

#### Overview

Strand-Tech Manufacturing (STM), is a leading domestic manufacturer of pre-stressed concrete strand and high carbon wire. Our products are primarily used for pre-stressed and post-tensioned construction applications.

Located in Summerville, South Carolina, STM was incorporated in 1998. The company became a subsidiary of Keystone Consolidated Industries in 2016. As a result, this alliance provides much of STM's high carbon steel rod feedstock from their Illinois-based sister company, Keystone Steel & Wire (KSW). In addition to providing a reliable, steady supply of quality steel, the mill is 'Buy America' Compliant. Therefore, our products meet the requirements for any project requiring materials that are '100% made in the USA'.



Recent facility advancements and upgrades have increased our manufacturing capacity to over 50,000 tons per year. Products include Grade 250, Grade 270, Grade 300 low relaxation strand.

STM currently carries all sizes and grades listed in the latest revision of ASTM A-416. In addition, we are working with ASTM to revise the standards. Further classifications will include other Grade 270 and Grade 300 products that are commonly used in the market.

## **Products**

While there are many more applications, common uses of STM's pre-stressed and post-tensioned construction materials include:

- Bridges
- · Commercial and Industrial Buildings
- · Concrete Poles
- · Parking Decks
- · Residential Housing Foundations









## **Customer Care**

At STM, our customers are the focus of everything we do. Our success comes from our capacity to listen carefully to our clients' requests and then implement solutions. The facilities and equipment at STM are designed to allow for the greatest degree of freedom in new product development and improvement. We work in close partnership with our customers. As a result, we have developed new products and processes that have satisfied our customers' unique and individual needs.

## **Contact Us**

For additional information on Strand-Tech Manufacturing or to request a quote, call us at 877.783.3305.













## **Product Charts**

7-Wire 250 Grade Strand For Prestressed Concrete											
Strand Size	Grade	Min. Diam.	Nom. Diam.	Max Diam.	Nom Steel Area in.	Load @ 1% LR (lbf)	Min. B/S (lbf)	Min. Diff.	Min. Elon.	Diam. Tolerance	
3/8" 250	250	0.359	0.375	0.391	0.080	18000	20000	0.002	3.5%	+0.016	-0.016
7/16" 250	250	0.422	0.438	0.454	0.108	24300	27000	0.0025	3.5%	+0.016	-0.016
1/2" 250	250	0.484	0.500	0.516	0.144	32400	36000	0.003	3.5%	+0.016	-0.016

7-Wire 270 Grade Strand For Prestressed Concrete											
Strand Size	Grade	Min. Diam.	Nom. Diam.	Max Diam.	Nom Steel Area in.	Load @ 1% LR (lbf)	Min. B/S (lbf)	Min. Diff.	Min. Elon.	Diam. Tolerance	
5/16" 270	270	0.307	0.313	0.339	0.059	14400	16000	0.0015	3.5%	+0.026	-0.006
3/8" 270	270	0.369	0.375	0.401	0.085	20700	23000	0.002	3.5%	+0.026	-0.006
7/16" 270	270	0.432	0.438	0.464	0.115	27900	31000	0.0025	3.5%	+0.026	-0.006
1/2" 270	270	0.494	0.500	0.526	0.153	37170	41300	0.003	3.5%	+0.026	-0.006
½" Spec 270	270	0.494	0.500	0.526	0.167	40500	45000	0.003	3.5%	+0.026	-0.006
9/16" 270	270	0.557	0.5625	0.589	0.192	46530	51700	0.0035	3.5%	+0.026	-0.006
.600" 270	270	0.594	0.600	0.626	0.217	52740	58600	0.004	3.5%	+0.026	-0.006
.700" 270	270	0.694	0.700	0.726	0.294	71500	79400	0.005	3.5%	+0.026	-0.006

7-Wire 300 Grade Strand For Prestressed Concrete											
Strand Size	Grade	Min. Diam.	Nom. Diam.	Max Diam.	Nom Steel Area in.	Load @ 1% LR (lbf)	Min. B/S (lbf)	Min. Diff.	Min. Elon.	Diam. Tolerance	
½" Super 300	300	0.494	0.500	0.526	0.167	45090	50100	0.003	3.5%	+0.026	-0.006
.600" 300	300	0.594	0.600	0.626	0.217	58590	65100	0.004	3.5%	+0.026	-0.006





# **Usage Chart**

Layers	3/8" 250	3/8" 270	7/16" 250	7/16" 270	1/2" 250	1/2" 270	1/2" SP	9/16"	.600
31	26,175	_	_	_	_	-	-	_	_
30	25,534	24,614	-	-	-	-	-	-	-
29	24,880	23,990	_	_	_	_	_	-	_
28	24,212	23,353	-	-	-	_	-	-	-
27	23,531	22,703	19,519	_	_	_	_	_	_
26	22,836	22,038	18,973	18,297	-	-	-	-	-
25	22,128	21,361	18,413	17,763	_	_	_	_	_
24	21,406	20,669	17,840	17,215	-	-	-	-	-
23	20,670	19,964	17,253	16,654	14,397	14,180	_	_	_
22	19,921	19,246	16,652	16,080	13,921	13,713	13,098	-	-
21	19,158	18,514	16,038	15,491	13,431	13,232	12,646	_	_
20	18,382	17,768	15,410	14,890	12,927	12,738	12,179	10,888	-
19	17,592	17,008	14,769	14,274	12,410	12,230	11,699	10,472	9,734
18	16,788	16,236	14,114	13,645	11,879	11,709	11,206	10,044	9,344
17	15,971	15,449	13,445	13,003	11,334	11,174	10,699	9,601	8,940
16	15,140	14,649	12,763	12,346	10,776	10,625	10,178	9,145	8,523
15	14,296	13,835	12,067	11,677	10,205	10,063	9,644	8,675	8,092
14	13,438	13,008	11,358	10,993	9,620	9,487	9,096	8,192	7,648
13	12,566	12,167	10,635	10,296	9,021	8,898	8,535	7,695	7,190
12	11,681	11,313	9,898	9,586	8,408	8,295	7,960	7,185	6,718
11	10,782	10,445	9,148	8,862	7,782	7,678	7,371	6,661	6,233
10	9,870	9,563	8,384	8,124	7,143	7,048	6,769	6,123	5,734
9	8,944	8,668	7,607	7,373	6,490	6,405	6,153	5,572	5,222
8	8,005	7,759	6,816	6,608	5,823	5,747	5,524	5,007	4,696
7	7,052	6,837	6,012	5,830	5,143	5,077	4,881	4,429	4,157
6	6,085	5,901	5,194	5,038	4,449	4,392	4,224	3,837	3,604
5	5,105	4,951	4,362	4,232	3,741	3,694	3,554	3,231	3,037
4	4,111	3,988	3,517	3,413	3,020	2,982	2,871	2,612	2,457
3	3,104	3,012	2,658	2,580	2,286	2,257	2,173	1,980	1,863
2	2,083	2,021	1,786	1,734	1,537	1,518	1,462	1,333	1,256
1	1,048	1,017	900	874	775	766	738	673	635

Summerville, SC 29483

