



IS 16192 Part 2: 2014

AUTOMOTIVE VEHICLES — WHEEL RIMS FOR TWO AND THREE WHEELED VEHICLES PART 2 SHEET METAL WHEEL RIMS — METHOD OF TESTS AND REQUIREMENTS

Wheel rims are integral to the function and performance of vehicles, remaining critical throughout their lifespan. For two- and three-wheeled vehicles, they serve as the outer edge of the wheel, securely holding the tire in place, and ensuring stability and performance.

Consumers expect wheel rims to meet high standards of **durability, safety, and performance**. The rims must be made of strong materials capable of enduring road impacts, harsh terrains, and changing weather without warping. Precision in design ensures a **snug tire fit, reducing vibrations** and ensuring smooth rides. Aesthetic appeal and corrosion resistance further enhance both the style and longevity of the rims.

Indian Standard IS 16192 (Part 2) specifically addresses the quality, safety, and performance requirements of wheel rims for two- and three-wheeled vehicles, aligning with key consumer expectations. This standard ensures that the wheel rim can handle **specific load, speed, and terrains** without failure. Important tests like **Rotation Bending Fatigue Test** (Dynamic Cornering Fatigue Test), **Radial Load Durability Test**, Radial Impact Resistance Test, **Torsion Moment Test**, etc., are specified in the standards, which ensure that the product performs smoothly in its lifetime.

The **Ministry of Heavy Industries** through Quality Control Order mandates that all sheet metal wheel rims for two and three wheeled vehicles sold, manufactured, or imported in India comply with IS 16192 (Part 2).

In summary, IS 16192 (Part 2) is your assurance that the wheel rims you buy are safe, durable, and of high quality. Next time you purchase wheel rims, look for the BIS mark to ensure they meet these standards, giving you peace of mind for your safety and your vehicle's performance.