



## IS 15533: 2024, Cycles — Safety Requirements for Bicycles for Young Children

While purchasing a **bicycle** for young children, consumers expect for best quality in terms of safety, comfort, and ease of use. This includes reliable brakes, non-slip pedals and sturdy frames with smooth edges. Lightweight construction and adjustable seat heights make the bike manageable and adaptable as kids grow. Durability is essential, with strong materials. Stability, often achieved through balance bikes or training wheels, helps build confidence.

Indian Standard **IS 15533** specifies the requirements for both metallic and nonmetallic parts used in the assembly of the Bicycles. This standard specifies the **dimensional tolerances** of the parts used in assembly of the product for robust design and its performance. This standard not only specifies the design and performance requirements such as **Fatigue test, impact test** but also specifies critical safety requirements such as **toxicity of the components come in contact with the rider, sharp edges**, security and strength of the safety related fasteners.

As the working of critical parts associated in functioning of the product impact the performance and safety, the requirements also specified for **Braking systems, Steering and its stability**, Handlebar and stem assembly, **Impact test** for frames, Bending fatigue test for **front forks**, wheel and tyre assembly, saddles and **seat-posts security test**.

**Instruction's clause of IS 15533** specifies the information regarding the type of use, preparation for riding, indication of saddle height, permissible total mass of the rider, recommendations for safe riding, indication for fittings of a luggage carrier, advisory note for specific risk, recommended tightening of the fasteners, correct method of assembly of parts, lubrication, correct chain tension and recommendations for general maintenance etc.

This Indian standard is identical to International standard **ISO 8098:2023** Cycles — Safety Requirements for Bicycles for Young Children.