IS 2589:1975 - Specification for Hard Drawn Steel Wire for Upholstery Springs

When purchasing hard drawn steel wire for upholstery springs, consumers prioritize factors like strength, durability, flexibility, and resistance to fatigue. High-quality steel wire is essential for ensuring that upholstery springs maintain their shape and support over time, contributing to the comfort, longevity, and safety of furniture. The wire used must withstand the pressure and stress of daily use for high-quality furniture manufacturing.

IS 2589:1975, developed by the **Bureau of Indian Standards (BIS)**, specifies the requirements for hard drawn steel wire used in upholstery springs. This standard outlines the material composition, mechanical properties, and testing procedures to ensure that the **wire meets the necessary safety and performance benchmarks.**

Key quality parameters addressed by IS 2589:1975 include:

- Mechanical Properties: The wire is required to have a specific tensile strength, elongation, fatigue resistance to sustain repeated loading and unloading cycles to endure the forces applied by users while maintaining its integrity which is crucial for maintaining the durability and comfort of upholstered furniture..
- > Surface Quality: Standard specifies that it must be free from defects such as cracks, pits, or scales that could weaken its structural integrity. This ensures the wire is smooth and uniform, improving both its performance and the safety of the furniture.
- ➤ Coating and Corrosion Resistance: Steel Wire may be coated to enhance its resistance to corrosion so that the wire can maintain its strength and appearance over time, even under humid or harsh conditions.
- Dimensions and Tolerances: The standard specifies the allowable tolerances for the wire's diameter, ensuring uniformity and compatibility with other components in the furniture assembly. Proper dimensions are critical for ensuring that the springs perform as intended and fit seamlessly into the design.

Consumers can be assured that hard drawn steel wire compliant with IS 2589:1975 is manufactured to the highest quality standards, **designed for durability, comfort, and safety**. The **BIS Quality Mark (ISI mark)** on the wire guarantees that it has undergone rigorous testing and meets the performance requirements for use in upholstery springs.

In conclusion, IS 2589:1975 ensures that the hard drawn steel wire used in upholstery springs is strong, durable, and resistant to wear and tear, providing reliable performance in furniture applications. When purchasing materials for furniture manufacturing, always look for the BIS Mark to confirm the product meets these stringent standards, ensuring long-lasting comfort and safety for end-users.