 of Item 2 of 42nd meeting minutes)*

Decision in 42nd Meeting: Shri Piyush briefed the query and mentioned that the wheel is for motorcycle application and it will be supplied to OEM (BMEV).
Shri Vinod from BMEV mentioned that the product is intended for use in motorcycles designed for everyday activities. He also mentioned that they have received the certificate for the tire in accordance with IS 15627.

Pictures of Vehicles and Wheel attached at **Annexure C.**
Committee deliberated in detail and requested following information from Arihant Udyog and BMEV:

- Whether such wheel Rims are referred in any standards
- Whether profile, bead etc are in-line with manuals and standards.
- Whether construction is similar to normal wheel or different, if different then what are the differences.
- Category of vehicle as per CMVR / IS 14272
- Type approval certificate of Tyre

- The committee requested Panel 3 to thoroughly deliberate and provide its recommendation once the details are received from Arihant Udyog/BMEV.

Status in Panel 1 meeting dated 28.6.2024:
: Input from Arihant Udyog is received, attached at Annexure-1.
Panel may deliberate.

Decision in Panel 1 meeting(28.6.2024): Shri Piyush provided a detailed briefing on the EUWA E S 3.28 standard. He explained that their wheel's construction is similar to a spoke wheel but is made of steel sheets instead of spokes. Additionally, he mentioned that their rim resembles a passenger car wheel rim, where
two sheet metals are welded with a steel tube. He further added that the said design is also utilized in the agricultural industry.
Further, Shri Piyush presented the test report of Tyres, tested as per IS 15627, on which, the said rim is supposed to be fitted. Shri Vitesh Giri mentioned that he had designed the said tyre for Speedways Tyre and said tyre is a wider tyre (for self-balancing) so that vehicle can be easily handled. It is used in similar kind of vehicles, that BMEV is manufacturing, in many countries like china etc. BMEV approached them for designing this tyre for highway application, and not for off road condition (where this type of tyres are normally used, ex. Garden, lawn etc..). High speed vehicles rim design is different than off highway tyre. When tyre is used in car and motorcycle, J type tyre is used, so while designing this tyre, we adopted J Type rim, which is also suitable for high-speed application.
Shri Piyush mentioned that in designing the rim, they have taken rim parameters from ITTAC Manual for Motorcycle, scooter and passenger car.
After deliberation, it was decided that, since the rim is not a standard motorcycle rim and its construction differs from a typical wheel, it cannot be considered immediately. Detailed checks of the profile requirements and safety validation tests by the vehicle manufacturer are necessary to ensure the roadworthiness of vehicles equipped with these rims and tires.
It further decided that once the above reports are available, it may be taken up suitably by the panel/committee for further deliberation and necessary action.
Panel also recommended that; it can be taken as project under BIS R&D policy.

Present Status: Mail received from BMEV is attached at Annexure- 4.

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

ITEM 9: Comments received on IS 16192 Part 3
(ref.: *Item 4.7 of 42nd meeting minutes)*

Committee deliberated and decided to take-up ICAT proposal in Panel 3 meeting for deliberation.

Status in Panel 1 meeting dated 28.6.2024:
: Panel may deliberate.

Decision in Panel 1 meeting(28.6.2024):

Sl. No.	Clause/Sub-clause/ para/table/fig. No. commented	Type of Comments (General/Editorial/ Technical)	Justification	Proposed change	Panel recommendation
1	Page 3, ANNEX A	Editorial	Applicant shall be used in place of Supplier wherever mentioned in ANNEX A of test standard.	Replace word “Supplier” with “Applicant”	Agreed

Present Status: Panel concluded and provided its recommendation. To be deliberated in Committee meeting

ITEM 10: Clarification request received from Minda Kosei on IS 10694 Part 1
(ref.: *Item 5.2 of 41st meeting minutes*)

Committee deliberated and requested Panel 3 to deliberate it along with the draft document (for revision, once received from Maxion) and provide its recommendation.

Status in Panel 1 meeting dated 28.6.2024:
: Panel may deliberate.

Decision in Panel 1 meeting(28.6.2024): Panel deliberated and decided to discuss the subject, once updated draft from Minda Kosei is received.
Present Status: Panel may deliberate.

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

ITEM 11: IS 13243: 2014 Automotive vehicles - Commercial vehicles - Attachments on hubs for wheels - Dimensions
(ref.: *Item 6.1.2 of 41st meeting minutes*)

Committee deliberated and decided to reaffirm and revise the standard, as it is based on ISO 4107: 2010 and ISO 4107 has been revised and published as ISO 4107: 2023. It requested Panel 3 to deliberate and provide the draft for revision for further deliberation in committee meeting.

Status in Panel 1 meeting dated 28.6.2024:
: Panel may deliberate.

Decision in Panel 1 meeting(28.6.2024): Panel requested ICAT to review IS 13243 and provide its input. BIS will share the review format, IS Standard and ISO standard with iCAT, for review.

Present Status: Review report received from ICAT has been circulated vide BIS portal dated 6.9.2024. Panel may deliberate.

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

ITEM 12 ICAT Comment on IS 16192 Part 2

Decision in 42nd Meeting:

committee deliberated and decided that these comments are comment on standard (IS 16192 Part 2) and decided to address other comments of ICAT through 3rd amendment (if accepted by committee after due deliberation). It requested panel 3 to deliberate on ICAT comments in its subsequent meetings and provide its recommendations

SNo.	**Clause / Subclause No.**	**Paragraph No./Figure No./Table No.**	**Type of Comment**	**Attachment**
2	ANNEX B	1)	Editorial	N/A
Comments/Suggestions along with Justification for the Proposed Change			Name of supplier	
Proposed Change/Modified Wordings			Name of "Applicant"	
Action Taken				
SNo.	**Clause / Subclause No.**	**Paragraph No./Figure No./Table No.**	**Type of Comment**	**Attachment**
3	ANNEX B	2)	Editorial	N/A
Comments/Suggestions along with Justification for the Proposed Change			Address of supplier	
Proposed Change/Modified Wordings			Address of "Applicant"	
Action Taken				

SNo.	Clause / Subclause No.	Paragraph No./Figure No./Table No.	Type of Comment	Attachment
4	ANNEX B	7) & 8)	Editorial	N/A
Comments/Suggestions along with Justification for the Proposed Change			Wheel rim manufacturer name (in case, different for supplier) & Address of wheel rim manufacturer (in case, different for supplier)	
Proposed Change/Modified Wordings			Wheel rim manufacturer name (in case, different from Applicant) & Address of wheel rim manufacturer (in case, different from Applicant)	
Action Taken				
SNo.	**Clause / Subclause No.**	**Paragraph No./Figure No./Table No.**	**Type of Comment**	**Attachment**
5	Annex B	13)	Editorial	N/A
Comments/Suggestions along with Justification for the Proposed Change			Maximum design load of wheel rim	
Proposed Change/Modified Wordings			Maximum design load of wheel rim (N)	
Action Taken				
SNo.	**Clause / Subclause No.**	**Paragraph No./Figure No./Table No.**	**Type of Comment**	**Attachment**
6	Annex B	19)	Editorial	N/A
Comments/Suggestions along with Justification for the Proposed Change			for Dynamic Radial Fatigue Test	
Proposed Change/Modified Wordings			Addition of "Tyre recommended inflation pressure (kPa)"	
Action Taken				
SNo.	**Clause / Subclause No.**	**Paragraph No./Figure No./Table No.**	**Type of Comment**	**Attachment**
7	Annex B	20)	Editorial	N/A
Comments/Suggestions along with Justification for the Proposed Change			for Dynamic Cornering Fatigue Test	
Proposed Change/Modified Wordings			Addition of "Inset/Outset (mm)"	

Decision in Panel 1 meeting(13.9.2024): will be updated after the panel meeting

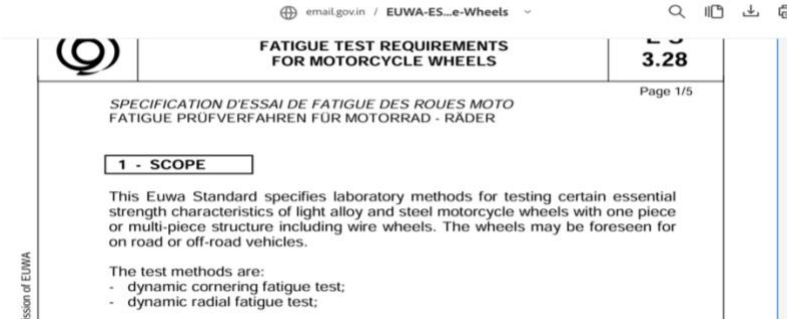
Annexure-1
(item 8)

• Whether such wheel Rims are referred in any standards
Yes, this pattern is followed in lawn mover , agriculture industry and in bikes also. With this we are attaching a file of EUWA norms laid for this type of rims.
• Whether profile, bead etc are in-line with manuals and standards.
It is in line with IS 15627-2005.
• Whether construction is similar to normal wheel or different, if different then what are the differences.
The manufacturing process is similar to normal wheels.

• Category of vehicle as per CMVR / IS 14272
L1e-B
• Type approval certificate of Tyre
TAC approval # CD0YR0406

NOTE

1. Type approval certificate of Tyre is from ICAT . Relevant portion may be shared during meeting
2. Scope of EUWA norms (mentioned above) is attached as below for reference.


email.gov.in / EUWA-ES...e-Wheels

FATIGUE TEST REQUIREMENTS FOR MOTORCYCLE WHEELS

3.28

Page 1/5

SPECIFICATION D'ESSAI DE FATIGUE DES ROUES MOTO
FATIGUE PRÜFVERFAHREN FÜR MOTORRAD - RÄDER

1 - SCOPE

This Euwa Standard specifies laboratory methods for testing certain essential strength characteristics of light alloy and steel motorcycle wheels with one piece or multi-piece structure including wire wheels. The wheels may be foreseen for on road or off-road vehicles.

The test methods are:
- dynamic cornering fatigue test;
- dynamic radial fatigue test;

ssion of EUWA

Annexure 2

(items 1 and 2)

Input received from INTERN

A-2.1 IS 10694 PART 1 -AUTOOMOTIVE VEHICLES-RIMS-GENERAL REQUIREMENT (PART 1 – NOMENCLATURE, DESIGNATION, MARKING AND MEASUREMENT)

DEFINITIONS AND NOMENCLATURE (NOT PRESENT IN STANDARDS BUT ARE AVAILABLE IN MANUAL)

Following definitions and nomenclatures shall apply

1.1 **Rim Base** – A part in a multi-piece wheel which holds other sub-components like Lock Ring, Bead Seat Band and Detachable

1.2 **Well** – That part of the rim so located with sufficient depth and width as to enable the tire breads to be mounted and demounted over the mounting side rim flange or bead taper.

1.3 **Lug** – A kind of connector (particularly for agricultural wheels) which is welded to rim; aids in assembling disc with rim.

1.4 **Hand Hole** – Opening in the disc area of a wheel for the purpose of valve stem access to inside dual tire and chain application

1.5 **Lock Ring** – A split ring which sits on the rim gutter and supports flange to rim base

1.6 **Side Ring** – A removable piece of a multi-piece rim assembly which provides lateral (FLANGE) support for one tire bead

1.7 **Inset** – The lateral distance from the rim center-line to the mounting surface of the disc. Inset places the rim center inboard of mounting surface.

1.8 **Outset** – The lateral distance from the rim center-line to the mounting surface of the disc. Outset places the rim center outboard of the hub surface.

1.9 **Inset** – The lateral distance from the rim center-line to the mounting surface of the disc. Inset places the rim center inboard of the mounting surface.

1.10 **Wheel Mounting**

A) Hub Mounting – Wheels that are designed to center on the hub at the bore of the wheel. These Wheels generally have straight through bolt holes, since the bolt holes only supply clearance for the stud. Hub mount wheels are generally used with two piece-flange nuts

B) Stud Mount Wheels – Wheels that are designed to center on the stud of a hub. These wheels have chamfers at the bolt holes into which a ball seat or conical nut is installed to center the wheel. The center bore of the wheel is only for clearance of the axle end.

1.11 **Disc Wheel** – A permanent assembly of a disc and a rim.

1.12 **Demountable Rim -** A rim with valve location which is used with a cast spoke wheel to provide the method of attaching tires to the vehicle.

1.13 **Two-piece flange** – A nut attached to a washer that is used to secure hub-mount wheels to a vehicle.

1.14 **Spring Flange** – The component that does the function of both flange and lock ring and used in two-piece construction.

1.15 **Valve Locators –** The guides located on the either side of the demountable rim valve slot or valve hole to properly locate the tire valve between spokes. Sometimes called “drivers”, “rim drivers”, “locating lugs” etc.; they are either indented or welded on.

1.16 **Valve Slot** – Opening in a tube-type rim to receive the tire tube valve stem.

1.17 **Multipiece Rims –** Flange and bead seat must be removable at least on one side of rim**.**

Definition change for better clarification

2.1 **Dual Spacing** – The distance between the center-lines of the rims to provide clearance between the tire sufficient to avoid dual tires tracking over the adjacent sidewalls at the six to zero clock position when the tires are run with a deflection under load.
2.2 **Bead Seat -** Surface of a rim that contacts the tire bead of vehicle wheel,
5 degree – for multi-piece, passenger and light truck wheel
15 degree – for medium and heavy-duty wheel (tubeless)

Annexure 3
(item 5)

DRAFTS RECEIVED FROM ICAT

A-3.1 DRAFT AMENDMENT NO. 3 TO IS 16192 (PART 1): 2014 AUTOMOTIVE VEHICLES — WHEEL RIMS FOR TWO AND THREE WHEELED VEHICLES (PART 1 Light Alloy Wheel Rims — Methods of Tests and Requirements')

(*Page* 1, *clause* **1**) — Substitute the following for the existing:

1 SCOPE

1.1 This standard (Part 1) prescribes the general and performance requirements of light alloy wheel rims intended for use on Two wheelers (L1 and L2 category of vehicles as defined in IS 14272), three wheelers (L5 category of1 vehicles as defined in IS 14272), E-rickshaws and E-carts.

1.2 Wired spoke wheel rims are not covered under this standard.

(*Page* 1, *clause* **3**) — Substitute the following for the existing:

3 DEFINITIONS AND NOMENCLATURE -

3.1 The definitions and nomenclature shall be as per IS 10694 (Part 1).

3.2 Typical Types of Light Alloy Wheel Rim

3.2.1 *Unit Construction Light Alloy Wheels* **—** Wheels of which the rim and spokes or the disc, are manufactured as single unit (see Fig.1)

3.2.2 *Composite Construction Light Alloy Wheel Rims* — Wheels of which the rim is made of light alloy and the spokes or disc are light alloy or steel, which are then assembled. (see Fig.1)

3.2.3 *Hybrid Construction Light Alloy Wheel Rims* —
Wheels of which, rim and ring are made of light alloy and casing is made of compatible material. Rim, ring, casing, hub and motor are then assembled together. (*see* Fig. 2)

NOTE—These wheels are constructed by using, rim, rings, hub motor etc. in such a manner that it will sustain enduring operating conditions in the field.

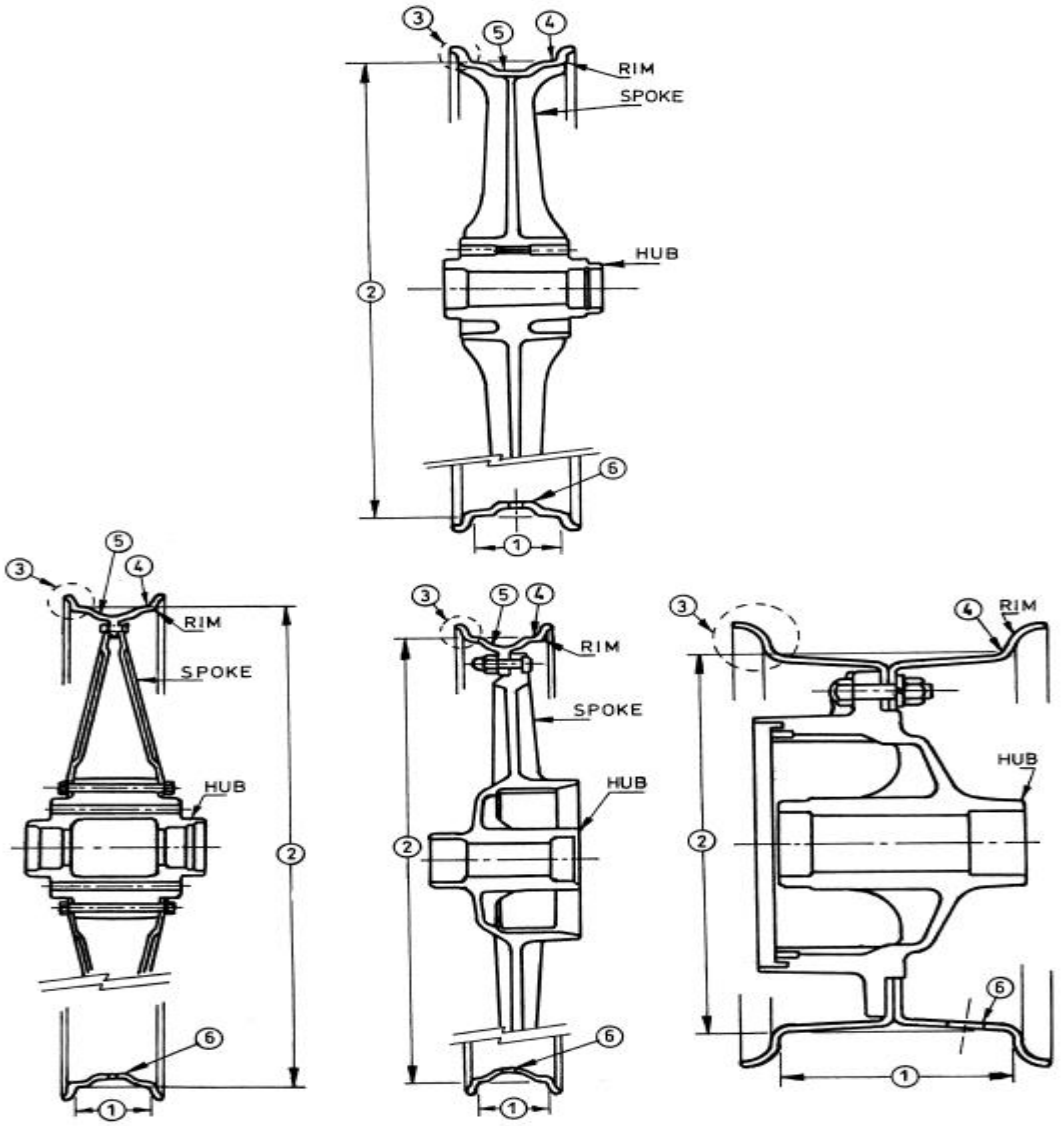


FIG. 1 TYPES OF LIGHT ALLOY WHEEL RIMS AND NOMENCLATURE

FIG. 2 – TYPICAL HYBRID WHEEL RIMS

(*Page* 3, *NOTE*) — Renumber the note mentioned after Cl. No. 4.6 as (i) & add the below note at (ii).

(ii) Hybrid Wheel rim (refer 3.2.3) shall be tested with the motor for which it is designed.

5.1.2 Quantity
5.1.2.1 Number of rims to be provided shall be minimum 4 number for tube tyre application (2 number with tyre and tube assembly) and 5 number for tubeless tyre application or at the discretion of testing agency.

5.1.2.2 In case of *Hybrid Construction Light Alloy Wheel Rim,* all wheels submitted shall be fitted with Hub Motor.

[Page 3, *clause* 5.3 (e)] — Insert the following after 5.3 (e):

f) Any design change in mounting of the motor, applicable for Hybrid Wheels

(*Page* 9, *Annex F*) — Insert the following after Sl. No 16:

17) Material grade of
17.1 Rim
17.2 Ring
17.3 Spoke/Disc
17.4 Hub motor casing

18) Motor Details
18.1 Power rating (for information only)
18.2 Make
18.3 Type

19) Part number of wheel rim assembly.

A-3.2 DRAFT AMENDMENT NO. 2 TO IS 16192 (PART 3): 2018 AUTOMOTIVE VEHICLES — WHEEL RIMS FOR TWO AND THREE WHEELED VEHICLES PART 3 SPOKE WHEEL RIMS — METHOD OF TESTS AND REQUIREMENTS

(*Page* 1, *clause* **1**) — Substitute the following for the existing:

1 SCOPE

1.3 This standard (Part 3) prescribes the general and performance requirements of Spoke wheel rims intended for use on Two wheelers (L1 and L2 category of vehicles as defined in IS 14272), three wheelers (L5 category of vehicles as defined in IS 14272), E-rickshaws and E-carts.

(*Page* 1, *clause* **3**) — Substitute the following for the existing:

3 DEFINITIONS AND NOMENCLATURE -

3.1 The definitions and nomenclature shall be as per IS 10694 (Part 1).

3.2 Typical Types of Spoke Wheel Rim

3.2.1 *Spoke Wheel Rim* — A spoke wheel rim is a steel or light alloy rim that is connected to a hub by spokes, which are made of steel or similar metals. (*see* Fig. 1)

3.2.2 *Hybrid Construction Spoke Wheel Rim* — Wheels of which, rim and ring are made of steel or alloy, that is connected to a hub by spokes. Rim, spokes, casing and motor are then assembled. (*see* Fig. 2)

NOTE—These wheels are constructed by using, rim, ring, spokes, hub motor etc. in such a manner that it will sustain enduring operating conditions in the field.

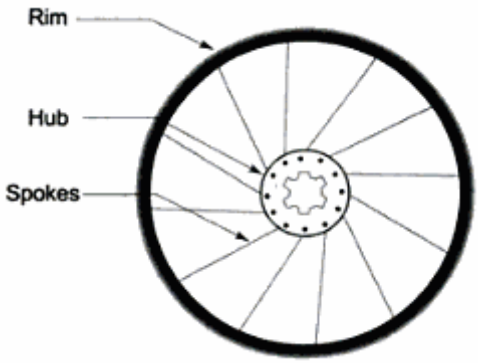


FIG. 1 – TYPICAL SPOKE WHEEL RIM

FIG. 2 – TYPICAL HYBRID SPOKE WHEEL RIM

(*Page* 1, *clause* **4.2.2**) — Substitute the following for the existing:

4.2.2 *Test Requirements*

4.2.1 Strength Test (for Spoke Wheel Rims)

4.2.2 Hybrid wheel rim (refer 3.2.2) when tested as per clause 4 of IS 16192 Part 1, shall meet the requirements prescribed therein.

NOTE— Hybrid Wheel rim (refer 3.2.2) shall be tested with the motors for which it is designed.

5.1.2 Quantity

5.1.2.1 Number of rims to be provided shall be minimum one number or at the discretion of testing agency.

5.1.2.2 In case of *Hybrid Construction Spoke Wheel Rim*, number of rims to be provided shall be minimum 4 number for tube tyre application (2 number with tyre and tube assembly) and 5 number for tubeless tyre application or at the discretion of testing agency. All wheels submitted shall be fitted with Hub Motor.

[Page 3, *clause* 5.3 (e)] — Insert the following after 5.3 (d):

e) Any design change in mounting of the motor, applicable for Hybrid Wheels

(*Page* 3, *Annex A*) — Insert the following after Sl No 14:

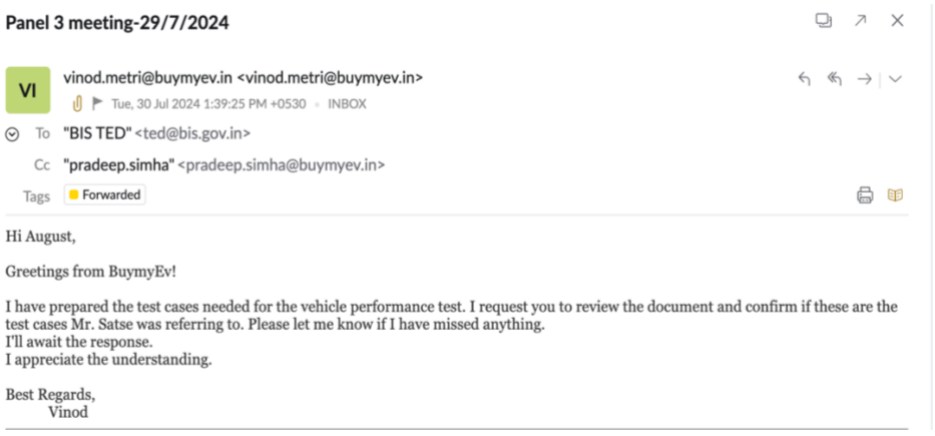
15) Material grade of
15.1 Rim
15.2 Ring
15.3 Spoke
15.4 Hub motor casing

16) Motor Details
16.1 Power rating (for information only)
16.2 Make
16.3 Type

17) Part number of wheel rim assembly.

Annexure 4
(item 8)

Comment/Input received from BMEV



Panel 3 meeting-29/7/2024

VI vinod.metri@buymyev.in <vinod.metri@buymyev.in>
Tue, 30 Jul 2024 1:39:25 PM +0530 INBOX
To "BIS TED" <ted@bis.gov.in>
Cc "pradeep.simha" <pradeep.simha@buymyev.in>
Tags Forwarded

Hi August,

Greetings from BuymyEv!

I have prepared the test cases needed for the vehicle performance test. I request you to review the document and confirm if these are the test cases Mr. Satse was referring to. Please let me know if I have missed anything.
I'll await the response.
I appreciate the understanding.

Best Regards,
Vinod

Mail attachment:

S.No	Vehicle performance test parameter	Referanc standard
1	Top speed	
2	Accelaration	IS : 14664
3	Braking	IS : 14664

4	Handling Characteristics	
5	Full throttle performance	AIS-137 (Part 5)
6	Fitment of tyre	AIS-050-2004
7	Vehicle weighment	IS : 11825
8	CMVR physical verification	93 to 125 CMVR, 1989
	Coast down test *	IS:14785

ANNEXURE 5

[item 3 (Sl No 5, and 6)]

REFERENCE DOCUMENT PROVIDED BY MR T CHAKRAVARTY

1.

- Nokian Tyres:
  The storeroom temperature should be below +25 ºC, it should preferably be dark and below +15 ºC. The properties of rubber may change, affecting the final service life of the tyre, if the temperature is above 25 ºC or below 0 ºC. Cool storage does not have any adverse effect on rubber products.
- Continental
  Storage Temperatures
  Do store all tyres at temperatures not exceeding 35°C, preferably below 25°C.

- ASTM
  Specific tyre storage conditions are defined in ASTM E 1136-93

  From the consumers point of view, it is better to make an objective storage temperature recommendation rather than subjective. However, based on Indian climatic conditions we can modify the statement to "Storage temperature should ideally be below 35°C, preferably below 25 ^{0}C and above 0°C.

2. Michelin
How to store tyres with rims
If your tyres are mounted on rims, store them standing upright, hang them up or stack them (two by two maximum).

store tyres with rims 2
How to store tyres without rims
If the tyres are not fitted on rims, do not stack or hang them.
Store them standing up.

How to store tyres with rims

If your tyres are mounted on rims, store them standing upright, hang them up or stack them (two by two maximum).

How to store tyres without rims

If the tyres are not fitted on rims, do not stack or hang them.
Store them standing up.

3. Kobet

RUBBER PRODUCTS: Inner Tubes and Flaps – guidelines of Kabat

1.1 Detailed conditions for storing inner tubes

Inner tubes should be stored in the cartons or packaging in which they were delivered by the manufacturer. Storage in enclosed warehouses is recommended. When delivering inner tubes in bulk, it is recommended to store them flat on racks or pallets in a manner that protects them against damage and deformation. Inner tubes may be stored in stacks not exceeding 1 m in height. Inner tubes should not be hung, because this may cause them to elongate and deform. Storage is recommended at between -5ºC and +25ºC, with relative humidity at less than 70%.

1.2 Detailed conditions for storing flaps

Flaps should be stored in the cartons or packaging in which they were delivered by the manufacturer. Storage in enclosed warehouses is recommended. For bulk delivery, it is recommended to place them on racks or pallets, folded flat. They may be stored in stacks not exceeding 1 m in height. Flaps should not be hung, because this may cause them to elongate and deform. Storage is recommended at between -5ºC and +25ºC, with relative humidity at less than 70%.

1.3 Storage time

The maximum storage time for new rubber products, counted from the date of production, should not be longer than:

- for tyres – 36 months

- for inner tubes and flaps – 24 months

ANNEXURE 6

[item 3 (Sl No 8, and 12)]

COMMENTS RECEIVED ON DOC TED 7 (25810), WC DRAFT FOR REVISION OF IS 13154

Sl. No.	Clause/Sub-clause/ para/table/fig. No. commented	Type of Comments (General/ Editorial/ Technical)	As per Document No. 25810	Proposed change	Justification
1	3.1	Editorial	Type of Agriculture type	Type of Agriculture type tyre	Editorial
2	3.22	Editorial	Traction Tyre — A tyre designed primarily for agricultural machines or implements or for agricultural the equipment of driven axles of implements or agricultural machinery	Traction Tyre — A tyre designed primarily for agricultural machines or implements or for ~~agricultural~~ the equipment of driven axles of implements or agricultural machinery	Editorial
	3.25	Editorial	NOTE – In case of implement tyres the service description is supplemented with the relevant symbol for the type of application concerned (traction or trailer) as defined in 3.23 and 3.24.	NOTE – In case of implement tyres the service description is supplemented with the relevant symbol for the type of application concerned (traction or trailer) as defined in 3.22 and 3.23.	Editorial
	3.27 Table 2	Technical	Table 2 Load Indices	Unit for Maximum load to be added as Kg "Corresponding Maximum Load to be carried kg"	Unit of load missing
	3.27 – Table 2	Editorial	Table 2 Load Indices (Clause 3.27) Sr # cclxiii, LI 262 states Maximum Load 85500	As per ITTAC / ETRTO, Maximum load 85000	Correction in Max. load value

<table>
<tr><td></td><td>Table 5</td><td>Editorial</td><td>Table 5 - Variation in Load Capacity (%) with Speed Tractor Steering Wheel and Marked Front or F-1 or F-2 (Clause 3.29)</td><td>Information of speed 45 km/h to be added as below:<table><tr><td>S.No.</td><td>Speed (Km/ h)</td><td>Variation in Load Capacity (A6)</td><td>Variation in Load Capacity (A6)</td></tr><tr><td>viii)</td><td>45</td><td>-</td><td>-7</td></tr></table></td><td>In line with ITTAC Standards Manual</td></tr>
<tr><td></td><td>Table 12</td><td>Technical</td><td>Table 12- Column 10
Maximum overall Dia. mm
F-1 & F-2</td><td>Maximum overall Dia. Mm
F-1 & F-2 / F-2 M</td><td>F-2 M to be added in line with T&RA.</td></tr>
<tr><td></td><td>Table 12</td><td>Editorial</td><td>Table 12- Column 12
Tyre Dimensions in Service</td><td>Minimum Overall width to be corrected as Max. Overall Dia</td><td>Editorial</td></tr>
<tr><td></td><td>Table 13</td><td>Editorial</td><td>Table 13 Column 3
Rim Width Contour profile</td><td>Rim Width Contour profile to be removed</td><td>To bring uniformity in line with other tables</td></tr>
<tr><td></td><td>Table 14</td><td>Editorial</td><td>Table 14- Column 12
Tyre Dimensions in Service</td><td>Minimum Overall width to be corrected as Max. Overall Dia</td><td>Editorial</td></tr>
<tr><td></td><td>Table 15</td><td>Editorial</td><td>Sl no. xv for size 15.9-28, cold IP mentioned as 2500 kPa</td><td>To be corrected as 250 kPa</td><td>In line with ITTAC Standards Manual</td></tr>
<tr><td></td><td>Table 20</td><td>Editorial</td><td>Minimum and Maximum OD for size 9.00-16 mentioned as Min OD – 897 mm, Max OD – 937 mm.</td><td>To be corrected as Min OD – 892 mm, Max OD – 947 mm.</td><td>In line with ITTAC Standards Manual</td></tr>
</table>

	Table 29	Editorial	Implement Tyres Mixed Application Tyre Section Code 6.50 Approved Rim Contour mentioned as 4.00E,4.50E, 5.00F, 5.50F	Rim Contour 4½K to be added	In line with ITTAC Standards Manual
	Annex G	Editorial	18) The cold inflation pressure (in kPa) that shall not be exceeded for bead seating during tyre mounting, as specified by the tyre manufacturer for the tyre type a) Inflation pressure (in kPa) corresponding to maximum load carrying capacity b) Inflation pressure (in kPa) for tests c) Inflation pressure (in kPa) for measurements	To be renumbered as 18) The cold inflation pressure (in kPa) that shall not be exceeded for bead seating during tyre mounting, as specified by the tyre manufacturer for the tyre type 19) Inflation pressure (in kPa) corresponding to maximum load carrying capacity 20) Inflation pressure (in kPa) for tests 21) Inflation pressure (in kPa) for measurements & subsequent points to be renumbered as 22,23,24 & 25.	To bring clarity.
	Annex E	Technical	TEST PROCEDURE FOR ENDURANCE TEST (LOAD/SPEED TEST) Test can only be performed on Test drum dia. 1.70m± 1 percent in diameter	ECE R106 In case of a test drum diameter larger than 1,700 mm ± 1 per cent, the above "percentage of test load" shall be increased as follows: $F_1 = K \cdot F_2$ Where: $K = \sqrt{\frac{(R_1 / R_2)\cdot(R_2 + r_T)}{(R_1 + r_T)}}$ R_1 is the diameter of test drum, in millimeter R_2 is the diameter of the reference test drum of 1,700 mm r_T is the tyre outer diameter (see paragraph 6.2. of this Regulati millimeter F_1 is the percentage of load to be applied for the test drum F_2 is the percentage of load, as per above table, to be appli reference test drum of 1,700 mm Example: K = 1 for a test drum diameter of 1,700 mm; In case of a test drum diameter of 3,000 mm and a tyre diameter of 150 $K = \sqrt{\frac{(3000/1700)\cdot(1700+1500)}{(3000+1500)}} = 1.12$	In line with ECE R 106

	Annex H Table 31	Technical	Tyre classification code	Following Codes to be added: F-2 to be F-2/F-2M G-2 - Garden tractor tyres (implement tyres): flotation traction service R-1W- Agricultural tractor drive wheel tyres: Wet Traction tread	In line with ECE R106 and T&RA

ANNEXURE 7
[item 3 (Sl No 11)]
UPDATED NATIONAL FOREWORD FOR REVISION OF IS/ISO 28580: 2018

NATIONAL FOREWORD

(**Formal clauses will be added later**)

This standard was originally published in 2015 which was identical with ISO 28580: 2009. This first revision of this standard is being undertaken to align it with the latest version of the ISO 28580: 2018.

The main changes compared to the previous edition are as follows:

a) Incorporation of clarifications and additional detail, for example those identified in ISO/TR 16377;
b) Expansion of the concept of reference machine to include two possible types, a physical reference or a virtual reference;
c) Allowance for alignment to be carried out based on a set of two or more alignment tyres as defined by the authorizing body;
d) Ability to reduce the warm-up duration of larger truck and bus tyres under certain conditions;
e) Alignment improvement through the use of four measures of each alignment tyre, using only the last three measures for computations; and
f) Additional information concerning machine drift evaluation.

The text of ISO standard is proposed for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standard for which Indian Standard also exist. The corresponding Indian Standard, which is to be substituted in their respective places, is listed below along with their degree of equivalence for the editions indicated:

International Standard	*Corresponding Indian Standards*	*Degree of Equivalence*
ISO 17025 General requirements for the competence of testing and calibration laboratories	IS/ISO/IEC 17025 : 2017 General requirements for the competence of testing and calibration laboratories (*Second Revision*)	Identical under single numbering

The technical committee has reviewed the provisions of following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this draft standard:

International Standards	*Title*
ISO 4000-1: 2015	Passenger car tyres and rims — Part 1: Tyres
ISO 4209-1: 2001	Truck and bus tyres and rims (metric series) — Part 1: Tyres
ISO 4223-1: 2017	Definitions of some terms used in the tyre industry — Part 1: Pneumatic tyres

ISO 8855: 2011	Road vehicles — Vehicle dynamics and road-holding ability — Vocabulary

This draft standard (IS/ISO 28580) is a guideline standard and should not be used for regulatory compliance until notified by the authorised agency.

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

Annex A, B, C, D, E, Annex F forms **informative/normative** part of this standard.

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off it shall be done in accordance with IS 2: 2022 'Rules for rounding off numerical values (*Second Revision*)'.

SCOPE

This document specifies methods for measuring rolling resistance, under controlled laboratory conditions, for new pneumatic tyres designed primarily for use on passenger cars, trucks and buses. This document is not applicable to tyres intended for temporary use only. It includes a method for correlating measurement results to allow inter-laboratory comparisons. It is designed to facilitate international cooperation and, possibly, regulation building.

Measurement of tyres using this method enables comparisons to be made between the rolling resistance of new test tyres when they are free-rolling straight ahead, in a position perpendicular to the drum outer surface, and in steady-state conditions.

FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 28580: 2018 or CONTACT:

A. P. D. Dwivedi
Scientist-F & Head
Transport Engineering Department
Bureau of Indian Standards
9 Bahadur Shah Zafar Marg
New Delhi 110 002
Email: ted@bis.gov.in; hted@bis.gov.in

ANNEXURE 8
[item 3 (Sl No 13)]
DRAFT RECEIVED FROM ITTAC FOR TABLE 12 AND TABLE 15 OF IS 15636

Table 12 Ultra-Light Truck Tyres (Code Designated Diagonal Ply)

(*Clauses* 4.1.1.1, 4.1.1.2, 4.1.1.3, 4.1.2, 4.1.3 *and* 6.3)

Sl No.	Tyre Size Designation	Rim Rec. Alt.	New Tyre- Inflated										
			Width (mm)			Overall Diameter (mm)			Ply Rating	Maximum Load (corresponding to Ply Rating) kg Single/Dual	Load Index Single/ Dual	Maximum Load (Corresponding to Load Index) kg Single/Dual	Cold I. P[1] kPa (Corresponding to Maximum load) Single/Dual
			Design Section Width	Minimum Section Width	Maximum Overall Width	Design	Minimum	Maximum					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
i)	4.00-10 ULT	3.00B 3.50B	110 115	106 111	116 121	466	460	485	4	365	73	365	345
ii)	4.50-10 ULT	3.50B 3.00B	125 120	121 116	134 129	490	483	497	8	500	84	500	500
iii)	5.00-10 ULT	3.50 3.50B 3.00B	134 129	130 125	143 138	516	508	524	8	545	87	545	500
iv)	4.50-12 ULT	3½J 4J	128 133	124 129	136 141	545	537	553	6	355/340	72/70	355/335	300/300
									8	415/395	77/76	412/400	400/400
v)	5.00-12 ULT	3.50B 3.00B 4.00B	137 132,142	133 128,138	147 142,152	568	560	576	4	365/345	73/71	365/345	240/240
									6	412/400	77/76	412/400	300/300
									8	487/462	83/81	487/462	400/400

NOTES

1 Recommended shown underlined.

2 Rims: Sizes not underlined above are permitted, but one and the same tyre may not be suitable for more than two rim widths or flange profiles. Before deciding a rim size/type, the tyre manufacturer should be consulted regarding suitability of the size/type intended to be used with a permitted rim. SDC rims provide case of tyre mounting/demounting, particularly important for the high Ply rating tyres.

[1] Inflation pressure

Table 12
Revised

S. No.	Tyre Size Designation	Rim Rec. Alt.	
(1)	(2)	(3)	
i)	4.00-10 ULT	3.00B 3.50B	Rest all columns are ok
ii)	4.50-10 ULT	3.50B 3.00B	
iii)	5.00-10 ULT	3.50 3.50B 3.00B	
iv)	4.50-12 ULT	**3½J** 4J	
v)	5.00-12 ULT	3.50B 3.00B 4.00B	

Table 15 Truck, Bus and Trailer Tyres in Highway Service (Metric Designated Radial Ply)

(*Clauses* 4.1.1.1, 4.1.1.2, 4.1.1.3, 4.1.2, 4.1.3 *and* 6.3)

Sl No.	Tyre Size Designation	Rim Rec. Alt.	New Tyre Inflated								
			Width (mm)			Overall Diameter (mm)			Load Index Single/ Dual	Maximum Load (Corresponding to Load Index) kg Single/Dual Single/Dual	Cold I. P[1] kPa (Corresponding to Maximum load) Single/Dual
			Design Section Width	Minimum Section Width	Maximum Overall Width	Design HW/HT/ TR/DT[1]	Minimum HW/HT/ TR/DT[1]	Maximum HW/HT/ TR/DT[1]			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
i)	295/90R20	8.00 7.50	294 289	277 272	308 303	1039/ 1044/ 1051/ 1059	1024/ 1028/ 1035/ 1043	1070/ 1076/ 1083/ 1092	152/148	3550/3150	850/850

NOTE- HW– Highway, HT- Heavy Tread, TR-Traction, DT-Deep Traction

[1] Inflation pressure

Table 15
Revised

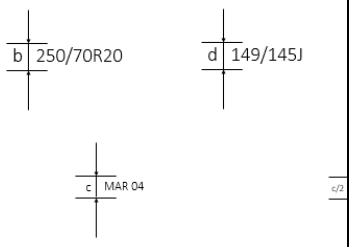
S. No.	Tyre Size Designation	Rim Rec. Alt.	
(1)	(2)	(3)	
i)	295/90R20	8.00 7.50	Rest all columns are ok

ANNEXURE 9

[item 3 (Sl No 13)]

COMMENTS RECEIVED ON DRAFT DOCUMENT TED 7 (21145) (DRAFT AMENDMENT 1 TO IS 15636)

A-9.1 COMMENTS FROM ITTAC (vide mail dt 13.8.2024)

Sl. No.	Clause/Sub-clause/ para/table/fig. No. commented	Type of Comments (General/ Editorial/ Technical)	As per Document No. 21145	Proposed change	Justification
1	Table 12	Editorial	The underlines are missing in design section width, Min. Section Width and Max. Section Width of all the 5 sizes and is misalignment	Underlines to be mentioned for all the five sizes and to be aligned properly	Editorial
2	Table 15	Editorial	Cold I.P. for Tyre size 275/90R20 mentioned as 125/125 and mis alignment in Section width values	Cold I.P. to be corrected as 860 /860 and to be aligned properly for Section Width values	Editorial
3	Tyre marking	Editorial	The letter 'C' is confusing. In the table c is in Lower case but in the example, it is in Upper Case	Suggested change:  Also, The font should look all the same as given above. And the parameters like Tyre Size, Load Index with the Speed Symbol, the word TUBELESS etc. should look proportional to the Font Height mentioned against each.	Editorial

<u>Additional comment</u>:

In line with the discussions held in Panel 1 meeting held on 18th Jun'24, the MPT category to be included. Accordingly, the following amendment is required in marking clause in line with ECE R54 Amendment # 6 published on 3rd Dec.'21:

Insert the following after 5.1 (m) as 5.1 (n)

5.1 (n) The suffix "MPT" after the rim diameter marking for tyres specifically designed for the equipment of multi-purpose commercial vehicles;

A-9.2 COMMENTS FROM MICHELIN VIDE BIS PORTAL

I agree with the Draft

A-9.3 COMMENTS FROM CONTINENTAL VIDE BIS PORTAL

SNo.	Clause / Subclause No.	Paragraph No./Figure No./Table No.	Type of Comment	Attachment
1	5.1 (d)	Page 6	Technical	N/A
Comments/Suggestions along with Justification for the Proposed Change			**Comment:** The second combination of speed symbol and load index should be surrounded by a circle.	
			Justification: UN Regulation 54 (Pls refer Supplement 25 of UN Regulation 54, which entered into force on 4 January 2023).	
Proposed Change/Modified Wordings			Speed symbol (or symbols) - An indication of tyre's nominal speed symbol and, **surrounded by a circle,** a second speed symbol along with load index, if applicable, in form of the symbol given in 3.28;	
SNo.	**Clause / Subclause No.**	**Paragraph No./Figure No./Table No.**	**Type of Comment**	**Attachment**
2	E-1 Tyre Markings	Page 42	Technical	cmt_1719464560_667cf26f1525e.png
Comments/Suggestions along with Justification for the Proposed Change			**Comment:** Annex E should be amended by adding the additional service description in the circle.	
			Justification: UN Regulation R54, Annex 3	
Proposed Change/Modified Wordings			Pls refere the attached image for proposed changes.	

ANNEXURE 10

[items 3 (Sl No 27), 5.1.5, 5.1.7, 5.1.8]

(Sl No 27 of item 3, and item 5.1.5 to 5.1.8)
MINUTES OF PANEL 2 MEETING

Minutes awaited. It will be updated once received from Convenor

ANNEXURE 11

[item 3 (Sl No 34)]

MINUTES OF PANEL 4 MEETING

Minutes awaited. It will be updated once received from Convenor

ANNEXURE 12
[item 3 (Sl No 40 to 43)]
DRAFT RECEIVED FROM INTERN MS KASHISH SHAREEN FOR IS 10694 PART 2,3,5 AND 6

A-12.1 DRAFT FOR IS 10694 PART 2

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY
(*Not to be reproduced without permission of BIS or used as an Indian Standard*)

भारतीय मानक मसौदा

स्वचल वाहन — रिम — सामान्य अपेक्षाएँ — भाग 2: यात्री कार
(*तीसरा पुनरीक्षण*)

Draft Indian Standard

AUTOMOTIVE VEHICLES — RIMS — GENERAL REQUIREMENTS — PART 2: PASSENGER CAR
(*Third Revision*)

ICS: 43.040.50;43.100

Automotive Tyres, Tubes and Rims Sectional Committee, TED 7	Last Date for Comments: **XX/XX/XXXX**

Automotive Tyres, Tubes and Rims Sectional Committee, TED 7

FOREWORD
(Formal clause to be added later)

This standard was first published in 1983 and was revised in 1996. The second revision is based on the experience gained after publication of the first revision and availability of new designs. This standard has been revised to keep pace with the latest technological advancement in the field of wheels/rims for commercial vehicles.

This standard aims at uniform rims profiles that will match the tyres in obtaining proper fitment. The sizes, designations and markings have also been standardized to facilitate uniform adoption during manufacture.

This standard is one of the parts pertaining to rims for various types of automotive vehicles under the general title 'Automotive Vehicles — Rims — General Requirements'. The other parts in this series are:

IS 10694 (Part 1): 2009	Nomenclature, Designation, Marking And Measurement (*Second Revision*)
IS 10694 (Part 3): 2009	Commercial Vehicle Rims (*Second Revision*)
IS 10694 (Part 4): 1983	Scooter and Scooter Derivative Rims
IS 10694 (Part 5): 1987	Moped, Motorcycle and Motorcycle Derivative Rims (*First Revision*)
IS 10694 (Part 6): 2009	Rims for Agricultural Tractors, Tillers and Implements (*Second Revision*)
IS 10694 (Part 7): 1983	Industrial Truck Rims
IS 10694 (Part 8): 2009	Earthmoving Machine Rims (*First Revision*)

These parts do not lay down methods of testing and performance requirements for wheels/rims pertaining to the respective tyres of automotive vehicles but lay down only the profiles and other general requirements. For passenger car wheels and truck and bus wheels/rims reference may be made to the following Indian Standards for methods of testing performance requirements:

IS No.	*Title*
9436: 1980	Performance requirements and method of tests for wheels for passenger cars
9438: 1980	Performance requirements and method of tests for wheels/rims for trucks and buses

The composition of the Committee responsible for the formulation of this standard is given at **Annex A (Will be added later).**

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off it shall be done in accordance with IS 2: 2022 'Rules for rounding off numerical values (*second revision*)'.

Draft Indian Standard

AUTOMOTIVE VEHICLES — RIMS — GENERAL REQUIREMENTS — PART 2: PASSENGER CAR

(*Third Revision*)

1 SCOPE

This standard (Part 2) covers the contour dimensions and other general requirements of passenger car rims.

2 REFERENCES

The standards given below contain provisions which, through reference in this text, constitute provision 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 10694 (Part 1): 2009	Automotive vehicles — Rims — General requirements: Part 1 nomenclature, designation, marking and measurement (First Revision)

3 DIMENSIONS

3.1 The contour and dimensions of passenger car rims shall be as given in Tables 1 and 2 and Fig. 1.

3.2 Diameters, circumference and mandrel dimensions shall be as per Fig. 22 and Tables 1 and 2 of IS 10694 (Part 1) and Fig. 2 of this standard.

4 DESIGNATION

4.1 The size designation of wheels/rims shall include figures and alphabets representing the following in the order given:

a) Nominal rim width code;
b) Rim flange profile designation; and
c) Nominal rim diameter code.

4.2 An alphabet signifies the tyre side profile of the rim flange. Usually the profile designation follows the nominal rim width code. It may however precede or include the nominal rim width code.

Example: 3.5 J × 13 or 5 J × 13

5 GENERAL REQUIREMENTS

5.1 The rims shall have a smooth contour, free from sharp edges on tyre side.

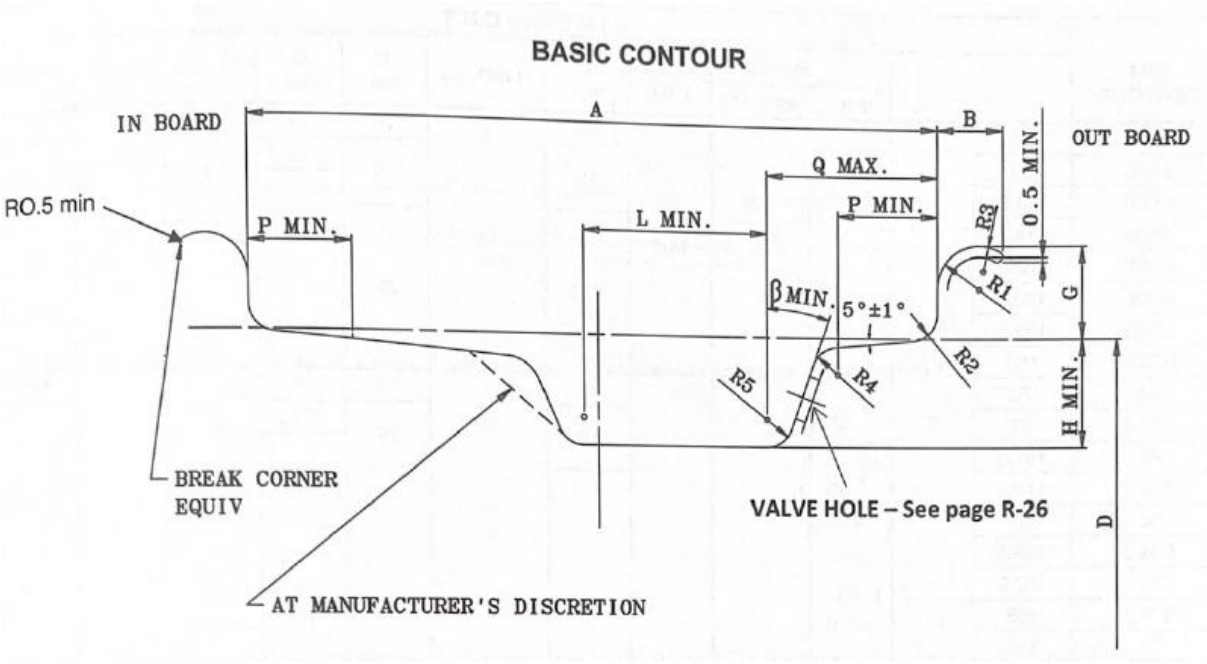
5.2 The valve hole edges on the rims shall be free from burrs.

5.3 Starting with the highest point of the flange of well-base or drop-centre rims, shaping of the flange contour towards the outer part of the rim is left to the manufacturer, but any increase in width of the rim flanges above the minimum width shall be located lower than the highest point of the flange in order to facilitate tyre mounting.

5.4 The bead seat contour may be as agreed between the rim and the vehicle manufacturers (see Fig. 1 for guidance).

5.5 For all other requirements the rims shall conform to IS 10694 (Part 1). Rims having safety hump on one bead seat only, the hump is to be at the mounting side of the rim, that is, the side at which the valve hole is punched.

5.6 Valve hole aperture shall be as per Fig. 21A to 21 H of IS 10694 (Part 1).



NOTES —

1) R_4 and R_5 are important for Tyre mounting purposes with nominal value of 4 mm plus a tolerance of 6 mm ; and
2) R_3 depending on actual values for flange curl and flange width, but Max. equal to R_1.

FIG. 1 5° PASSENGER CAR RIM PROFILE DIAMETER CODE 10 TO 22 DROP-CENTRE RIMS BASIC CONTOUR

Table 1 Diameter Code 10 to 22 Drop-Centre Rims Contour Dimensions
(*Clause* **3.1**)

Rim **Contour**	*Dimension*											
	A		***B***		*G*	*P*	*H*	*L*	*Q*	R_1	R_2	*β*
	Min		Max[1)]		*± 0.6*	*Min*	*Min*[2)]	Min	Max	Min	Max	Min
3.00B	76	+1	10	13	14.1	13	15	16	28	7.5	4.5	10°
3.50B	89	±1	10	13	14.1	15	15	19	34	7.5	4.5	13°
4.00B	101.5	+1	10	13	14.1	15	15	19	45	7.5	4.5	13°
4.50B	114.5	±1	10	13	14.1	19.5	15	22	45	7.5	4.5	13°
5.00B	127	±1	10	13	14.1	19.5	15	22	45	7.5	4.5	13°
5.50B	139.5	±1	10	13	14.1	19.5	15	22	45	7.5	4.5	13°
6.00B	152.5	+1	10	13	14.1	19.5	15	22	45	7.5	4.5	13°
6.50B	165	±1	10	13	14.1	19.5	15	22	45	7.5	4.5	13°
3J	76	+1	11	15	17.3	13	17.3	16	28	9.5	6.5	20°
$3^{1}/_{2}$J	89	±1	11	15	17.3	15	17.3	19	34	9.5	6.5	20°
4J	101.5	+1	11	15	17.3	15	17.3	19	45	9.5	6.5	20°
$4^{1}/_{2}$J	114.5	+1	11	15	17.3	19.5	17,3	22	45	9.5	6.5	20°
5J	127	+1	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$5^{1}/_{2}$J	139.5	+1	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
6J	152.5	±1	11	15	17.3	19.5	17,3	22	45	9.5	6.5	20°

$6^{1}/_{2}$J	165	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
7J	178	±1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$7^{1}/_{2}$J	190.5	±1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
8J	203	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$8^{1}/_{2}$J	216	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
9J	228.5	±1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$9^{1}/_{2}$J	241.5	+1.5	I1	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
10J	254	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$10\,^{1}/_{2}$J	266.5	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
11J	279.5	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$11\,^{1}/_{2}$J	292	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
12J	305	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$12\,^{1}/_{2}$J	317.5	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
13J	330	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$13\,^{1}/_{2}$J	343	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
14J	355.5	+1.5	11	15	17.3	19.5	17.3	22	45	9.5	6.5	20°
$4\,^{1}/_{2}\,K$	114.3	+1.5	11.4	15	19.6	19.8	20.3	22	45	10.7	6.5	20°
5K	127	+1.5	11.4	15	19.6	19.8	20.3	22	45	10.7	6.5	20°
6K	152.4	+1.5	11.4	15	19.6	19.8	20.3	22	45	10.7	6.5	20°

NOTES —

a) Superscript ‘1)’ indicates: B Max values may be exceeded on rims for light commercial vehicles; and
b) Superscript ‘2)’ indicates: Minimum dimensions for well depth (H) and well angle are required for tyre mounting. Larger values may be required to ensure sufficient space for tubeless tyre valve seating.

Table 2 Diameters
(*Clause* **3.1**)

Nominal Diameter Code	10	12	13	14	15	16	17	18	19	20	21	22	23
Specified Diameter D, mm	253.2	304.0	329.4	354.8	380.2	405.6	436.6	462.0	487.4	512.8	538.2	563.6	589

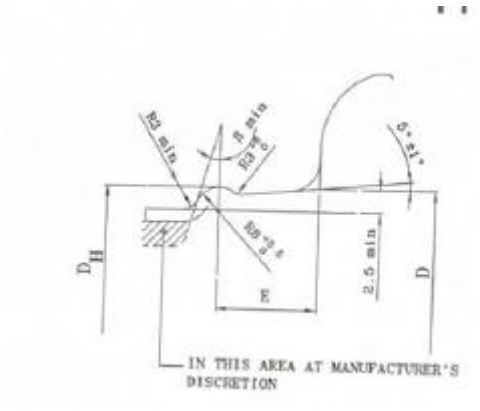
Nominal Diameter Code	24	25	26	28	30
Specified Diameter D, mm	614.4	639.8	665.2	716.0	766.8

Designation	**Bead Seat Contour**		**Marking**
	Outboard	Inboard	
Hump	Hump (Round)	Normal	H
Double Hump	Hump (Round)	Hump	H2
Flat Hump	Flat Hump	Normal	FH
Double Flat Hump	Flat Hump	Flat Hump	FH2

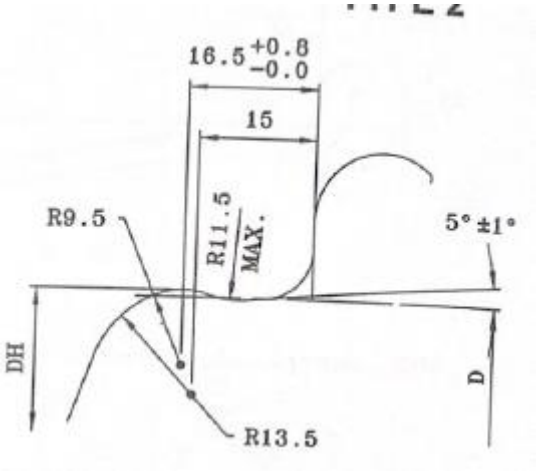
Combination Hump	Flat Hump	Flat Hump	CH
Extended Hump	Extended Hump	Extended Hump	EH2
Extended Hump +	Extended Hump +	Extended Hump +	EH2+

NOTE — For rim mandrel diameter, *see* Tables 1 to 4 of IS 10694 (Part 1).

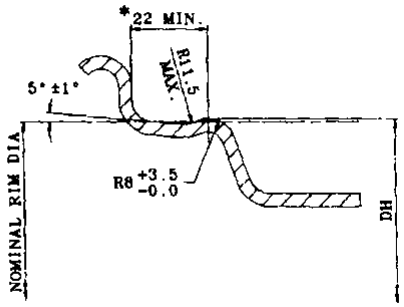
5°DROP-CENTRE RIM FOR PASSENGER CAR DIAMETER CODE 12 TO 22 OPTIONAL BEAD SEAT CONTOURS. When specially ordered, options are permitted for bead seat contours and the rims are to have such identification marking.



Nominal Rim Dia. Code	Flat Hump Circumference πDF (+0, -3)
10	795.4
12	955.0
13	1034.8
14	1114.6
15	1194.4
16	1274.2
17	1371.6
18	1451.4
19	1531.2
20	1161.0
21	1690.8
22	1770.6
23	1850.4
24	1930.2
25	2010
26	2089.8
28	2249.4
30	2409



ROUND HUMP – (TYPE 2)

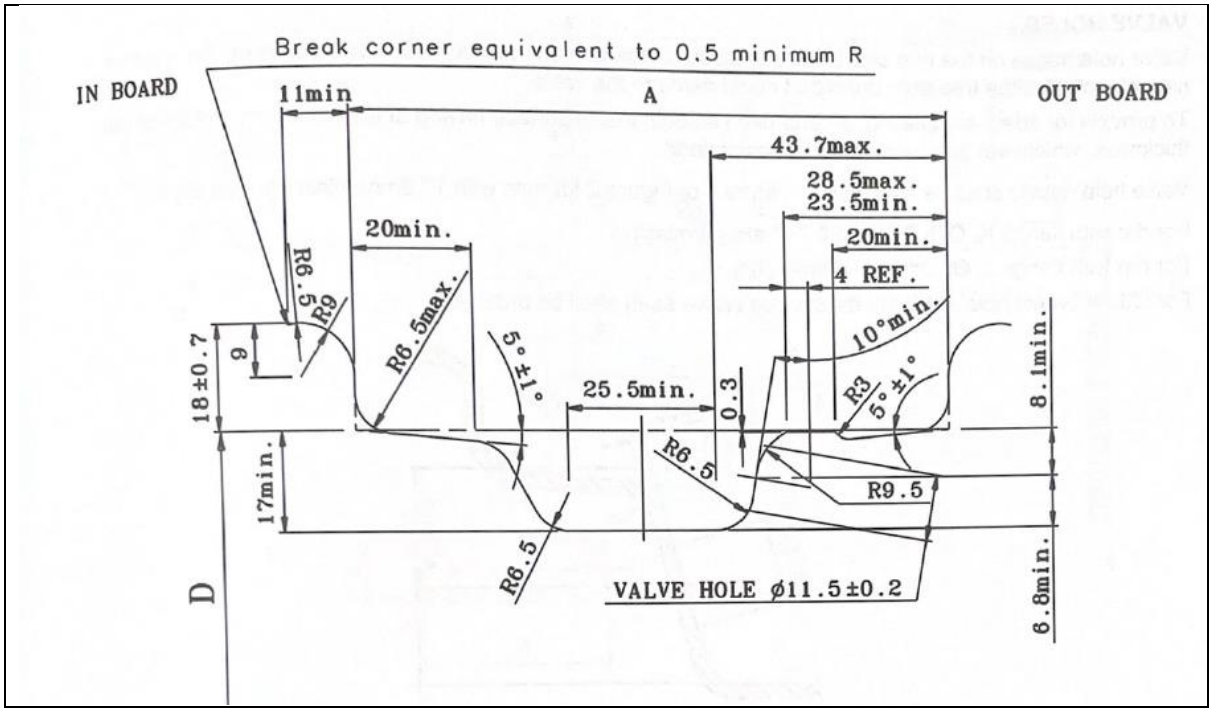


*–19.5 *Min* permitted on rim width 4.50 (4 1/2) to 7.

Nominal Rim Dia. Code	Circumference πDF (+0, -3)
10	797.6
12	957.6
13	1037.0
14	1116.8
15	1196.6
16	1276.4
17	1373.8
18	1453.6
19	1533.4
20	1613.2
21	1693.0
22	1772.8
23	1852.6
24	1932.4
25	2012.2
26	2092
28	2251.6
30	2411.2

All dimensions in millimetres.

FIG. 2 BEAD SEATCONTOURS



Dimensions(mm)					
RIM SIZE Designation	D	OUTER CIRCUMFERENCE OF D		A	
		DIMENSION	TOLERANCE	DIMENSION	TOLERANCE
4T X 14	354.8	1114.6	+1.2	101.5	+2.0
4T X 15	380.2	1194.4			
4T X 16	405.6	1274.2			

A-12.2 DRAFT FOR IS 10694 PART 3

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY
(*Not to be reproduced without permission of BIS or used as an Indian Standard*)

भारतीय मानक मसौदा

स्वचल वाहन — रिम — सामान्य अपेक्षाएँ — भाग 3: व्यावसायिक वाहन रिम
(*तीसरा पुनरीक्षण*)

Draft Indian Standard

AUTOMOTIVE VEHICLES — RIMS — GENERAL REQUIREMENTS — PART 3: COMMERCIAL VEHICLE RIMS
(*Third Revision*)

ICS: 43.040.50; 43.080.01

Automotive Tyres, Tubes and Rims Sectional Committee, TED 7	Last Date for Comments: **XX/XX/XXX**

Automotive Tyres, Tubes and Rims Sectional Committee, TED 7

FOREWORD
(Formal clause to be added later)

This standard was first published in 1983 and revised in 1991. The second revision is being based on the experience gained after publication of the standard and availability of new designs. This standard has been revised to keep pace with the latest technological advancement in the field of wheels/rims for commercial vehicles.

This standard aims at uniform rims profiles that will match the tyres in obtaining proper fitment. The sizes, designations and markings have also been standardized to facilitate uniform adoption during manufacture.

This standard is one of the parts pertaining to rims for various types of automotive vehicles under the general title 'Automotive Vehicles — Rims — General Requirements'. The other parts in this series are:

IS 10694 (Part 1): 2009	Nomenclature, Designation, Marking And Measurement (*Second Revision*)
IS 10694 (Part 2): 2009	Passenger Car (*Second Revision*)
IS 10694 (Part 4): 1983	Scooter and Scooter Derivative Rims
IS 10694 (Part 5): 1987	Moped, Motorcycle and Motorcycle Derivative Rims (*First Revision*)
IS 10694 (Part 6): 2009	Rims for Agricultural Tractors, Tillers and Implements (*Second Revision*)
IS 10694 (Part 7): 1983	Industrial Truck Rims
IS 10694 (Part 8): 2009	Earthmoving Machine Rims (*First Revision*)

These parts do not lay down methods of testing and performance requirements for wheels/rims pertaining to the respective tyres of automotive vehicles but lay down only the profiles and other general requirements. For passenger car wheels and truck and bus wheels/rims reference may be made to the following Indian Standards for methods of testing performance requirements:

IS No.	*Title*
9436: 1980	Performance requirements and method of tests for wheels for passenger cars
9438: 1980	Performance requirements and method of tests for wheels/rims for trucks and buses

The composition of the Committee responsible for the formulation of this standard is given at **Annex A (Will be added later).**

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off it shall be done in accordance with IS 2: 2022 'Rules for rounding off numerical values (*second revision*)'.

Draft Indian Standard

AUTOMOTIVE VEHICLES — RIMS — GENERAL REQUIREMENTS — PART 3 COMMERCIAL VEHICLE RIMS

(*Third Revision*)

1 SCOPE

This standard (Part 3) covers contours and other general requirements for commercial vehicle rims.

2 REFERENCES

The standards given below contain provisions which, through reference in this text, constitute provision 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 10694 (Part 1): 2009	Automotive vehicles — Rims — General requirements: Part 1 nomenclature, designation, marking and measurement (First Revision)

3 DIMENSIONS

Dimensions of contour for light and commercial vehicles shall be as given in Fig. 1 to Fig. 5.

3.1 Valve apertures for semi-drop centre, wide base and flat base rims shall be as given in Fig. 21G and 21H of IS 10694 (Part 1).

3.2 For valve hole aperture of other types, see A, B, C, D, E and F of Fig. 21 of IS 10694 (Part 1).

3.3 For details of diameter, circumference and mandrel dimensions, refer Fig. 22 to 24 and Tables 1 to 4 of IS 10694 (Part 1).

4 DESIGNATION

The size designation of wheel/rims are as per Indian Standards IS 10694 (Part -1) z

5 GENERAL REQUIREMENTS

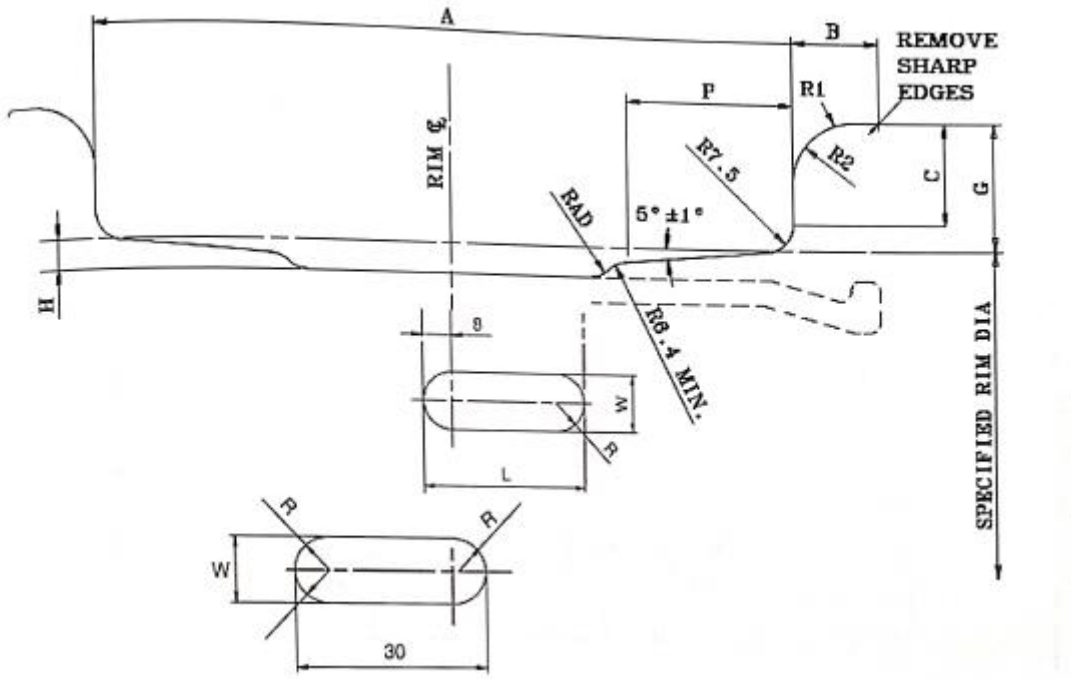
5.1 The rims shall have a smooth contour free from sharp edges on the tyre side.

5.2 The valve hole slot edges on the rims shall be free from burrs.

5.3 Starting with the highest point of the flange of well base or drop centre rims, the shaping of the flange contour towards the outer part of the rim is left to the manufacturers, but any increase in width of the rim flanges above the minimum width shall be located lower than the highest point of the flange in order to facilitate tyre mounting.

COMMERCIAL VEHICLE 5° SEMI-DROP CENTRE RIM

Contour Dimensions
All dimensions in millimetres



Width Code	A		B	C	G		H	P	R_1	R_2	
	Dimension	Tolerance	Min		Dimension	Tolerance	Min	Min		Dimension	Tolerance
4.50E	114.5	±3.2	12.5	13.5	20	±1.5	4	22	8.5	14	±2.5
5.00E	127		12.5	13.5	20		4	22	8.5	14	
5.50F	139.5		13.0	14.5	22.5		5.5	23.5	9.5	15.5	
6.00G	152.5		14.5	-	28.0			31.5	-	14.0	
6.50H	165.0		19.0	-	34.0			36.0	-	18.5	

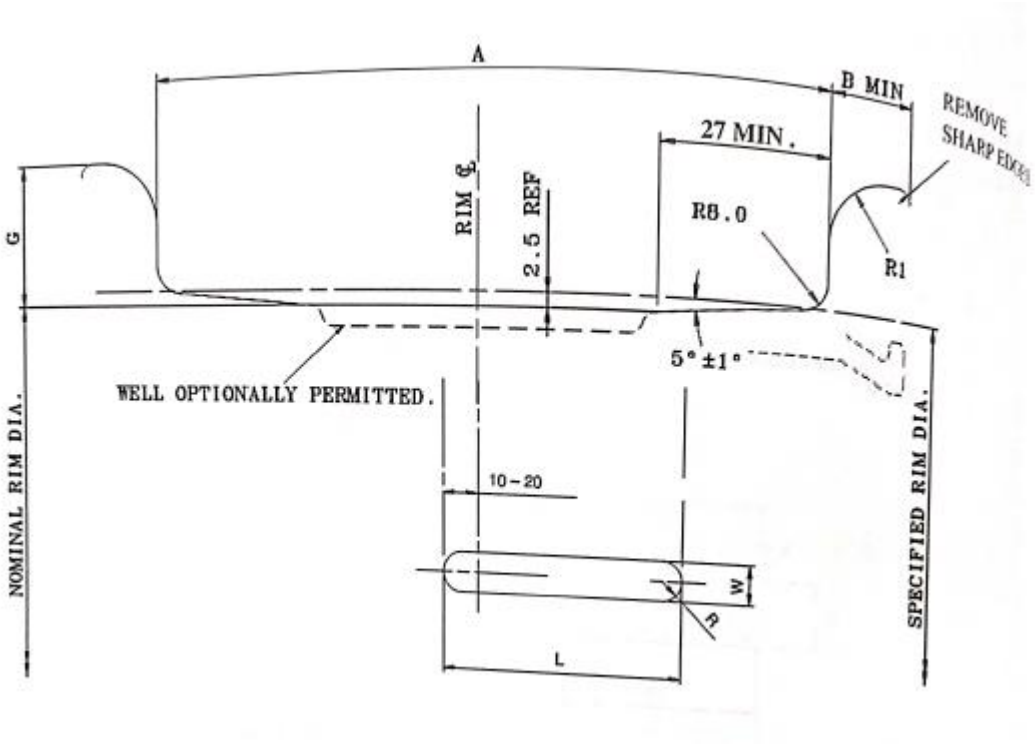
Diameter

Nominal Rim Dia. Code	Specified Rim Dia. ± 0.4 mm[1)]
15	380.2
16	405.6

NOTES —
a) For rim mandrel diameter, *see* Tables 1 to 4 of IS 10964 (Part 1);
b) For valve slot apertures, *see* Fig 21H of IS 10964 (Part 1); and
c) Superscript '1)' indicates**:** Tolerance is for tyre design purposes only.

FIG. 1 RIM CONTOUR FOR DIAMETER CODE — 16

COMMERCIAL VEHICLE 5° TAPERED RIM — PROFILE 1



Contour Dimensions

All dimensions in millimetres.

Width Code	A		B	G		R_1	
	Dimension	Tolerance	Minimum	Dimension	Tolerance	Dimension	Tolerance
B6.0	152.5	±3.5	19.0	33.0	±1.5	16.5	±2.5
B6.5	165.0		20.0	35.5		18.0	
B7.0	178.0		21.5	38.0		19.0	
B7.5	190.5		22.5	40.5		20.5	
B8.0	203.0		24.0	43.0		21.5	
B8.5	216.0	±4.0	25.0	45.5		23.0	

Rim Diameter

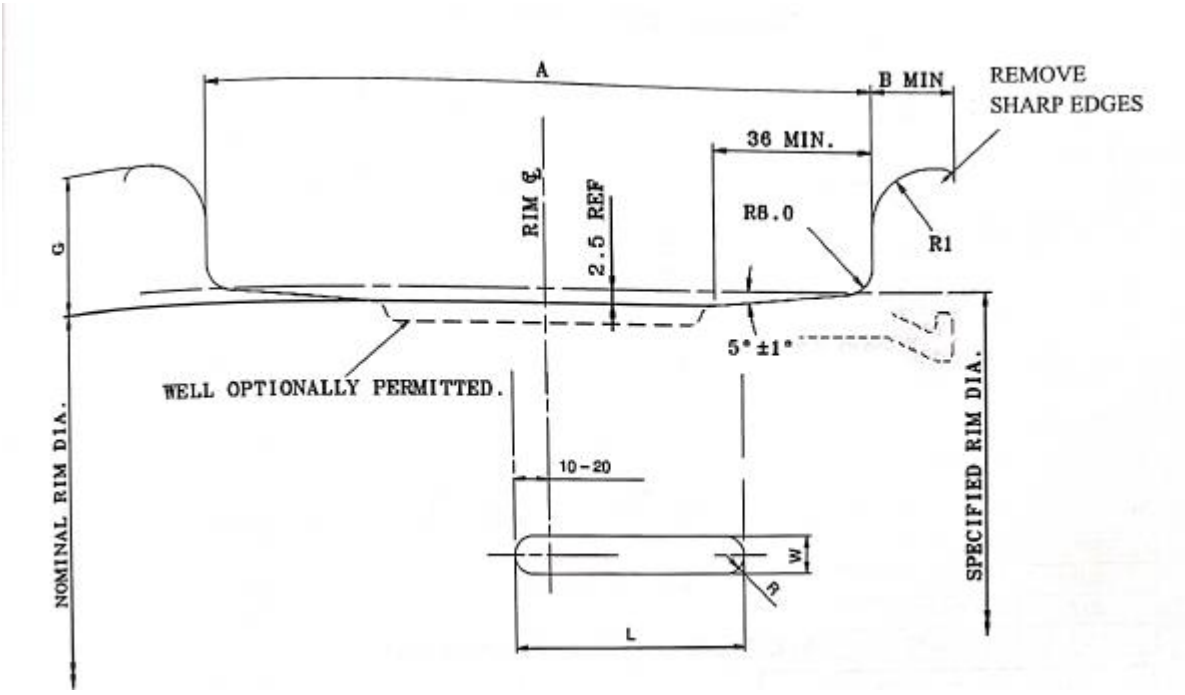
Nominal Rim Dia. Code	Specified Rim Dia. ±0.4 mm[1)]
20	512.8

NOTES —

a) 1 For rim mandrel diameter, see Tables 1 to 4 of IS 10694 (Part 1);
b) 2 For valve slot apertures, see Fig. 22J of IS 10964 (Part 1); and
c) Superscript ‘1)’ indicates: Tolerance is for tyre design purposes only.

FIG. 2 RIM CONTOUR FOR DIAMETER CODE — 20

COMMERCIAL VEHICLE 5° TAPERED RIM — PROFILE II



Contour Dimensions
All dimensions in millimetres

Width Code	*A*		*B*	*G*		R_1	
	Dimension	Tolerance	Minimum	Dimension	Tolerance	Dimension	Tolerance
5.0	127	±3.5	16.5	28	±1.5	14	±2.5
5.5	139.5		17.5	30.5		15	
6.0	152.5		19	33		16.5	
6.5	165		20	35.5		18	
7.0	178		21.5	38		19.0	
7.5	190.5		22.5	40.5		20.5	
8.0	203		24	43		21.5	
8.5	216	±4.0	25	45.5		23	
9.0	228.5		26.5	48.5		24	
10.0	254	±5.0	28	51		25.5	
11.25	286		28	51		25.5	
14.0V	355.5		29.5	44.5		27	

Rim Diameter

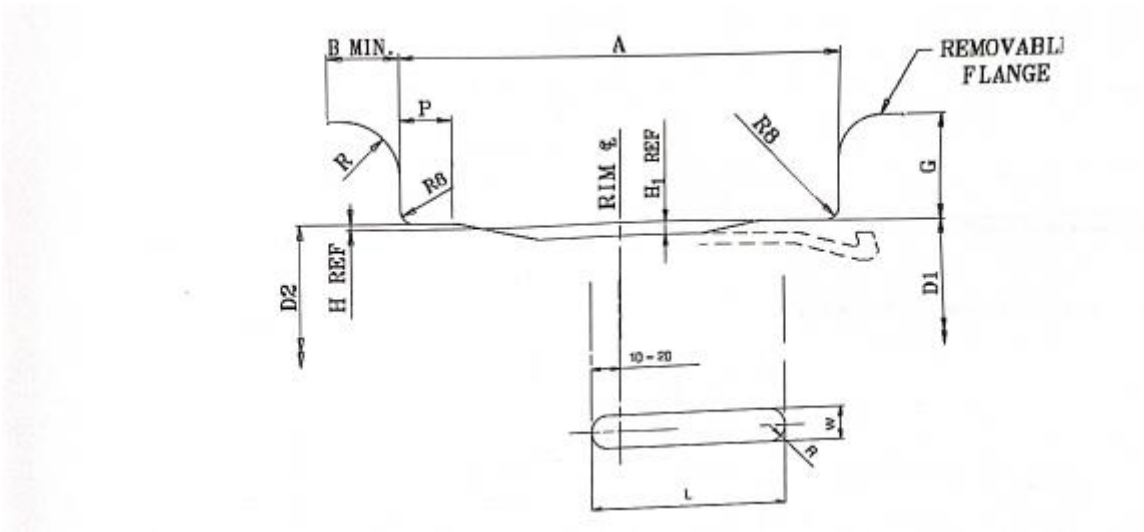
Nominal Rim Dia. Code	Specified Rim Dia. ±0.4 mm[1)]
15	387.4
20	514.4
22	565.2
21#	537.4
24	616

NOTES —

a) For rim mandrel diameter, see Tables 1 to 4 of IS 10694 (Part 1);
b) For valve slot apertures, see Fig. 22J of IS 10964 (Part 1); and
c) Superscript ‘1)’ indicates: Tolerance is for tyre design purposes only.

FIG. 3 RIM CONTOUR FOR DIAMETER CODE — 20

COMMERCIAL VEHICLE FLAT BASE RIM



Contour Dimensions
All dimensions in millimetres.

Width Code	*A*		*B*	*G*		*R*	*P*	H_1 *REF*	*H REF*
	Dimension	Tolerance	Minimum	Dimension	Tolerance	Dimension	Tolerance	Dimension	Dimension
7.50 V	190	±3.0	27	44.5	±1.5	27	46	2.0	3.5
5.00S	127	±3.5	22	33.5	±1.5	18.5	20 Max	1.5	3.5
6.0 T	152.5	±3.5	26	38	±1.5	22	20 *Max*	1.5	3.5
7.0 T	177.8	±2.3	26.5	38.5	±0.4	22	46	2.0	3.5
10.00 W[1)]	254	±5.0	32.5	51	±1.5	29	20 *Max*	-	-
8.50 V 5°	216	±4.0	31	44	±1.5	27	20 *Max*	2.0	3.5
10.0 V 5°	254	±5.0	31.0	44	±1.5	27	20 *Max*	1.5	3.5

Diameters and Circumferences

Nominal Rim Diameter Code	Nominal Rim Diameter 'D_1', mm	Circumference ±1.2 mm	Specified Rim Diameter 'D_2', mm	Circumference ±1.2 mm
20	508	1 595.9	511.2	1605.9
24	609.6	1 915.1	612.8	1925.2

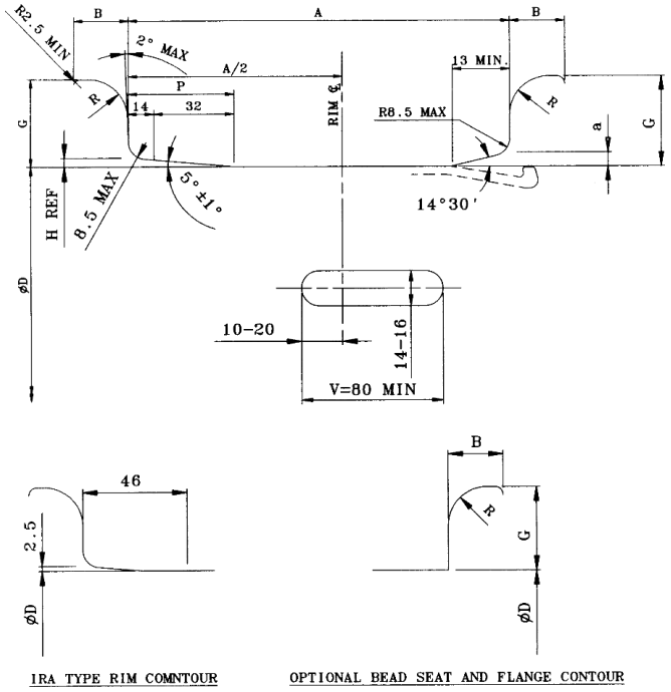
NOTES —

a) For rim mandrel diameter, see Tables 1 to 4 of IS 10964 (Part 1);
b) For valve slot apertures, see Fig. 21H of IS 10964 (Part 1); and
c) Superscript '1)' indicates: For 'W' profile $D_1 = D_2$.

4A Rim Contour for Diameter Code — 20, 24

FIG. 4 COMMERCIAL VEHICLE RIM CONTOURS — *Continued*

COMMERCIAL VEHICLE INTERIM RIM CONTOURS (IR AND IRA)



Contour Dimensions

All dimensions in millimetres.

Width Code	A		B	G		R	P	H REF
	Dimension	Tolerance	Minimum	Dimension	Tolerance	Dimension	Tolerance	Dimension
7.5 V 5°	190	±3.0	27	44.5	±1.0	27	46	2.0

Diameters and Circumferences

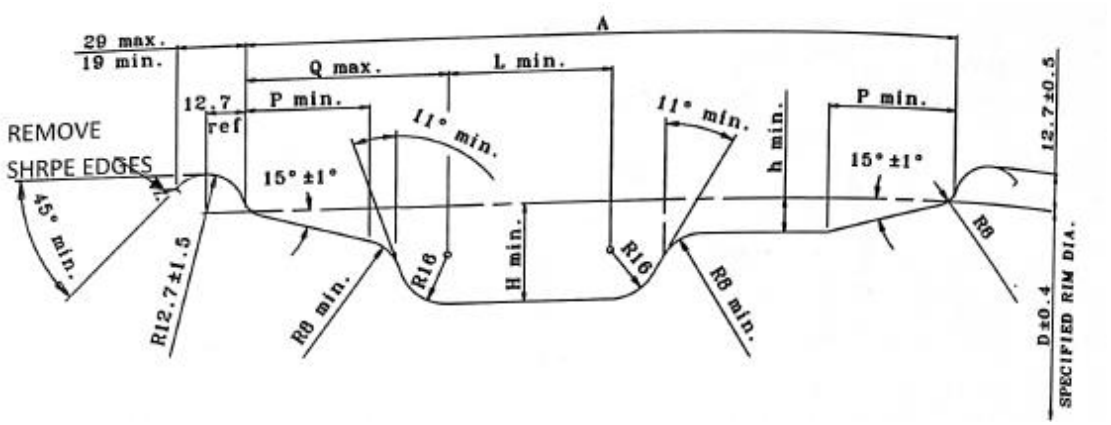
Nominal Rim Dia. Code	*D*	Outer Circumference of *D*	
		Dimension	Tolerance
20	50 8	1 596	±1.2

NOTES —

a) For rim mandrel diameter, see Tables 1 to 4 of IS 10964 (Part 1); and
b) For valve slot apertures, see Fig. 21H of IS 10964 (Part 1).

4B Contour for 7.5 V5° × 20
Commercial Vehicle 15° Drop-Centre Rims
(Width Codes 6.00 to 14.00 Basic Contour)

FIG. 4 COMMERCIAL VEHICLE RIM CONTOUR



Width Code	Nominal Diameter Code	Contour Dimensions					
		A ±2.5	P *Min*	L *Min*	Q *Max*	H *Min*	h *Min*
5.25	17.5	133.5	25	4	55	24	7
5.25	19.5	133.5	25	4	56	27	7
5.25	22.5	133.5	25	8	57	30	7
6.00	17.5	152.5	2 5	1 1	60	24	8.5
6.00	19.5	152.5	3 0	1 1	62	27	8.5
6.00	22.5	152.5	3 0	1 1	63	30	8.5
6.75	17.5	171.5	2 5	1 1	62[1)]	24	9
6.75	19.5	171.5	3 0	1 4	64	27	9
6.75	22.5	171.5	3 2	1 4	66[1)]	30	9
7.50	17.5	190.5	2 5	1 4	65[1)]	24	9.5
7.50	19.5	190.5	3 0	2 1	67[1)]	27	9.5
7.50	22.5	190.5	3 4	2 1	68[1)]	30	10
AG8.25	16.5	209.5	34	30	70	30	10
8.25	17.5	209.5	25	28	65	24	9.5
8.25	19.5	209.5	3 0	2 8	67[1)]	27	9.5
8.25	22.5	209.5	3 6	2 8	70[1)]	30	10
8.25	24.5	209.5	36	28	72	30	10
9.00	19.5	228.5	3 0	2 8	68[1)]	30	9.5
9.00	22.5	228.5	3 6	2 8	70[1)]	30	10
9.00	24.5	228.5	36	28	70[1)]	30	10
AG9.75	16.5	247.5	34	30	70	30	10
9.75	22.5	247.5	36	28	70[1)]	30	10.5
9.75	25.5	247.5	36	28	72[1)]	30	10.5
10.50	17.5	266.7	2 5	3 0	65[1)]	24	9
11.75	19.5	298.5	3 4	3 0	68[1)]	30	11
11.75	22.5	298.5	3 4	3 0	70[1)]	30	11
12.25	19.5	311	3 0	3 0	70[1)]	30	11
14.00	19.5	355.5	3 4	3 0	68[1)]	30	11

NOTES —

a) These dimensions comprise the minimum well envelope for tyre mounting purposes; and
b) Tolerance is for tyre design purposes only.
1) Larger dimensions may be used subject to confirmation by tyre mounting trials.

Diameters

Nominal Diameter Code	Specified Diameter (D) (mm)

16.5	419.1
17.5	444.5
19.5	495.3
22.5	571.5
24.5	622.3

NOTES —

a) For rim mandrel diameter, see Tables 1 to 4 of IS 10964 (Part 1);
b) For valve hole apertures, see Fig. 21E and 21F of IS 10964 (Part 1); and
c) Superscript '1)' indicates: Larger dimensions may be used subject to confirmation by tyre mounting trials.

FIG. 5 RIM CONTOUR FOR DIAMETER CODE — 17.5, 19.5 AND 22.5

A-12.3 DRAFT FOR IS 10694 PART 5

For BIS Use Only

भारतीय मानक प्रारूप

ऑटोमोटिव वाहनों के लिए रिम्स के लिए सामान्य आवश्यकताएं
भाग 5 मोपेड, मोटरसाइकिल और मोटरसाइकिल व्युत्पन्न रिम्स

Draft Indian Standard

GENERAL REQUIREMENTS FOR RIMS FOR AUTOMOTIVE VEHICELS
PART 5 MOPED, MOTORCYCLE AND MOTORCYCLE DERIVATIVE RIMS

ICS:

Last date for receipt of comments is XX/XX/XXXX

Automotive Tyres, Tubes and Rims Sectional Committee, TED 7

FOREWORD

Wheels/rims for all types of vehicles are being manufactured in the country. This Indian Standard has been issued in order that the manufacturers follow uniform rim profiles for proper fitment of tyres and become familiar with the size designations and other markings.

This standard (Part 5) is one of a series of Indian Standards pertaining to rims for various types of automotive vehicles. The standards in this series are:

IS: 10694 (Part l)-1984 General requirements for rims for automotive vehicles: Part 1 Rim nomenclature, designation, marking and measurement

IS: 10694 (Part 2)-1983 General requirements for rims for automotive vehicles: Part 2 Passenger car rims

IS: 10694 (Part 3)-1983 General requirements for rims for automotive vehicles: Part 3 Commercial vehicle rims

IS: 10694 (Part 4)-1983 General requirements for rims for automotive vehicles: Part 4 Scooter and scooter derivative rims

IS: 10694 (Part 5)-1983 General requirements for rims for automotive vehicles: Part 5 Motorcycle and motorcycle derivative rims

IS: 10694 (Part 6)-1984 General requirements for rims for automotive vehicles: Part 6 Agricultural tractor rims

IS: 10694 (Part 7) -1983 General requirements for rims for automotive vehicles: Part 7 Industrial truck rims

IS: 10694 (Part 8)-1983 General requirements for rims for automotive vehicles: Part 8 Earthmoving machine rims

Keeping the exports of vehicles in view and for harmonization of standards, efforts have been made to refer to European Tyre and Rim Technical Organization (ETRTO) Standards.

These standards do not lay down methods of testing and performance requirements for wheels/rims. These lay down only the rim profiles and other general requirements. For passenger car wheels and truck and bus wheels/rims, reference may be made to the following standards for methods of testing and performance requirements:

IS: 9436-1980 Performance requirements and methods of test for wheels for passenger cars

IS: 9438-1980 Performance requirements and methods of test for wheels/rims for trucks and buses

The composition of the Committee responsible for the formulation of this standard is given at **Annex A (Will be added later).**

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 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.

Draft Indian Standard

GENERAL REQUIREMENTS FOR RIMS FOR AUTOMOTIVE VEHICELS PART 5 MOPED, MOTORCYCLE AND MOTORCYCLE DERIVATIVE RIMS

ऑटोमोटिव वाहनों के लिए रिम्स के लिए सामान्य आवश्यकताएं
भाग 5 मोपेड, मोटरसाइकिल और मोटरसाइकिल व्युत्पन्न रिम्स

1 SCOPE

Covers the requirements of rims for mopeds, motorcycles and motorcycle derivative tyres. This standard covers only spoked rims.

2 REFERENCES

The standards given below contain provisions which, through reference in this text, constitute provision 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 10694 (Part 1): 1984	General requirements for rims for automotive vehicles: Part 1 Rim nomenclature, designation, marking and measurement.
IS: 513: 1986	Specification for cold rolled low carbon steel sheets and strips (third revision).

3 NOMENCLATURE

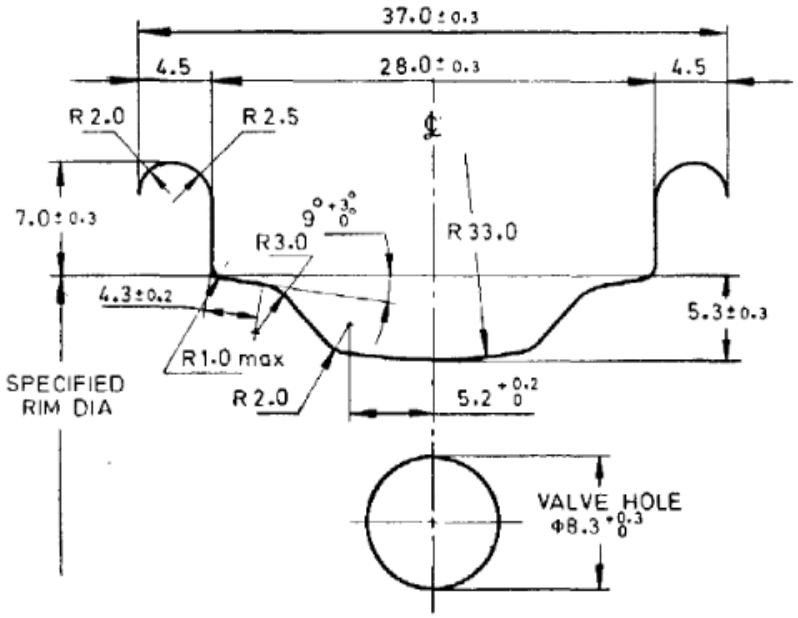
Shall be in accordance with IS 10694 (Part 1): 1984 'General requirements for rims for automotive vehicles: Part 1 Rim nomenclature, designation, marking and measurement'.

4 MATERIAL

The rim shall be manufactured from suitable cold-rolled steel strip conforming to IS: 513-1986 Specification for cold rolled low carbon steel sheets and strips (third revision).

5 DIMESNIONS

The contours and dimensions for mopeds, motorcycles and motorcycle derivative rims shall be as given in Fig. 1 and Table 2.



All dimensions in millimetres.

FIG. 1 CONTOUR DIMENSIONS FOR TAPERED BEAD SEAT RIMS OF NOMINAL WIDTH CODE 28

6 RIM DIAMETERS CIRCUMFERENCE AND WIDTH CODE

Shall be as given in Tables 1, 2 and 3. The bead seat rim circumference measurement shall be carried out using a tape gauge whose length is related to mandrel diameter. The tape width is related to nominal rim width code and is specified in Table 4. The method of measurement shall be in accordance with IS 10694 (Part 1): 1984.

7 DESIGNATION

The size designation of rims shall include the following in the order given
[see also IS: 10694 (Part 1)-1984]:

a) Nominal rim width code,
b) Nominal rim diameter code.
Example: 1.50 × 16

Note - Rims were earlier designated by a combination of alphanumeric code and rim width.
Example: WM2/1.85

TABLE 1 DIAMETERS AND CIRCUMFERENCES FOR TAPERED BEAD SEAT RIM

(Clause 6)

All dimensions in millimetres.

Nominal Rim Dia Code	Specified Rim Dia *D*	Taping Dia	Taping Circumfe-rence +2.0 -0.5	Taping Position	Tape Mandrel Dia	Tape Mandrel Circumfer-ence*	Dia of Ball Tape for Rim Measurement
19	484·47	483.26	1518.20	3.3	483.76	1519.78	8.0

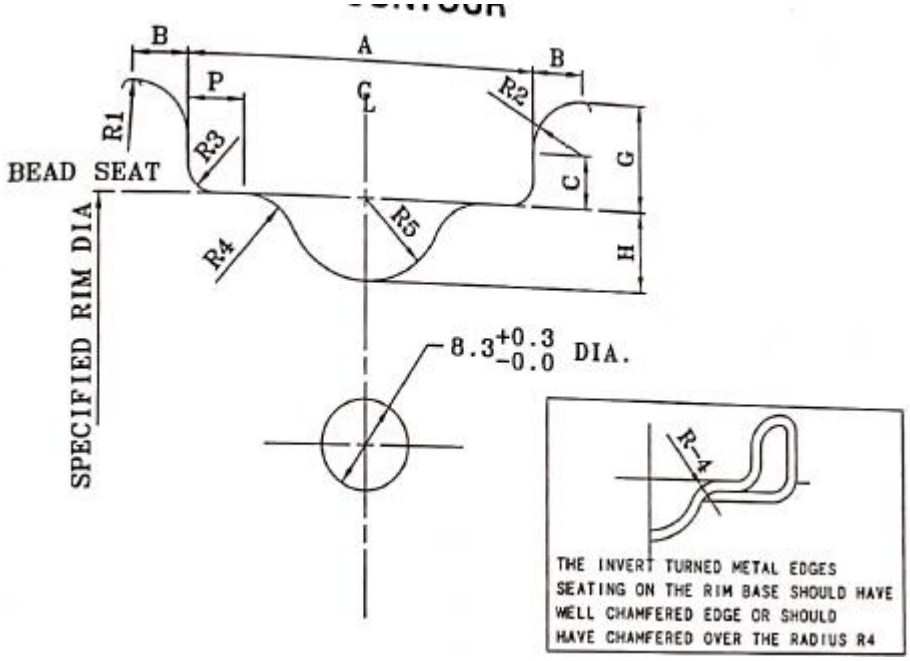
22	560.67	559.46	1 757.59	3.3	559.96	1759.17	8·0

Note-The above data are based on a mean bead seat angle 10°30' for circumference checking method
[see **IS:** 10694 (Part 1)-1984].
*Mandrel dimensions include a plus tolerance of 2 mm on circumference.

TABLE 2 CONTOUR DIMENSIONS FOR CYLINDRICAL BEAD SEAT RIMS

(Clause 6)

All dimensions in millimetres.



Nominal Rim Width Code	*A* +1.0 -0.5	*G* 0.5	*H* +1.0 -0.5	*B Min*	*B Max*	*P* +2.0 -0.0	J	R_1 *Min*	R_2	R_3 *Max*	R_4 *Min*	R_5 *Min*
1.10	28.0	7.0	7.0	5.0	7.0	3.0	2.0	1.5	6.0	1.5	5.0	7.0
1.20	30.5	9.0		5.5	7.5	3.0	3.5	1.5	6.0	1.5	5.0	7.0
1.35	34.0	10.0	7.5	6.5	8.5	3.5	4.0	1.5	6.5	1.5	5.0	7.0
1.40	36.0	10.0	8.0	6.5	8.5	3.5	4.0	1.5	6.5	1.5	5.0	10.0
1.50	38.0	10.5	8.0	7.5	9.5	4.0	4.0	2.0	7.0	2.0	5.5	11.5
1.60	40.5	12.0	8.0	7.5	9.5	4.5	4.0	2.0	8.0	2.0	5.5	13.0
1.85	47.0	14.0	9.0	8.5	12.5	5.0	3.5	2.0	12.5	2.0	6.0	15.0
2.15	55.0			8.5	12.5	7.5	3.5	2.0	12.5	2.0	7.0	18.5
2.50	63.5			9.5	12.5	7.5	3.5	2.0	12.5	2.0	7.0	19.0
2.75	70.0		12.0	10.5	12.5	11.0	3.5	3.0	12.0	3.0	7.0	19.0
3.00	76.0			10.5	12.5	11.0	3.5	3.0	12.0	3.0	7.0	19.0

TABLE 3 DIAMETERS AND CIRCUMFERENCES FOR CYLINDRICAL BEAD SEAT RIMS

(Clause 6)

All dimensions in millimetres.

Nominal Rim Dia Code	Specified Rim Dia	Specified Rim Circumference +2.0 -0.5	Tape Length	Tape Mandrel Dia* +0 -0.05
10	253.2	795.4	798.42	253.8
12	304.0	955.0	958.02	304.6
14	357.1	1121.9	1124.92	357.7
15	382.5	1201.7	1204.71	383.1
16	405.6	1274.2	1277.28	406.2
17	433.3	1361.2	1364.31	433.9
18	458.7	1441.0	1444.11	459.3
19	484.1	1520.8	1523.90	484.7
20	534.9	1680.4	1682.32	535.5
22	558.8	1755.5	1758.57	559·4

Note - Measurements are to be made on rims ready for tyre mounting and individually on each bead seat.
*Tape mandrel is to check tape length. It includes the maximum tolerance of specified rim circumference

8 GENRAL REQUIREMENTS

8.1 The rims shall have a smooth contour free from sharp edges on the tyre side.

8.2 The holes for wire spokes shall be circular and free from burrs and sharp edges. These holes shall have uniform pitch. The spoke holes shall be equally spaced and shall be alternately on either side of the centre of the rim.

8.3 The valve hole shall be accurately punched or drilled centrally on the nose of the rim approximately opposite to joint of the rim and shall be at the centre of the two diverging spoke holes. This hole shall be clean, circular and free from burrs.

8.4 Starting with the highest point of the flange of well-base, the shaping of the flange contour towards the outer part of the rim is left to the discretion of the manufacturer but any increase in width of the rim flange above the minimum width shall be located lower than the highest point of the flange in order to facilitate tyre mounting.

8.5 The surface of the rim shall be free from any flaw, crack, crazing or any other similar structural defect.

8.6 Surface Treatment - The rim shall be nickel and chromium plated and the minimum thickness of plating on the significant surfaces shall conform to service Grade 3 of IS :1068-1985 'Specification for electroplated coatings of nickel plus chromium and copper plus nickel plus chromium on iron and steel (second revision)'.

9 MARKING

9.1 The rims shall be marked with the following in accordance with IS: 10694 (Part 1)-1984:

a) Size designation, and

b) Name or trade-mark of the rim manufacturer.

9.2 Certification Marking - Details available with the Bureau of Indian Standards.

TABLE 4 TAPE WIDTH FOR RIM MEASUREMENT

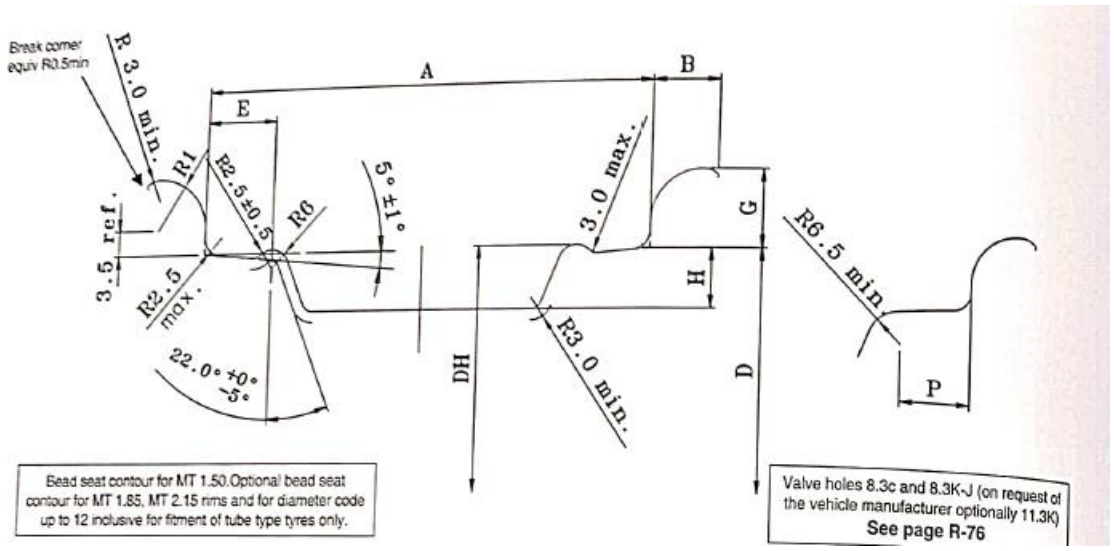
(Clause 6)

Nominal Rim Width Code	Tape Width (W)* mm
1.20	27·0
1.35	30.5
1.40	32.5
1.50	33.5
1.60	36·0
1.85	42.5

*Tape width (W) = Nominal rim width - 2R3 - negative tolerance value on rim width.

DROP – CENTRE RIMS WITH 5° TAPERED BEAD SEATS – MT TYPE

BASIC CONTOUR -MT

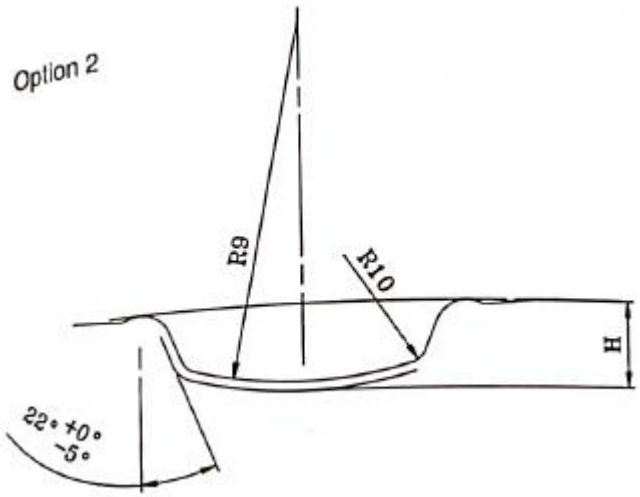


RIM CONTOUR	CONTOUR DIMENSONS (mm)									
	A	B		E	G	H min	P +2.0	R1	R6 ±0.5	
		min.	Max.							

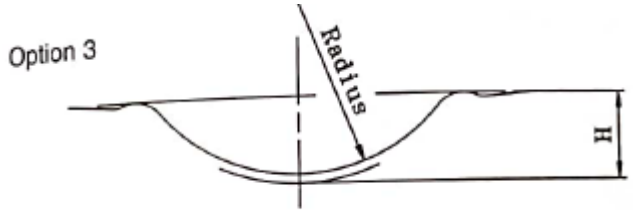
									-0		
MT 1.50	38	7.5	11.5	-	-	10	±0.5	8	4	7.0	-	
MT1.60	40.5			10	+0.5	12			-	12.5	2.5	
MT1.85	47			12	-0.0	14		9	8		3.0	
MT2.15	55			13					11			
MT2.50	63.5							12			5.5	
MT2.75	70			14								
MT3.00	76			15	+2.0			13				
MT3.50	89				-0.0							
MT3.75	95			16			+1.0					
MT4.00	101.5						-0.5					
MT4.25	108											
MT4.50	114.5											
MT5.00	127											
MT5.50	140											
MT6.00	152.5											
MT6.25	159											
MT6.50	165											
MT7.00	178											
MT7.50	190.5											
MT8.00	203											
MT8.50	216											
MT9.00	228.5											
MT9.50	241.5											
MT10.00	254											
MT10.50	266.5											
MT11.00	279.5											
MT11.50	292.1											
MT12.00	304.8											
MT12.50	317.5											
MT13.00	330.2											
MT13.50	342.9											

DROP – CENTRE RIMS WITH 5° TAPERED BEAD SEATS – MT TYPE

OPTIONAL WELL CONTOURS



RIM CONTOUR	CONTOUR DIMENSIONS (mm)			
	H MIN	R9 min	R10	
			min	max
MT1.85	10	20	3	8
MT2.15	10			
MT2.50	13	30		10
MT2.75	13			
MT3.00	14	40		
MT3.50	15			
MT3.75	16			
MT4.00	16			
MT4.25	17	50		
MT4.50	17	50		
MT5.00	18	70		
MT5.50	19	80		
MT6.00	20	100		
MT6.25	21	110		
MT6.50	21	120		
MT7.00	22	130		
MT7.50	23	150		
MT8.00	24	170		
MT8.50	25	190		
MT9.00	26	200		
MT9.50	27	220		



NOMINAL DIAMETER CODE	DIMENSIONS (mm)	
	SPECIFIED DIAMETER	HUMP CIRCUMFERENCE
		+2.0 -1.0
8	202.4	-
10	253.2	793.3
11	278.6	873.1
12	304	952.9
13 M/C	332.2	1041.5
14 M/C	357.6	1121.3
15 M/C	383	1201.1
16 M/C	406	1273.4
17 M/C	433.8	1360.7
18 M/C	459.2	1440.5
19 M/C	484.6	1520.3
20 M/C	510	1600.1
21 M/C	535.4	1679.9
22 M/C	560.8	1759.9
23 M/C	586.2	1839.5
24 M/C	611.6	1919.3

E X P L A N A T O R Y N O T E

This standard was first published in 1983 covering motorcycles and motorcycle derivative tyres. As a result of the experience gained in implementation of this standard as well as IS: 8410-1977 'Specification for rims for mopeds' and to keep pace with the technological

developments, a need was felt to revise both these standards. Tyres, Tubes and Rims Sectional Committee decided to combine motorcycle and moped rims in one standard. On publication of this standard, IS: 8410-1977 will be withdrawn.

Production of tapered bead seat rims as given in Fig. **1** is gradually dying out in India but has been retained in the Indian Standard for reference during the transition period.

To avoid proliferation in size range, the use of 1.40 cylindrical bead seat rim, in place of 1.35 is being explored and, therefore, both the sizes have been included in the standard.

Previously, the rims were generally coded with WM codes which are given below only for information and shall not be used in future:

Symbol	*Nominal Rim Width (in Inches)*
WMO	1.50
WM1	1.60
WM2	1.85

For this Indian Standard, a reference has been made to ETRTO and JATMA data books and ISO 4249/3-1986 'Motorcycle tyres and rims (code designated series) — Part 3: Rims' and ISO/DIS-5995/2 'Moped tyres and rims — Part 2: Rims'.

Incorporation of strength and ovality for rims was also considered but because of lack of data the same has not yet been included.

A-12.4 DRAFT FOR IS 10694 PART 6

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY
(*Not to be reproduced without permission of BIS or used as an Indian Standard*)

भारतीय मानक मसौदा

स्वचल वाहन — रिम — सामान्य अपेक्षाएँ — भाग 6: कृषि ट्रेक्टर, टिलर्स और साधनों के लिए रिम
(*तीसरा पुनरीक्षण*)

Draft Indian Standard

AUTOMOTIVE VEHICLES — RIMS — GENERAL REQUIREMENTS — PART 6: RIMS FOR AGRICULTURAL TRACTORS, TILLERS AND IMPLEMENTS
(*Third Revision*)

ICS: 43.040.50; 65.060.10

Automotive Tyres, Tubes and Rims Sectional Committee, TED 7	Last Date for Comments: **XX/XX/XXXX**

Automotive Tyres, Tubes and Rims Sectional Committee, TED 7

FOREWORD
(Formal clause to be added later)

This standard was first published in 1984 and revised in 1988. The second revision is being based on the experience gained after publication of standard and availability of new designs. This standard has been revised to keep pace with the latest technological advancement in the field of wheels/rims for all types of vehicles.

This standard aims at uniform rims profiles that will match the tyres in obtaining proper fitment. The sizes, designations and markings have also been standardized to facilitate uniform adoption during manufacture.

This standard is one of the parts pertaining to rims for various types of automotive vehicles under the general title 'Automotive Vehicles — Rims — General Requirements'. The other parts in this series are:

IS 10694 (Part 1): 2009	Nomenclature, Designation, Marking And Measurement (*Second Revision*)
IS 10694 (Part 2): 2009	Passenger Car (*Second Revision*)
IS 10694 (Part 3): 2009	Commercial Vehicle Rims (*Second Revision*)
IS 10694 (Part 4): 1983	Scooter and Scooter Derivative Rims
IS 10694 (Part 5): 1987	Moped, Motorcycle and Motorcycle Derivative Rims (*First Revision*)
IS 10694 (Part 7): 1983	Industrial Truck Rims
IS 10694 (Part 8): 2009	Earthmoving Machine Rims (*First Revision*)

These parts do not lay down methods of testing and performance requirements for wheels/rims pertaining to the respective tyres of automotive vehicles but lay down only the profiles and other general requirements.

The composition of the Committee responsible for the formulation of this standard is given at **Annex A** (Will be added later).

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off it shall be done in accordance with IS 2: 2022 'Rules for rounding off numerical values (*second revision*)'.

Draft Indian Standard

AUTOMOTIVE VEHICLES — RIMS — GENERAL REQUIREMENTS — PART 6: RIMS FOR AGRICULTURAL TRACTORS, TILLERS AND IMPLEMENTS

(*Third Revision*)

1 SCOPE

This standard (Part 6) covers the rim contours and general requirements for agricultural tractor, tillers and implements.

2 REFERENCES

The standards given below contain provisions which, through reference in this text, constitute provision 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 10694 (Part 1): 2009	Automotive vehicles — Rims — General requirements: Part 1 nomenclature, designation, marking and measurement (First Revision)

3 DIMENSIONS

Rim contours for agricultural tractors, tillers and implements with dimensions shall be as given in Fig. 1 to Fig. 4.

3.1 For valve-hole apertures, *see* **2.3.4** of IS 10694 (Part 1).

3.2 For details of diameters, circumference and mandrel dimensions, *see* Tables 1 and 2 and **5.3** of IS 10694 (Part 1).

4 DESIGNATION

The size designation of wheel/rim shall include figures and alphabets in the following order, representing:

a) Nominal rim width code;
b) Rim flange profile; and
c) Nominal rim diameter code.

4.1 An alphabet signifies the tyre side profile of the rim flange. Usually, the profile designation follows the nominal rim width code. It may, however, precede or include the nominal rim width.

Examples:

W 11 × 28
W15L × 28
5.00 F × 20

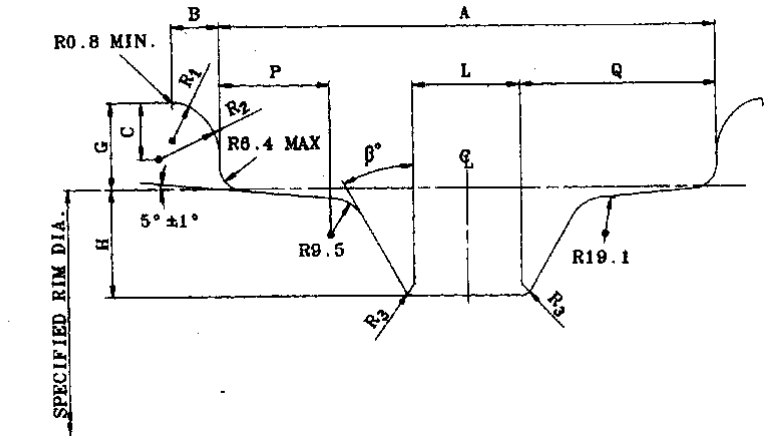
5 GENERAL REQUIREMENTS

5.1 The rim shall have a smooth contour, free from sharp edges on the tyre side.

5.2 Valve hole shall generally be perpendicular to well base in case of well base rim.

5.3 Valve-hole edges on rim shall be free from burrs.

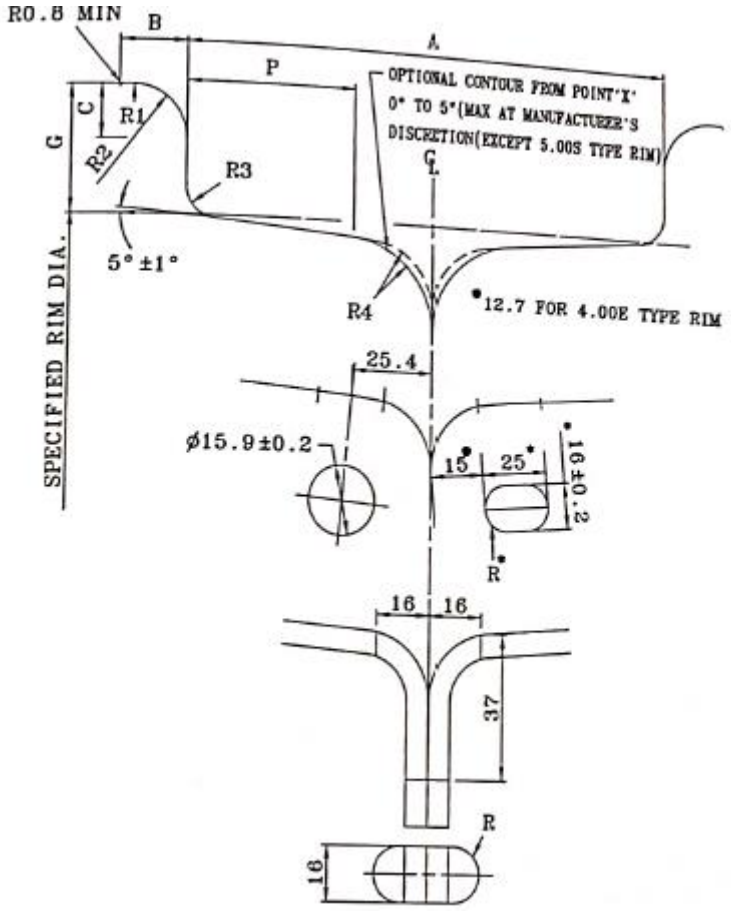
5.4 Starting with the highest point of the flange of well base or drop centre rims, the shaping of the flange contour towards the outer part of the rim is left to the manufacturer, but any increase in width of the rim flanges above the minimum width shall be located lower than the highest point of the flange in order to facilitate tyre mounting.



Contour Dimensions
All dimensions in millimetres.

Width Code	A		B	P	Q	C	L	G		H	R_1	R_2	R_3	B
	Dimension	Tolerance	Min	Min	Max		Min	Dimension	Tolerance	Min				Min
4.00E	101.6	±1.6	11.7	18.0	-	13.6	30.4	19.8	±1.2 -0.4	19.0	8.6	14.2	4.7	10°
4.50E	114.3				23.1		-			23.4				
5.00F	127.0		12.2	23.9	23.9	14.5	-	22.2		27.6	9.7	15.6	6.4	15°
5.50F	139.7				36.5		-							
5K	127.0		10.3	19.8	35.3	10.3	26.2	19.6		25.4	6.4	10.7		

FIG. 1 5° DROP — CENTRE RIMS FOR LIGHT TRUCK, TRAILER, AGRICULTURAL TRACTORS AND IMPLEMENTS



Contour Dimensions
All dimensions in millimetres.

Width Code	A		B	C	G		P[1)]	R_1	R_2	R_3	R_4
	Dimension	Tolerance	Min		Dimension	Tolerance				Max	Max
4.00E	101.6	±2.0	12.5	13.5	20.0	±1.0	25.0	14.0	14.2	4.3	10.0
5.00S	127.0		22.5	—	31.3[3)]		—	—	18.3	8.0	16.0
5.00 F	127.0		13.0		22.5		23.5[2)]	15.5	18.3	8.0	12.0
5.50F	139.7			14.5					15.6	6.4	

NOTES —

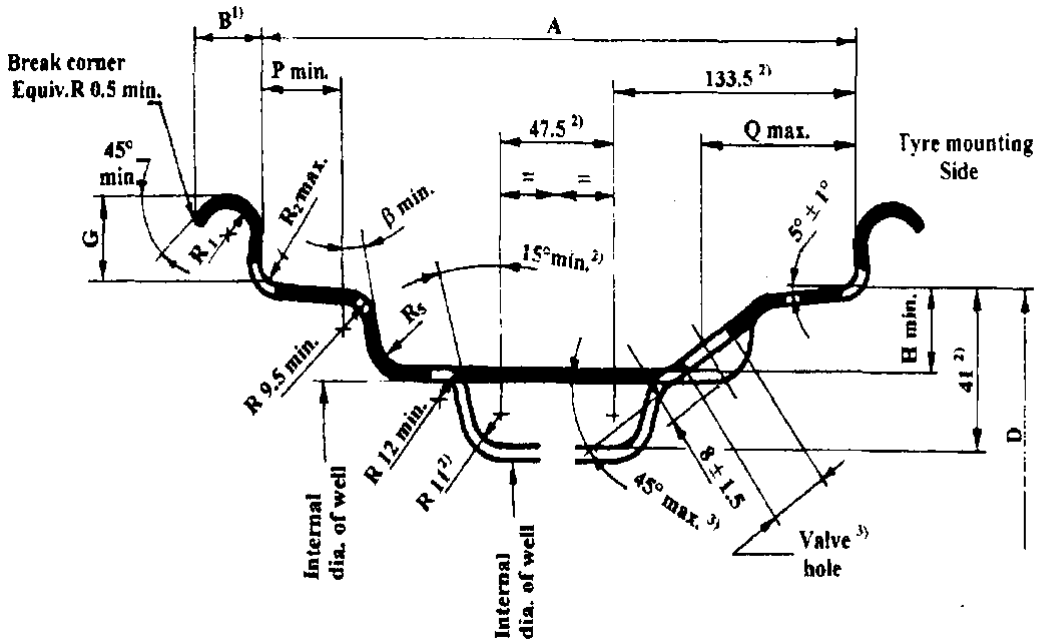
a) Superscript '1)' indicates: A higher minimum under consideration and would be acceptable only if a tyre of 12 p.r. or higher is added to the range in that case a circular rim hole, instead of the elongated slot, as shown, may be necessary.
b) Superscript '2)' indicates: 34 mm minimum for 5.50 F × 10 Rim.
c) Superscript '3)' indicates: Tolerance ±1.2.

FIG. 2 DIVIDED TYPE RIM PROFILE DIAMETER CODE 9 — 16

Table 1 Diameters and Circumferences
(Clause **3.2**)

Sl. No. (1)	Nominal Rim Diameter Code (2)	Specified Rim Diameter (3)	Taping Diameter (4)	Taping Circumference (5)	Taping Position (6)	Tape Mandrel Diameter[1)] (7)	Tape Mandrel Circumference[1)] (8)	Diameter of Ball Tape for Rim Measurement (9)
I	9	227.8	227.0	713.1	4.6	227.4	714.2	10.0
II	10	253.2	251.9	791.4	7.3	252.3	792.5	16.0
III	**12**	308.8	307.5	966.1	7.3	307.8	967.0	16.0
IV	**13**	329.4	328.1	1030.7	7.3	328.5	1031.8	16.0
V	16	405.6	404.3	1270.3	7.3	404.7	1271.2	16.0

NOTE — Superscript '1)' indicates: Mandrel dimensions shown above include plus tolerance of 1.2 mm on circumference and 0.4 mm on diameter.



Contour Dimensions — W and DW Rims

FIG. 3 AGRICULTURAL TRACTORS AND IMPLEMENTS W AND DW RIM BASE CONTOURS — *Continued*

Rim Contour	Dimensions, mm												
	A		G ±	B		P	H	Q	**L**	**R_1**	**R_2**	**R_5**	***β***
				Min	Max	Min	Min	Max	**min**		Max	Max	Min
W6	152.5	±2.5	22.5	10	14.5	23.5	20.5	44.5	58.5	9.5	6.5	11	6°
W7	178	±2.5	22.5	10	14.5	23.5	20.5	44.5	84	9.5	6.5	11	6°
W8	203	±2.5	22.5	10	14.5	23.5	20.5	44.5	109	9.5	6.5	**11**	6°
W9	228.5	±2.5	25.5	11.5	18[1)]	27	20.5	51	121.5	11	6.5	11	6°
W10	254	±2.5	25.5	11.5	18[1)]	27	20.5	51	147	11	6.5	11	15°
W11	279.5	±2.5	25.5	11.5	18[1)]	27	20.5	57.5	159.5	11	6.5	11	15°
W12	305	±2.5	25.5	11.5	18[1)]	27	20.5	57.5	185	11	6.5	11	15^0
W13	330	±2.5	25.5	11.5	18[1)]	27	20.5	57.5	**210**	**11**	6.5	11	15°
W8L	203	±2.5	22.5	11.5	18[1)]	27	20.5	51	96	11	6.5	11	15°
W101	254	±2.5	22.5	11.5	18[1)]	27	20.5	57.5	134	11	6.5	11	15°
W141	355.5	±5	25.5	11.5	18[1)]	27	20.5	57.5	230.5	11	6.5	11	15^0
W151	381	±5	25.5	11.5	18[1)]	33	20.5	57.5	256	11	6.5	11	15°
W161	406.5	±5	25.5	11.5	18[1)]	33	20.5	57.5	281.5	11	6.5	11	15°
W181	457	±5	25.5	11.5	18[1)]	33	20.5	57.5	332	11	6.5	11	15°
DW10	254	±2.5	25.5	11.5	18[1)]	27	20.5	54	-	11	6.5	14.5	15°
DW 11	279.5	±2.5	25.5	11.5	18[1)]	27	20.5	54	-	11	6.5	14.5	15°
DW 12	305	±2.5	25.5	11.5	18[1)]	27	20.5	54	-	11	6.5	14.5	15°
DW13	330	±2.5	25.5	11.5	18[1)]	27	20.5	54	-	11	6.5	14.5	15°
DW 13L	330	±2.5	25.5	11.5	24[1)]	36.5	27	63.5	-	11	8	14.5	15°
DW 14 L	355.5	±5	25.5	11.5	18[1)]	36.5	27	54	-	11	8	14.5	15°
DW 15 L	381	±5	25.5	16	- [2)]	36.5	27	63.5	-	11	8	14.5	15°
DW 16 L	406.5	±5	25.5	16	- [2)]	50.5	27	63.5	-	11	8	14.5	15°
DW 18 L	457	±5	25.5	16	- [2)]	50.5	27	95.5	-	11	8	14.5	15°
DW 20B[3)]	508	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 21 B[3)]	533.5	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 23 B[3)]	584	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 24 B[3)]	609.5	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 25 B[3)]	635	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 27 B[3)]	686	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 28 B[3)]	711	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 30 B[3)]	762	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW31B	787.5	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 36 B[3)]	914.5	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
DW 44 B[3)]	1118	±6.5	29	21	- [2)]	50.5	27	95.5	-	15	8	14.5	15°
TW13	330	±2.5	25.5	11.5	24[1)]	27	-	-	-	11	6.5		15°
TW14L	355.5	±5	25.5	11.5	24[1)]	36.5	-	-	-	11	8		15°
TW15L	381		25.5	16	- [2)]	36.5	-	-	-	11	8		15°
TW16L	406.5		25.5	16	- [2)]	50.5	-	-	-	11	8		15°
TW18L	457		25.5	16	- [2)]	50.5	-	-	-	11	8		15°
TW20B	508		29	21	- [2)]	50.5	-	-	-	15	8		15°
TW21B	533.5		29	21	- [2)]	50.5	-	-	-	15	8		15°
TW23B	584		29	21	- [2)]	50.5	-	-	-	15	8		15°
TW24B	609.5		29	21	- [2)]	50.5	-	-	-	15	8		15°
TW25B	635		29	21	- [2)]	50.5	-	-	-	15	8		15°
TW27B	686		29	21	- [2)]	50.5	-	-	-	15	8		15°
TW28B	711		29	21	- [2)]	50.5	-	-	-	15	8		15°
TW30B	762		29	21	- [2)]	50.5	-	-	-	15	8		15°
TW31B	787.5		29	21	- [2)]	50.5	-	-	-	15	8	14.5	15°

TW36B	914.5		29	21	- [2)]	50.5	-	-	-	15	8	14.5	15°
TW44B	1118		29	21	- [2)]	50.5	-	-	-	15	8		15°

FIG. 3 AGRICULTURAL TRACTORS AND IMPLEMENTS W AND DW RIM BASE CONTOURS

NOTES —

a) The outer rim flange contour from the highest point of the rim flange is left to the manufacturer the following restrictions. The contour can either follow a continuation of R_1 to full flange width or, if conical shaped, a minimum 45° angle applies between the upper G horizontal reference line.
b) These dimensions comprise the minimum well envelope for tyre-mounting purposes.
c) Valve holes 15.7 C2 or 15.7 G3 may be on either side of the rim.
d) Superscript '1)' indicates: Rim flanges width within 5 mm on each side.
e) Superscript '2)' indicates: 21 Rim flanges width within 6 mm on each side.
f) Superscript '3)' indicates: DW-B rim contour has been named DW-A in year 2004, 2005 and 2006. W-B rims replace DW-A rims and can be used with full interchangebility.

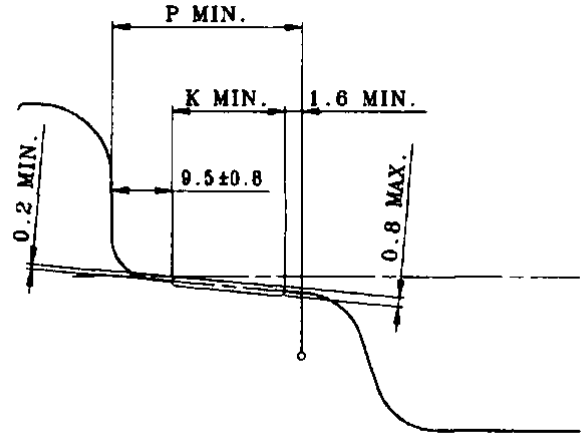
Table 2 Diameters — W and DW Rims
(*Clause* **3.2**)

Sl. No.	**Nominal Diameter Code**	**Type**	**Dimensions**	
			Specified Diameter, D mm	Internal Diameter of Well mm
(1)	(2)	(3)	(4)	(5)
i)	16	W	405.6	352.2
ii)	18	W	462.0	408.5
iii)	20	W	512.8	459.3
iv)	24	DW	614.4	510.1
v)	24	W	614.4	560.9
vi)	26	DW	665.2	560.9
vii)	26	W	665.2	611.7
viii)	28	DW	716.0	611.7
ix)	28	W	716.0	662.5
x)	30	DW	766.8	662.5
xi)	30	W	766.8	713.3
xii)	32	DW	817.6	713.3
xiii)	32	W	817.6	764.1
xiv)	34	DW	868.4	764.1
xv)	34	W	868.4	814.9
xvi)	36	DW	919.2	814.9
xvii)	36	W	919.2	865.7
xviii)	38	DW, TW	970.0	865.7
xix)	38	W	970.0	916.5
xx)	40	DW++TW+TW	1020.8	967.3
xxi)	40	W	1020.8	967.3
xxii)	42	DW, TW	1071.6	967.3
xxiii)	42	W	1071.6	1018.1
xxiv)	44	W	1122.4	1068.9
xxv)	44	DW, TW	1122.4	1018.1
xxvi)	46	DW,TW	1173.2	1068.9
xxvii)	46	W	1173.2	1119.7
xxviii)	48	DW,TW	1173.2	1119.7
xxix)	48	W	1224.0	1170.5
xxx)	50	DW,TW	1274.8	1170.5
xxxi)	50	W	1274.8	1221.3
xxxii)	52	DW,TW	1325.6	1221.3
xxxiii)	52	W	1325.6	1272.1
xxxiv)	54	DW,TW	1376.4	1272.1
xxxv)	54	W	1376.4	1322.9

NOTE — Tolerance for internal diameter of wheel:

From W 16 to DW 26	±1 mm
From W 26 to DW 36	±1.5 mm
From W 36 to W 44	±2 mm
From W 46 to W 54	±3 mm

KNURLING SPECIFICATION FOR TRACTOR RIM



PITCH 1.6 TO 3.2 mm.

Rim Width	Rim Diameter Code Below 24	Rim Diameter Code 24 and Above
Up to width Code 13	Optional	Optional
Width Code 14 and above	Optional	Mandatory

KNURLING DETAILS	
P_{Min}	K_{Min}
< 33	10.2
up to 41.3	20.6
>41.3	25.4

FIG. 4 KNURLING DETAIL

ANNEXURE 13
(item 5.3.5)
COMMENTS FROM IRMRA ON IS 15627, IS 15633, and IS 15636

A-13.1 COMMENT ON MANDATORY MARKINGS IN IS : 15633/15636 STANDARDS IN COMPARISON WITH AIS 142(vide mail dated 21 march 2024)

This is in reference to some mandatory markings given in AIS 142:2019 on page 5 such as TRACTION (clause: 4.2.5),Alpine symbol(clause :4.2.6), MPT/ML/ET/POR(clause:4.2.7,SPECIAL USE) as well as the requirements mentioned in clause 6.5,6.6 and 6.7 (page 10,11) for classification in TRACTION ,SPECIAL USE,PROFFESIONAL OFF ROAD(POR) category.

As both standards BIS (IS: 15633/15636) and AIS 142 are enforced now, we are hereby requesting to add the above markings and requirements suitably in IS: 15633 and IS: 15636 to avoid any discrepancies during BIS /AIS certification.

Also we need the better clarity for overall diameter (OD) specification given in tables 6 to 28 of IS 15636 to qualify any tyre size in TRACTION or SPECIAL USE.

Examples:

Case 1: table 6 is giving OD specification as standard and premium, suppose any size listed is to be classified under TRACTION or SPECIAL USE with appropriate markings as above then which OD specification is to be followed.

Case 2: table 14 is giving OD specification as HW (highway) /HT(heavy tread)/TR(Traction), suppose any size listed is to be classified as SPECIAL USE with appropriate markings as above, then which OD specification is to be followed. If the tyre size is having the marking TRACTION then only OD specification of TR(traction) is to be followed or HW (highway) /HT(heavy tread) can also be followed.

Case 3: table 19 is giving the OD specification for normal and special service, suppose any size listed is to be classified under TRACTION with appropriate marking as above, then which OD specification is to be followed.

One table can be inserted after table 10 of IS 15636 for the radial size designations for Mining and Logging application for more clarity.

A-13.2 REGARDING TESTING OF TEMPORARY USE SPARE TYRE UNDER CLAUSE NO. 3.33 OF AMENDMENT 1 OF IS 15633:2022.

We are in the receipt of tyre size 165/70R14 81R for testing as per category of use (annex J) as “temporary” under clause no. 3.33 of amendment 1 of IS 15633:2022. Further this sample is also having the markings as Max. 80 Kmph (in contrast speed category symbol R : 170kmph max.) and “TEMPORARY USE ONLY”.

Kindly clarify
1. Whether we can include the above case under category of use as “Temporary”?
or clause no. 3.33 is the definition of temporary use spare tyre and 3.33.1 i.e. only T type temporary use spare tires can be added under this category currently as no further classification is given for the case highlighted above.
2. If the above case is to be certified under “ temporary “ category of use , we need the clarification in the standard regarding the tests to be done, any exclusion for endurance test similar to T type and the required mandatory markings (including the min. letter height) to differentiate compared to normal specification tyre.

Mail dated. 26.3.2024: please consider the definition of temporary use spare tyre given in AIS 142:2019 also as below.

(f) For Classes C2 and C3 tyres:
  (i) In case of tyres submitted for approval of rolling sound emission levels at stage 1, whether M+S marked or not;
  (ii) In case of tyres submitted for approval of rolling sound emission levels at stage 2, whether traction tyre or not;
(g) The tread pattern.

3.2. **"Brand name" or "Trade description"** means the identification of the tyre as given by the tyre manufacturer. The brand name may be the same as that of the manufacturer and the Trade description may coincide with the trade mark.

3.3. **"Rolling sound emission"** means the sound emitted from the contact between the tyres in motion and the road surface.

3.4. **"Tyre class"** means one of the following groupings:

3.4.1. Class C1 tyres: Tyres conforming to Standard IS 15633;

3.4.2. Class C2 tyres: Tyres conforming to Standard IS 15636 and identified by a load capacity index in single formation lower or equal to 121 and a speed category symbol higher or equal to "N" and/or tyres marked with LT/C;

3.4.3. Class C3 tyres: Tyres conforming to Standard IS 15636 and identified by:

(a) A load capacity index in single formation higher or equal to 122 and /or tyres not marked with LT/C; or

(b) A load capacity index in single formation lower or equal to 121 and a speed category symbol lower or equal to "M" and /or tyres not marked with LT/C.

3.5 **"Representative tyre size"** means the tyre size which is submitted to the test described in Annex A to this Standard with regard to rolling sound emissions, or Annex C for adhesion on wet surfaces or Annex D for rolling resistance to assess the conformity for the type approval of the type of tyre, or Annex E for use in severe snow conditions.

3.6. **"Temporary-use spare tyre"** means a tyre different from a tyre intended to be fitted to any vehicle for normal driving conditions; but intended only for temporary use under restricted driving conditions.

3.7. **"Tyres designed for competition"** means tyres intended to be fitted to vehicles involved in motor sport competition and not intended for non-

A-13.3 IRMRA COMMENT ON IS 15627 (Mail dt 30.8.2024)

We need the clarification regarding the clause 6.4 of amendment 1 of IS 15627:2022 referring the table 12. If you see the table 5 to 11, except table 6a, 7 & 9, most of sizes are mentioned with pressure more than 230 kPa which is not in line with table 12.

ANNEXURE 14

(item 5.3.6)

CLARIFICATION REQUEST FROM MR SATISH KAKKAD AND FMCS

A-14.1 CLARIFICATION REQUEST FROM MR SATISH KAKKAD

We have a valid BIS license for our company in Thailand with license number 4100026057. We want to include a new variety in our license under SPECIAL USE category for Mining and logging as this tyre is for OFF the Road application to be used in mines and construction sites. The speed index is G and is a Radial construction tyre. Please let me know if we can also get the inclusion done in SPECIAL CATEGORY UNDER MINING AND LOGGING We have seen some domestic licenses with the same inclusion and we also want to do the same. We have seen mining and logging tyre in the standards in Table 10 of the IS standards.
Awaiting your early reply.

A-14.2 CLARIFICATION REQUEST FROM FMCS (IN CONTINUATION TO MR SATISH KAKKAD REQUEST)

This has reference to the query received from one of the AIR under FMCS regarding inclusion of Tyres for commercial use vide trailing mail.

The query is regarding the Mining and Logging Tyres for use in intermittent highway service mentioned in Table 10 of IS 15636:2022. It has been mentioned by AIR that some of the domestic licences have got inclusion under this category.

As per IS 15636:2022, Special category tyre is defined as Special − *Special-use tyre, for example tyre for mixed use (both on and off the road) and/or restricted speed.*

TED is kindly requested to confirm whether this category of tyres is to be considered under Special use tyres.

ANNEXURE 15
(item 5.4)

COMMENTS RECEIVED FROM SONIL VENTILFABRIK ON IS 9081 (vide mail dated 14.5.2024)

Following Standards on Tyre Valve Threads were withdrawn by BIS:

1) IS 9449 : Part 1 : 1980 (Reaffirmed Year : 2009)
Dimensions for Tyre Valve Threads - Part I : Threads 5V1, 5V2, 6V1 and 8 V1

2) IS 9449 : Part 2 : 1985 (Reaffirmed Year : 2007)
Dimensions for Tyre Valve Threads - Part 2 : Threads 9V1, 1OV2 and 12V1

3) IS 9449 : Part 3 : 1985 (Reaffirmed Year : 2007)
Dimensions for Tyre Valve Threads - Part 3 Threads, 10V1, 15V1, 17V1 and 20V1

In IS 9081 : 2017, there is no mention on details for Tyre Valve Threads. All world standards including our ITTAC, ETRTO, TRA, JATMA, ISO, etc. are giving details of Tyre Valve Threads in their Standard Manual. Almost all threads used in Tyre Valves are non-standard & hence I request you to add this details in next update. I am attaching Thread details sheet for your reference.

I request you to share our suggestion to concerned stake holders for their comments / suggestions.

If there is any format in which the suggestions are to be submitted, I request you to kindly send the format so that we can submit our suggestion in prescribed format.

I am available for further discussion.

ANNEXURE 16

(item 9.4)

GUIDELINE RECEVIED FROM PNC DEPARTMENT) FOR ADOPTION OF ISO/IEC STANDARDS AND DESIGNATION OF EXPERTS FOR ISO/IEC PROJECTS

(Reference: PNC09/20/2024-PNC-BIS)

Guidelines for strengthening the Standardisation Ecosystem in the country:

ADOPTION OF ISO/IEC STANDARDS

1. Excessive focus on adoption of ISO/IEC standards has two negative implications

a) It hinders the creation of original work and the development of new indigenous standards.
b) Fosters the tendency to take rather than make a standard

2. Therefore, unless a Wide Circulation Draft has already been issued and a revision or amendment is required due to changes in the ISO/IEC standard, no ISO/IEC standards or standards from other Standards Development Organizations shall be adopted without prior approval from the DG henceforth.

3. The proposal for taking up the adoption of a standard must elaborate the advantages and relevance of the adoption in the Indian context.

DESIGNATION OF EXPERTS FOR ISO/IEC PROJECTS

1. Focus will now be on participating in the making of ISO/IEC standards on the basis of the Level of Interest established in respect of a NWIP or draft standard.

2. The Member Secretary, in consultation with the Chair of the Sectional Committee and the Head of Department, and if necessary, with the entire Sectional Committee, shall determine and specify the Level of Interest for each NWIP or draft standard received from ISO/IEC in the IRD Portal.

3. The next step is to designate one or two members of the Sectional Committee to represent BIS for standards categorized as Level H (High) and M (Medium). These designated experts will act as face and voice of BIS for the project at the ISO/IEC level.

4. Experts assigned to H-level projects shall be entitled to attend TC/WG meetings with the approval of the Head of the Standardisation Department, and there shall not be the need to take the matter to the Screening Committee.

5. The designated expert shall be responsible for providing detailed feedback on drafts and documents from ISO/IEC, assisting the Sectional Committee in developing the rationale for proposing NWIPs, finalizing proposals for leadership positions and secretariats and briefing the Sectional Committee on discussions at the ISO/IEC level.

6. Representation of BIS at meetings for M-level projects shall be decided by the Screening Committee.