



TIRE BEAD WIRE

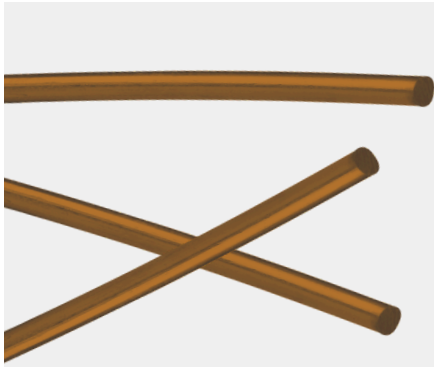
Tire Bead Wire is a high-strength steel wire used to reinforce the bead section of radial and bias-ply tires across all vehicle categories. It plays a critical role in maintaining the tire's shape under internal pressure and external forces, ensuring a secure fit to the rim and consistent performance. Tire bead wire is engineered for maximum strength, fatigue resistance, and adhesion, making it a trusted solution for rubber product manufacturers and the global tire industry.

Key Features

Available in diameters from 0.7 mm to 3 mm, the wire is coated with bronze containing 1% to 12% tin for enhanced rubber adhesion. Coating composition and tensile strength are tailored to customer needs. Supplied on industrial spools, it is manufactured under strict quality control to ensure consistency and performance.

Application

Tire Bead Wire is designed for use in a wide range of products that demand structural reinforcement and rubber adhesion. It is used in tires for passenger cars, trucks, aircraft, and specialty vehicles. It's also suitable for high-pressure hoses and flexible ducts. Its strength, flexibility, and bonding capability make it ideal for demanding rubber-based applications.



Global-grade performance powered by advanced wire drawing and coating excellence

TDS No: OZKA/TDS001/BW/0.96/HT

Size: 0.96 mm

Grade: HT

Rev No: 00

Mechanical Properties

Sr. No.	Characteristics	UOM	Nominal Value	Tolerance
1	Diameter	mm	0.96	± 0.02
2	Breaking Strength	N	Min. 1295	-
3	Yield Strength (Proof Stress @0.2%)	%	85	± 5
4	Elongation @ break	%	5	-
5	Torsion	Nos/200D	min. 50	-
6	Straightness-Arc Height	cm/3mtr	Max. 60	-
7	Coating Weight	gms/kgs	0.47	± 0.17
8	Coating Composition – Tin Content	%	2	± 1
9	Coating Composition – Copper Content	%	98	± 1
10	Adhesion force	N*	*	*
11	Cumarone Resin Coating	gms/kg	0.11	± 0.04
12	Residual Torsion	Turns/9 mtr	0	± 1

*Adhesion Force: Adhesion requirement, Test parameters (Curing time, Temperature, Pressure, mold width) and rubber compound to be provided by the customer.

Note

1. If there are any specific characteristic requirements differing from those specified above like Breaking strength, Yield Strength, Coating weight, Coating composition etc. the same to be shared with us to carry out feasibility study and confirm.
2. Packing: Spool / coil dimensions to be provided by the customer.