

PC BAR

Elsewedy Steel's PC Bars are high-strength, low-relaxation steel bars used to pre-stress concrete in structural applications. They are produced by cold drawing and heat treatment processes to ensure high tensile performance and long-term dimensional stability. PC Bars are available in plain or threaded forms based on the project's anchoring requirements.

Key Features

PC Bars are manufactured in diameters ranging from 10 mm to 40 mm, with tensile strengths up to 1,050 MPa. They are available as plain or threaded bars and meet international standards including BS 4486 and ASTM A722. Elsewedy provides full testing and certification upon request.

Application

PC Bars are commonly used in post-tensioned and pre-tensioned concrete applications such as bridge structures, nuclear facilities, tunnels, and ground anchors. They offer high load capacity and effective crack control in demanding environments.

Mechanical Properties

PC Bars

Standard	Diameter mm	Cross section Area mm²	Weight g/m	Tensile Strength N/mm²	Characteristic value of maximum force KN	Maximum value of maximum force KN	Characteristic value of 0,1 % proof force KN	Minimum Elongation %	Maximum curvature mm/lm
prEN10138-2	7,00	38,5	300,7	1770	68,1	78,3	59,9	3,5	2,5
	8,00	50,3	393	1670	84	96,6	73,9		
	9,00	63,6	469,70	1570	99,9	115	87		
	9,40	69,4	542,00	1570	109	125	95		

