

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

This standard specifies requirements for uncoated, stress-relieved, low-relaxation seven-wire strands used in prestressed concrete. The standard includes three strand types: plain, indented, and compacted, each designed for optimal tension retention and resistance to creep through stabilizing hot-stretch treatment. Strands range from 6.4 to 18 mm in diameter and support tensile strengths up to 2,160 MPa. The design includes specifications for the centre and surrounding wires with tight lay length tolerances. Material specifications require high-grade carbon steel for enhanced strength and durability, while indented strand types feature oval indentations for added bonding. The standard also details requirements for straightness, behaviour during cutting, and dimensional accuracy to ensure reliable performance in high-stress applications.