

Addenda to Minutes of 42nd meeting of TED 7

Substitute B-2 of Annexure B by following:

B-2 IS 16192 Part 2

Committee deliberated and endorsed the draft document modified by panel 3. It also endorsed the panel recommendation and Chair approval for issuance of draft into WC of 30 days.

Further it deliberated at length (*see B-2.1, B-2.2 and B-2.3 also*) and decided to process the draft amendment document TED/7/24493 into Publication and authorized BIS to carry out editorial correction, if any.

On CMD comments, committee decided as follows:

<p>Cl. 4.2.2- It is being specified that Hybrid wheel rim and composite wheel rim of type 2 shall be tested and evaluated as per IS 16192 (Part 1). The test requirements /acceptance criteria for these wheel rims have not been clearly specified in the draft Amendment document. Also, test methods for applicable tests for these wheel rims specially on the aspect that whether the Hybrid wheel rims shall be tested "with hub motor" or "without hub motor" is not specified in the draft Amendment to IS 16192 (Part 2).</p> <p>In this regard it is observed that following tests are specified to be done on wheel rims as per IS 16192 (Part 1): 2014: <i>Rotation Bending Fatigue Test (Dynamic Cornering Fatigue Test), Radial Load Durability Test, Radial Impact Resistance Test, Torsion Moment Test, Air Leak Test (Tubeless Tyres Wheel Rim)</i>. Whereas, IS 16192 (Part 2) specifies only following 2 tests on wheel rims: <i>Dynamic Cornering Fatigue Test (CFT) , Dynamic Radial Fatigue Test (RFT)</i></p> <p>It can also be seen from IS 16192 (Part 1) and IS 16192 (Part 2) that the test requirements for CFT and RFT are different in IS 16192 (Part 1) and IS 16192 (Part 2). Also, the test method and test requirements/acceptance criteria specified in IS 16192 (Part 1) are for Light alloy wheel rims. In view of the above, it is recommended that the test methods and requirements/acceptance criteria for these wheel rims should be explicitly specified in IS 16192 (Part 2) itself for all applicable tests.</p> <p>Figure 1 and Figure 2 needs more clarity and should illustrate all components (Rim, Ring, casing, Hub motor) clearly.</p>	<p>Committee deliberated and appreciated the panel work and mentioned that updated draft documents have addressed clarity issue suitably.</p> <p>Committee mentioned that these points were well deliberated in panel and committee meetings. Regarding reference of IS 16192 Part 1 for testing and conformance in IS 16192 Part 2, committee mentioned that it is done as requirements of IS 16192 Part 1 are stringent compared to other parts and international</p>
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	reference are also not available for hybrid and such composite wheel.
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B-2.1 ICAT Comment:

Committee accepted ICAT comment on clause 3.2.1. For other comments, committee deliberated and decided that these comments are comment on standard. Committee 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.

B-2.2 Comments from ACMA

Shri Ashvani from Mandap briefed the comments. Committee deliberated and mentioned that as discussed in panel 3 meeting, dt. 9.4.2024, decision regarding responsibility of certification will be taken by CMD dept suitably.

Regarding reference of IS 16192 Part 3, Shri Ashvani mentioned that reference of part 3 is required to regulate the dimensions and not allowing the manufacturing of unauthorized dimensions, which may cause tyre fitting issues. Committee deliberated and mentioned that incorporation of dimensional requirement in various wheels standards, was discussed in 37th meeting, and committee had requested ITTAC and BIS to update ITTAC manual and BIS standards. As Dimensions are not part of international standards on performance requirement of wheel, committee had decided to not include dimension for time being. However it had decided that once the data is updated, committee will discuss further the possibility of including dimensions requirement in relevant Indian Standard.

Committee mentioned that as presently revision of various part of IS 10694 are under discussion, thus it decided that for dimensional requirement reference of IS 16192-3 is not required and it can be sufficed through reference of relevant part of IS 10694. Committee decided to discuss the reference of dimensional requirement once various parts of IS 10694 are updated. Additionally, it requested Mandap to provide the details of sizes, profile and other details available with him, which can be helpful in revising the standard, for updating the IS 10694 series standards.

B-2.3 Comments from YAMAHA:

Comments received from Yamha, was circulated with members vide mail dated 13.5.2024, are reproduced below:

‘Kindly substitute the Note as below:

- NOTE - Hybrid Wheel rim (refer 3.2.2) shall be tested with the motor for which it is designed. However, wheel rim may be tested with motor casing (without motor) in agreement between technical agency and manufacturer.

- Justification: There is no direct contact between the motor (stator) and motor casing (rotor) and inside motor parts do not bear any load, so there is no influence on the performance requirement of wheel rim.'

Shri Navneet from Yamha briefed the comments, Committee deliberated and mentioned that, as these wheels have been tested with motor and no issues have been noticed so far, it is not recommended to test without motor. It decided to not accept the YAMAHA comment.