

Summary of IS 12776: 2002

IS 12776:2022, titled "Galvanized Strand for Earthing – Specification," outlines specifications for galvanized steel strands used in earthing applications, particularly for grounding overhead transmission lines. Originally published in 2002 and latest reaffirmed in 2022, this standard ensures the durability and effectiveness of earthing strands in minimizing electrical resistance, ensuring safety during faults or electrical surges.

Key features include:

1. **Material Composition:** The strands must be made of galvanized steel with hot-dipped zinc coating to prevent corrosion. The strands are usually made from 7-wire configurations, such as 7x3.15 mm.
2. **Mechanical Properties:** Requirements include minimum tensile strength, torsion, elongation, and resistance. Tests such as wrapping, torsion, and galvanizing ensure durability under stress.
3. **Testing Requirements:** A range of tests, including a DC resistance test and zinc coating adherence, are specified for quality assurance.
4. **Marking and Packaging:** The specification includes details for labeling each drum with manufacturer info, drum no., strand size, weight, and length etc.

This standard is widely referenced in other guidelines for electrical infrastructure to ensure safe grounding practices.

