



### Delivering Peace-of-Mind to Our Customers

At Sumiden Wire, we work hard every day to exceed our customers' expectations.

We strive to add value to your business by providing the highest quality products with industry-leading customer service.

### Superior Service and Management Focus

Sumiden Wire is a U.S. Corporation with a seasoned and stable local management team and an in-house engineering team focused on providing high quality products along with long-term value for our customers.

### Providing for Today and the Future

Sumiden Wire is a subsidiary of Sumitomo Electric Industries Ltd, a group of 390 companies in 40 countries with over 270,000 employees.

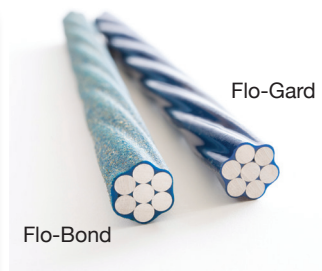
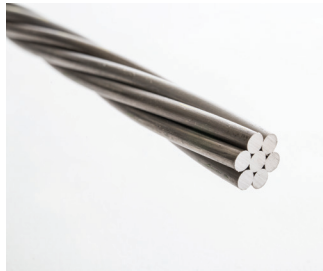
The unique relationship between companies offers us the opportunity to meet our customers' needs today and in the future by staying on top of global trends and key market changes.

We are committed to working together as a partner in the industry. Our goal is to provide long-term mutual success for our customers.

## PC Strand:

**Made in the U.S.A.**

Established in 1979, Sumiden Wire has grown to become a major U.S. producer of high quality PC Strand with locations in California, Tennessee and Texas. We routinely invest in our manufacturing facilities to maintain competitiveness and quality. We also invest in the future of our industry by regularly working with research teams in academia and private industry to develop new and innovative products and techniques. We are an active member of the Post-Tensioning Institute and the Precast/Prestressed Concrete Institute, as well as a proud supporter of the PCI Foundation and its efforts to educate and inspire the next generation of prestressed concrete designers and engineers.



### Uncoated PC Strand

Seven-wire prestressed concrete steel strand is manufactured in a wide range of sizes and grades in accordance with ASTM A416 specifications.

Also available is special Stay Cable Quality PC Strand, produced to meet the PTI Stay Cable Specification.

Our manufacturing plants located in California, Tennessee and Texas have inventories available and ready for immediate shipment.

### Epoxy-Coated PC Strand

ASTM A882 epoxy-coated seven-wire prestressed concrete steel strand is manufactured in the same size range as our uncoated PC Strand, and is also available as Stay Cable Quality.

- Flo-Bond: A grit finish to enhance bond-to-concrete capacity.
- Flo-Gard: A smooth surface finish.

The epoxy covers the outside diameter of the strand and also covers each individual component wire ( Flo-Fil ) completely filling all internal voids.

### Stainless-Steel PC Strand

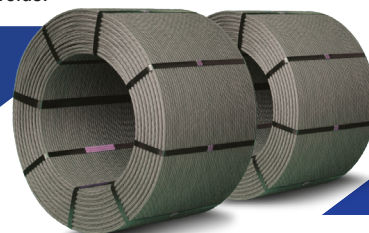
ASTM A1114 seven-wire prestressed concrete stainless steel strand combines high-strength, low-relaxation, and anti-corrosion properties. This innovative product is produced using a duplex 2205 stainless steel melted and manufactured in the U.S.A., making it compliant with all "Buy – America" and "Buy – American" requirements.

Stainless steel spiral wire is also available.

For more information or to have a sales representative contact you, visit:

**[www.sumidenwire.com](http://www.sumidenwire.com)**

Three U.S. manufacturing locations to better serve you:  
Dayton, Texas | Dickson, Tennessee | Stockton, California



# TECHNICAL DATA FOR SEVEN-WIRE PRESTRESSING STRAND



ASTM A416 – UNCOATED LOW-RELAXATION PRESTRESSING STEEL STRAND										
Grade	Nominal Strand Diameter in [mm]	Strand Diameter Tolerance in [mm]	Minimum Breaking Strength lbf [kN]	Min. Yield Strength at 1% Extension lbf [kN]	Minimum Elongation Under Load %	Nominal Area in <sup>2</sup> [mm <sup>2</sup> ]	Nominal Modulus of Elasticity psi [kN/mm <sup>2</sup> ]	Min. Diameter Difference C/W and O/W in [mm]	Nominal Pitch	Nominal Weight lb/1,000 ft kg/1,000 m
250K	3/8 [9.5]	+0.016, -0.016 [+0.40, -0.40]	20,000 [89]	18,000 [80]	3.5	0.080 [52]	28.6 x 10 <sup>6</sup> [197.2]	0.002 [0.051]	12 x dia   16 x dia	272 [405]
	7/16 [11.1]		27,000 [120]	24,300 [108]		0.108 [69.7]		0.0025 [0.064]		367 [548]
	1/2 [12.7]		36,000 [160]	32,400 [144]		0.144 [92.9]		0.003 [0.076]		490 [730]
270K	3/8 [9.5]	+0.026, -0.006 [+0.65, -0.15]	23,000 [102]	20,700 [92]	3.5	0.085 [55]	28.6 x 10 <sup>6</sup> [197.2]	0.002 [0.051]	12 x dia   16 x dia	290 [430]
	7/16 [11.1]		31,000 [138]	27,900 [124]		0.115 [74.2]		0.0025 [0.064]		390 [580]
	1/2 [12.7]		41,300 [184]	37,170 [165]		0.153 [98.7]		0.003 [0.076]		520 [780]
	0.52 (1/2HBS) [13.2]		45,000 [200]	40,500 [180]		0.167 [108]		0.003 [0.076]		570 [840]
	9/16 [14.3]		51,700 [230]	46,530 [207]		0.192 [124]		0.0035 [0.089]		650 [970]
	6/10 [15.2]		58,600 [261]	52,740 [235]		0.217 [140]		0.004 [0.102]		740 [1,100]
	0.62 [15.7]		62,800 [279]	56,520 [251]		0.231 [150]		0.004 [0.102]		780 [1,200]
	7/10 [17.8]		79,400 [353]	71,460 [318]		0.294 [190]		0.0045 [0.114]		1,000 [1,500]
300K*	6/10 [15.2]		65,100 [290]	58,590 [261]		0.217 [140]		0.004 [0.102]		740 [1,100]

\* This product is not recognized by any specification, but is made in conformance with ASTM A416 standards on the nominal diameter and area of the size and grade.

RELAXATION PROPERTIES	
Initial Stress	Maximum Relaxation after 1,000 Hours
70% Specified Minimum Breaking Strength	2.5%
80% Specified Minimum Breaking Strength	3.5%

# TECHNICAL DATA FOR SEVEN-WIRE EPOXY-COATED PRESTRESSING STRAND

Nominal Strand Diameter in [mm]	ASTM A882 – EPOXY-COATED STRAND			STEEL STRAND (A416 / A416M)		
	Nominal Diameter in [mm]	Coating Thickness mil [µm]	Nominal Weight lb/kft [kg/km]	Minimum Breaking Strength lbf [kN]	Minimum Yield Strength at 1% Extension lbf [kN]	Minimum Elongation Under Load %
3/8 [9.5]	0.415 [10.54]	15-45 [380-1,140]	310 [461]	23,000 [102]	20,700 [92]	3.5
7/16 [11.1]	0.478 [12.14]	15-45 [380-1,140]	420 [625]	31,000 [138]	27,900 [124]	3.5
1/2 [12.7]	0.540 [13.72]	15-45 [380-1,140]	550 [819]	41,300 [184]	37,170 [165]	3.5
6/10 [15.2]	0.648 [16.46]	15-45 [380-1,140]	820 [1220]	58,600 [261]	52,740 [235]	3.5

# SPECIFICATIONS FOR STAINLESS STEEL SEVEN-WIRE PRESTRESSING STRAND

Stainless Steel Alloy: 2205 (UNS: S32205) Duplex

ASTM A1114 – STAINLESS STEEL SEVEN-WIRE PRESTRESSING STRAND										
Grade	Nominal Strand Diameter in [mm]	Strand Diameter Tolerance in [mm]	Minimum Breaking Strength lbf [kN]	Min. Yield Strength at 1% Extension lbf [kN]	Minimum Elongation Under Load %	Nominal Area in <sup>2</sup> [mm <sup>2</sup> ]	Nominal Modulus of Elasticity psi [kN/mm <sup>2</sup> ]	Min. Diameter Difference C/W and O/W in [mm]	Nominal Pitch	Nominal Weight lb/1,000 ft kg/1,000 m
240K	0.52 [13.2]	+0.016, -0.016 [+0.40, -0.40]	40,100 [179]	36,100 [161.1]	1.4	0.167 [108]	24.3 x 10 <sup>6</sup> [167.5]	0.003 [0.076]	12 x dia   16 x dia	570 [840]
	0.62 [15.7]		55,400 [248]	49,860 [223.2]		0.231 [150]		0.004 [0.102]		780 [1,200]

RELAXATION PROPERTIES	
Initial Stress	Maximum Relaxation after 1,000 Hours
70% Specified Minimum Breaking Strength	2.5%
80% Specified Minimum Breaking Strength	3.5%

USAGE NOTE: 0.52" and 0.62" 240 ksi stainless steel strands are typically compatible with the equivalent 1/2" and 6/10" prestressing chucks. It is up to the user to verify this compatibility with their chuck supplier.