



PC WIRE

PC WIRE IDEAL FOR PRESTRESSED CONCRETE STRUCTURES



www.pcsteelwire.org

Introduction

About us

EcoTec Building Material Supplies Co., Ltd. Steel Wire Factory manufactures and exports the prestressed concrete wire.

Prestressed concrete wire adopted prestressed and post-tensioning technology is widely used in wide range of prestressed concrete structures and civil engineering constructions, such as large scale railroad, high-way bridges, building trusses, overhead crane beams, industrial and wall board, tubular piles, PC water pipes and nuclear power station, etc.



PC wire for prestressed concrete

Steel wire for prestressed concrete mainly includes three types according to the surface treatment: plain PC wire, spiral PC wire and indented PC wire. And the reference standards: GB/T5223, ASTM A421, BS5896, JIS G3536, EN10138 or other special standards.



Plain PC Wire



Low relaxation plain PC wires



Cold rolled plain PC wire in rolls

Plain PC Wire, also called plain surface PC steel wire or smooth PC wire, features low relaxation and high tensile strength, ideal for concrete structures.

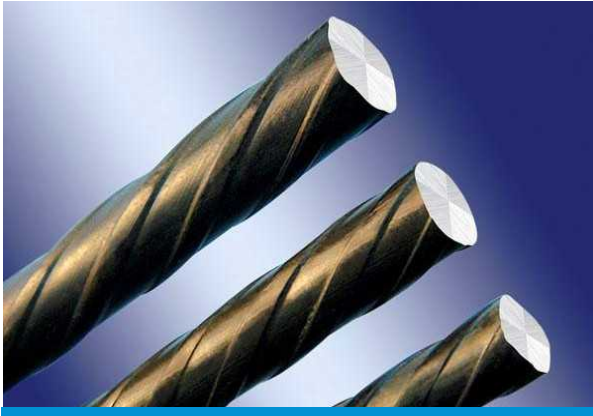
Plain PC Wire Specification

Nominal Dia. (mm)	Tolerance (mm)	Tensile strength not less than (MPa)	Yield strength not less than (MPa)	Bending times not less than (times/180)	Bending radius (R/mm)
4.8	± 0.05	1470 1570 1670	1290 1380 1470	4	15
5.0	± 0.05	1770 1860	1560 1640	4	15
6.0	± 0.05	1470	1290 1380	4	15
6.25	± 0.05	1570 1670 1770	1290 1380	4	15
7.0	± 0.05		1470 1560	4	20
8.0	± 0.05	1470 1570	1920	4	20
9.0	± 0.05	1470 1570	1380	4	25

Elongation at max load not less than 3.5%.

Relaxation properties: the relaxation at 1000 h (initial load to 70% of nominal tensile strength) not more than 2.0.

Spiral PC Wire



Spiral PC wire with different diameters



Spiral PC wire packed with steel strips

Spiral PC wire with spiral ribs can obviously strengthen the combination between wire and concrete, thus increasing the performance of the PC construction structure and extending its service life.

Spiral PC Wire Specification

Nominal diameter (mm)	Lining Dia. and tolerance (mm)	Outline Dia. and tolerance (mm)	Width of single rib (a/mm)	Layer length (mm - 360°)	Nominal cross section (mm ²)	Re. mass per meter (g/m)
4.00	3.85 ± 0.05	4.25 ± 0.05	0.90-1.30	24-30	12.57	98.6
4.80	4.60 ± 0.05	5.10 ± 0.05	1.30-1.70	28-36	18.09	142
5.00	4.80 ± 0.05	5.30 ± 0.05	1.30-1.70	28-36	19.63	154
6.00	5.80 ± 0.05	6.30 ± 0.05	1.60-2.00	30-38	28.27	222
6.25	6.0 ± 0.05	6.70 ± 0.05	1.60-2.00	30-40	30.68	241
7.00	6.73 ± 0.05	7.46 ± 0.10	1.80-2.20	35-45	38.48	302
8.00	7.75 ± 0.05	8.45 ± 0.10	2.00-2.40	40-50	50.26	394
9.00	8.75 ± 0.05	9.45 ± 0.10	2.10-2.70	42-52	63.62	499
No. of Helix ribs: 4.						

Indented PC Wire



Indented PC wire with different indented shape



Indented PC wire in rolls

Available with two-sides, three-sides, or four-sides indents, indented PC wire with round, ellipse or rhombus shape surface treatment can heavily combine the steel wire with concrete.

Indented PC Wire Specification

Nominal diameter (mm)	Tensile strength not less than (MPa)	Yield strength not less than (MPa)	Elongation not less than (%)	Bending test not less than		Relaxation value 1000 hours no more than (%)	
				Times	Radius (mm)	I	II
≤ 5.00	1470 1570	1250 1330	3.5	3	15	8	25
≤ 5.00	1470 1570	1250 1340	3.5	3	20	8	25

ECOTEC BUILDING MATERIAL SUPPLIES CO., LTD.

Xinhua Road 151, Hengshui City, Hebei Province, China.

Tel +86-318-2961366

E-Mail info@pcsteelwire.org

Web <http://www.pcsteelwire.org>



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