



PC WIRE

Pre-stressed Concrete Wire (PC Wire) is a high-grade, low-relaxation steel wire designed to strengthen concrete by countering its inherent low tensile properties. Manufactured by continuously heating and stretching cold-drawn high-carbon steel, the result is a wire with superior yield strength and significantly reduced load relaxation. It is available with smooth or indented surfaces, based on project requirements

Key Features

Elsewedy's PC Wire comes in diameters from 4 mm to 9.4 mm, with tensile strength up to 1860 MPa. It offers low relaxation properties, a minimum elongation of 3.5%, and is manufactured to meet international standards including BS 5896, ASTM A421, and EN 10138-2. Products are supplied with smooth or indented surfaces depending on structural needs

Application

PC Wire is used in a wide range of pre-stressed concrete applications such as concrete pipes, railway sleepers, floor beams, and precast hollow-core slabs. Its consistent performance and structural efficiency make it ideal for infrastructure and industrial construction

Mechanical Properties

According to BS 5896 - ASTM A421 - En 10138-2

Diameter (mm)	Tensile Strength (KN)	Weight (gm/m)	Cross Section Area (mm ²)	Permissible Deviation in W/m (%)	Braking Load (KN)	Minimum Elongation (%)
4	1860	98.4	12.6	+2	26.9	3.5
5	1860	153.1	19.6	+2	42	3.5
6	1770	221	28.3	+2	57.6	3.5
7	1770	300.7	38.5	+2	78.3	3.5
8	1670	392.8	50.3	+2	96.6	3.5
9.4	1570	542	69.4	+2	109	3.5

