



Indian Standard IS 2415:2015 CYCLE — RUBBER TUBES (MOULDED/JOINTED)

Rubber tubes specified in this standard are intended for use with tyres prescribed in IS 2414 :2005 for cycles. When selecting the rubber tubes for tyres, durability, performance, safety, and size compatibility are key considerations. Rubber tubes are an essential component of a tyre of bicycle's wheel assembly, providing the necessary air pressure and cushioning for smooth rides.

Consumers expect these tubes to be **robust, puncture-resistant, and easy to fit**, ensuring long-lasting performance across different terrains. Indian Standard **IS 2415:2021**, developed by the Bureau of Indian Standards (BIS), specifies the quality, safety, and performance requirements for moulded and jointed rubber tubes for cycle tyres, ensuring they meet consumer expectations.

The standard addresses crucial quality parameters such as the **material composition**, ensuring the rubber used is of high quality by ensuring that the rubber used meets the specific requirements of **elongation at break, tensile strength, tension set, accelerated ageing and joint adhesion strength**. It also specifies requirements for the **dimensional accuracy of tubes** to ensure they fit seamlessly with the corresponding **tyre sizes, avoiding air leakage or improper inflation**. The tube valves, a critical component, must meet specific performance criteria as per **IS 532** to ensure proper inflation and airtight sealing.

Marking and labelling requirements under the standard provide essential information helping consumers select the right tube to be used with corresponding tyre of same size designation as prescribed in IS 2414 :2005.

The DPIIT Quality Control Order mandates that Cycle rubber tubes sold, manufactured, or imported in India comply with **IS 2415** and display the BIS Standard Mark, ensuring high-quality and safe tubes for Indian roads.

In summary, **IS 2415** ensures that cycle rubber tubes are durable, safe, and of high quality, meeting the demands of cyclists across different terrains and conditions. When purchasing rubber tubes for tyres of cycles, look for the BIS Standard Mark to ensure a product that adheres to these stringent standards, offering enhanced performance.