



Prestressed Concrete Wire Technical Data Sheet ASTM

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1. Product description

Pc wire is the production of cold drawn wires as rods or coils by heat treatment with prestressing.

This specification covers two types of stress-relieved round high-carbon steel wire commonly used in prestressed concrete construction, as follows:

Type BA wire is used for applications in which cold-end deformation is used for anchoring purposes (Button Anchorage), and Type WA wire is used for application in which the ends are anchored by wedges, and no cold-end deformation of the wire is involved (Wedge Anchorage).

2. Normative references

- ASTM A421/A421M - Standard Specification for Stress-Relieved Steel Wire for Prestressed Concrete

3. Mechanical Properties

Nominal Diameter,		Tensile strength, min,			
		Type BA		Type WA	
inch	mm	psi	Mpa	psi	Mpa
0.192	4.88	-	-	250 000	1725
0.196	4.98	240 000	1655	250 000	1725
0.250	6.35	240 000	1655	240 000	1655
0.276	7.01	235 000	1620	235 000	1620

Nominal Diameter,		Initial Stress,		Min. Stress at 1% Extension,			
				Type BA		Type WA	
inch	Mm	psi	Mpa	psi	Mpa	psi	Mpa
0.192	4.88	29 000	200	-	-	212 500	1465
0.196	4.98	29 000	200	204 000	1407	212 500	1465
0.250	6.35	29 000	200	204 000	1407	204 000	1407
0.276	7.01	29 000	200	199 750	1377	199 750	1377

4. Chemical Properties

The chemical properties of the supplied raw materials according to ASTM SAE J403 are given in the table.

Quality	(C %)	(Mn %)	(P %)	(S %)
SAE 1084	0,80-0,93	0,60-0,90	max. 0,030	max. 0,050

5. Packaging Forms

Package Specification	Coil Size	Bar
Inner Diameter (ID) (mm)	1200-2200	-
Outer Diameter (OD)/L. (mm)	1840-2500	2000-5000
Weight (kg)	1000-1500	1000-1500

wire you desire...