

IS 4824:2022 , Bead Wire for Tyres — Specification(Third Revision)

From city streets to mountain trails, tyres support us through every terrain and season, rolling with resilience, adapting with every turn, and ensuring every journey ends in safety and comfort. Imagine a tyre rolling through life, carrying the weight of a family road trip, the thrill of a racetrack, or the endurance required on a dusty, rugged path. Each tread and groove in the tyre tells its own story, worn down by countless miles, all the while keeping us safe, steady, and moving forward.

Bead wire is one of the core ingredients and the essential component in tyre manufacturing that reinforces tyre structure, ensuring durability and safety by keeping the tyre securely mounted on the wheel rim.

When we talk about critical components like bead wires, the measurable parameters like chemistry, mechanical properties and protective coatings has a important role to play to ensure the quality of the components. Further, the component should be able to justify its character so that the types perform intended task without failure.

The Bead wires are generally made of steel and manufactured **Indian Standard IS 4824:2022** provides specification for **bead wire used in tyre reinforcement**. This is the third revision of the standard, initially published in 1968 and later revised in 1973 and 2006, to align with international practices and advances in material technology.

IS 4824:2022 establishes comprehensive specifications for bead wire production and quality control, essential to the durability and safety of tyres across various industries. Through stringent testing and material guidelines, it aligns with global standards, supporting Indian manufacturers in producing high-quality, export-ready products that meet international safety and performance requirements.