



उत्पाद मैनुअल

आई एस 16192 (भाग 3): 2018 के अनुसार स्वचलन वाहन - दो और तीन पहिये वाले वाहनों के लिए व्हील रीम - तीली व्हील रीम- परीक्षण पद्धतियाँ के लिए

दस्तावेज संख्या - पी एम/आई एस 16192 (Part 3)/2/ जनवरी 2022

भारतीय मानक ब्यूरो की स्कीम-1 (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिशिष्ट की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/ प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

PRODUCT MANUAL FOR WHEEL RIMS FOR TWO AND THREE WHEELED VEHICLES- SPOKE WHEEL RIMS - METHOD OF TESTS AND REQUIREMENTS ACCORDING to IS 16192(Part 3):2018

Document No.- PM/IS 16192 (Part 3)/2/January 2022

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

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**PRODUCT MANUAL FOR
AUTOMOTIVE VEHICLES - WHEEL RIMS FOR TWO AND THREE
WHEELED VEHICLES: SPOKE WHEEL RIMS - METHOD OF
TESTS AND REQUIREMENTS
ACCORDING TO IS 16192 (Part 3): 2018**

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1.	Product	:	IS 16192 (Part 3) :2018
	Title	:	Automotive Vehicles - Wheel Rims For Two And Three Wheeled Vehicles: Spoke Wheel Rims - Method Of Tests and Requirements
	No. of Amendments	:	One
2.	Sampling Guidelines:		
a)	Raw material	:	---
b)	Grouping guidelines	:	Please refer <u>ANNEX – A</u>
c)	Sample Size	:	One complete assembly with spokes and one wheel Rim without spoke
3.	List of Test Equipment	:	Please refer <u>ANNEX – B</u>
4.	Scheme of Inspection and Testing	:	Please refer <u>ANNEX – C</u>
5.	Possible tests in a day:	:	All tests
6.	Scope of the Licence	:	Please refer <u>ANNEX – D</u>

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ANNEX A

Grouping Guidelines

1. Following guidelines shall be followed for grant of licence and change in scope of licence:
 - i. Every variety of wheel rim is required to be tested. Appropriate reduction in testing, as decided by testing agency in accordance with Cl. 5.2 and Cl. 5.3 of IS 16192 (Part 3), shall be applicable.
 - ii. The manufacturer shall declare all the varieties which are intended to be covered in the scope of licence and submit the technical specification in accordance with Annex A of IS 16192 (Part 1) for each variety of wheel rim intended to be manufactured by him. In addition to the details as per Annex A of IS 16192 (Part 3), the manufacturer shall also submit following technical specification for each variety of wheel rim intended to be manufactured by him: a) Design b) Thickness*, c) Material, d) Inset/Outset.
 - iii. For inclusion of additional variety, every modification in technical specification in accordance with Annex A along with modification in Design, Thickness, Material and Inset/Outset shall be declared by manufacturer to BIS.
 - iv. In case any reduction in testing in accordance with Cl. 5.2 and Cl. 5.3 of IS 16192 (Part 3) is sought at the time of grant of licence or inclusion, the same shall be declared by the manufacturer to BIS and the testing lab carrying out the testing.
2. During the operation of the Licence, BO shall ensure that all the varieties covered in the Licence are tested in rotation, to the extent possible.

* Till the time declaration on thickness of rim is brought in the Standard, manufacturers shall declare thickness at critical areas of rim such as wheel rim well area, bead area, disc / spokes and hub area. Change in thickness at these areas to be evaluated for applicability of tests as per existing criterion given in Cl. 5.2 and Cl. 5.3 of IS 16192 (Part 3).

ANNEX B

List of Test Equipment

Major test equipment required to test as per the Indian Standard

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Strength Requirements	Equipment as per Cl. 4.2 of IS 16192 (Part 3)

The above list is indicative only and may not be treated as exhaustive.

ANNEX C

Scheme of Inspection and Testing

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipment.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. LABELLING AND MARKING – As per the requirement of IS 16192 (Part 3).

4. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

4.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

5. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
4.1	General Requirements	4.1	IS 16192 (Part 3): 2018	-	Each Wheel rim		-
4.2	Strength Requirements	4.2		S	One sample	Once in a year for each size designation, material, type, design load covered in the scope and manufactured during the year .	

Note-1: Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: Levels of control given in column 3 are obligatory, to which the licensee shall comply with.

ANNEX E
Scope of Licence

Licence is granted to use Standard Mark as per IS 16192 (Part 3):2018 with the following scope:				
Name of the product: Automotive Vehicles - Wheel Rims for two and three wheeled vehicles – Spoke wheel rims - Method of tests and requirements				
	Variety 1	Variety 2	Variety 3	Variety 4
Maximum Design Load (N)				
Size designation				
Type of wheel Rim				
Material				
Rim thickness				
Inset/Outset (mm)				