



IS 17155:2019 –Tricycle, Single Hand Propelled (Right/Left) (Junior Size)

While selecting a single-hand propelled tricycle for junior user's with **disabilities affecting their lower extremities**, safety, comfort, and ease of use are essential considerations. A tricycle that provides stability, ease of maneuvering, and proper dimensions is important for ensuring that the user can navigate independently and safely. Selecting a tricycle specifically designed to meet the user's needs is crucial, as incorrect dimensions or materials could compromise both safety and usability.

Indian Standard **IS 17155 : 2019**, developed by the Bureau of Indian Standards (BIS), specifies the safety and performance requirements for single-hand propelled tricycles intended for **junior users** with disabilities affecting their lower extremities. This standard covers essential aspects of tricycle design, providing an adaptable mobility solution that supports user independence. **Power-driven tricycles are excluded** from this standard.

Key aspects covered by IS 17155:2019:

The standard specifies critical aspects such as frame, seat, wheels, and handlebars, to ensure that the tricycle is appropriate for junior users. It includes detailed specifications on dimensions, materials, and other design elements to optimize the tricycle's fit and usability. The standard also specifies requirements for the **steering mechanism, braking system, wheel assembly, and drive chain** to ensure safe and efficient operation.

Essential tests, including the **static load test, brake effectiveness, and maneuverability**, confirm that the tricycle remains stable and secure during daily use on various surfaces and at different speeds. These tests verify that the tricycle is structurally sound, stable, and equipped with reliable brakes, providing a safe riding experience for users.

The standard specifies the information that should be marked on the tricycle, including the **manufacturer's name, Batch No. and date of manufacturing** and any other special information regarding design and intended use.

In summary, IS 17155:2019 ensures that single-hand propelled tricycles are designed with safety, adaptability, and user's needs in mind, promoting independence and mobility for junior user's with disabilities affecting their lower extremities.