

IS 14268: 2022 – Uncoated Stress Relieved Low Relaxation Seven-Wire Strand for Prestressed Concrete

This standard provides specifications for uncoated stress-relieved low relaxation seven-wire strands used in prestressed concrete, essential for applications requiring high tensile strength and durability such as bridges, buildings, and other civil structures.

The consumer expects high tensile strength, low relaxation to minimize long-term elongation and a good bond with concrete. Consumer seeks product that ensure structural integrity and longevity, particularly in critical infrastructure.

IS 14268: 2022 addresses these expectations by defining the production process and quality criteria for three types of strands: plain, indented, and compacted. Each type undergoes a stabilizing hot stretching process to enhance resistance to creep and reduce relaxation losses, critical for maintaining prestress over time. The standard includes detailed provisions for wire quality, mechanical properties, and geometry to ensure optimal performance in prestressed applications.

Keywords: Prestressed concrete, high tensile strands, low relaxation, prestress cable, prestress wire, prestress steel cable,