



## Indian Standard- IS 5872:1990- Cold Rolled Steel Strips (Box Strappings)

The product described in **IS 5872** is cold-rolled steel strips, commonly referred to as box strappings, used primarily for packaging and bundling purposes. These steel strips are designed for securely strapping boxes, pallets, and various loads, ensuring safe transportation and handling. They are particularly suitable for industrial packaging where high strength and durability are required.

**Desirable Properties:** Box strappings made from cold-rolled steel strips have several key properties:

- **High Tensile Strength:** Provides the necessary force to hold heavy and bulky items securely, resisting breakage under tension.
- **Flexibility and Formability:** Allows easy bending and wrapping around packages without cracking, essential for tight and secure strapping.
- **Corrosion Resistance:** Various surface finishes, including galvanized, painted, or coated with epoxy, zinc, or copper, enhance resistance to corrosion, which is critical for outdoor and extended-use applications.
- **Uniform Dimensions and Smooth Finish:** Ensures consistent performance and ease of handling in automated strapping machines.

**Required Tests:** To meet performance and quality standards, these steel strips undergo multiple tests:

- **Tensile Testing:** Measures tensile strength and elongation, ensuring the strip can withstand high loads. At least one test is conducted per 25 tonnes of material from each cast.
- **Reverse Bend Test:** Assesses flexibility by bending the strip without cracking, ensuring durability during repeated wrapping and unwrapping.
- **Chemical Composition Analysis:** Verifies the chemical makeup, including elements like carbon and manganese, to maintain structural integrity.
- **Corrosion Resistance Testing:** For coated strips, salt spray tests measure resistance to rust over specified hours based on the coating type, ensuring longevity in various environmental conditions.

This product is a reliable choice for packaging, providing a robust, corrosion-resistant, and durable solution for securing heavy loads in transit.