



## IS 9962:1981 SPECIFICATION FOR STEEL WIRE FOR NEEDLES

Steel wire for needles, as specified in **IS 9962:1981**, is designed for various needle types used in industries like hand sewing and gramophone needles.

This standard covers essential requirements to ensure the wire's **durability**, **strength**, and **precise dimensions**, addressing the needs of industries where these needles perform repetitive and precise tasks under stress.

IS 9962:1981 specifies quality parameters to meet these demands, such as **chemical composition** (carbon, manganese, silicon, sulfur, phosphorus) for optimal strength and flexibility, **tensile strength** to withstand stress, and **surface finish** (bright, copper, brass, or bronze) for smooth, corrosion-resistant surfaces. The standard also outlines **decarburization limits** to maintain structural integrity and **dimensional accuracy** for consistent diameter, key to efficient needle performance.

To ensure these quality standards, steel wires undergo a variety of tests, including **tensile tests** to verify strength, **surface quality checks** to eliminate defects, and **coating assessments** to confirm durable finishes.

These standards collectively guarantee that steel wire for needles will provide consistent and high-quality performance across applications. The **BIS standard mark** on products indicates compliance with IS 9962:1981, assuring consumers of their reliability and adherence to quality benchmarks.