



IS 2039 (Part 1 to 3): 1991

## Steel tubes for bicycle and cycle rickshaws - Specification

**Steel tubes** serve as **the primary structural components** in the **frames** of bicycles and cycle rickshaws.

For bicycles and cycle rickshaws, consumers prioritize **strength, durability, lightweight construction, and resistance to corrosion**. These features ensure that the cycles and rickshaws are **safe, reliable, and efficient** for prolonged use. Given the diverse conditions in which these vehicles operate, the steel tubes should also possess **high impact resistance** and **withstand heavy loads**, especially in **demanding urban and rural environments**.

The Indian Standard **IS 2039 (Part 1 to 3): 1991** outlines **comprehensive specifications** for **steel tubes** used in **bicycles** and **cycle rickshaws**. This standard covers the **essential requirements** for ensuring that steel tubes meet **performance, safety, and durability** standards, providing confidence to manufacturers and users alike.

Precise **dimensional requirements** (for example, tube diameter and wall thickness ) are defined to ensure reliable assembly and structural integrity. **Workmanship, Chemical tests, and mechanical test** ( eg-Tensile, flattening, and drift expansion tests ) are vital to confirm that the tubes can endure real-world conditions, ensuring the **safety, performance, and durability** of cycles and rickshaws.

By adhering to IS 2039 Part 1 to 3, manufacturers can ensure that steel tubes used in bicycles and cycle rickshaws are of the **good quality**. Consumers should look for the **BIS standard mark** when purchasing cycles or cycle rickshaws to ensure they meet the required standards.