



LOOS ENCYCLOPEDIA OF:

**Wire, Wire Rope, Cable, Hardware, Cableware,
Fittings, Tools, Assemblies & More**

Loosco.com

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HOW TO USE THE LOOS & CO ENCYCLOPEDIA

EASY SERVICE

Our competent and friendly sales staff is eager to help with whatever you need. Please use our toll free number.

PUT LOOS & CO., INC. INTEGRATION TO WORK FOR YOU

At Loos & Co., Inc. we draw our own wire from rod. We strand our own component strands. We close our own cable and wire rope. We manufacture our own fittings and hardware at our Cableware® division. And, we put all the parts together for your specific needs in your custom designed assemblies.

EASY ORDERING

Our competent and friendly sales staff is eager to help with whatever you need. The POMFRET DIVISION has a \$1000.00 line item minimum order, excluding surcharges, for stock items.



**FOR ALL YOUR WIRE, WIRE ROPE,
CABLE AND ASSEMBLIES, CALL OUR
SALES STAFF AT OUR POMFRET DIVISION**

1-800-533-LOOS (5667)

Email: sales@loosco.com

Web: <http://www.loosco.com>

Fax: 860-928-6167



OUR QUALITY POLICY

Loos & Co., Inc., Pomfret, is registered to AS9100 – Revision B and ISO 9001:2000. Our scope of registration is the “Manufacture of wire, wire rope and cable assemblies for commercial, aerospace and automotive markets”.

Loos & Co., Inc. is a world class manufacturer of stainless steel wire and specialty cable products, assuring customer satisfaction through continual improvement techniques.

Our business plan documents our commitment to meet customer requirements through specific, measurable objectives.

Management reviews the effectiveness of the quality policy and quality management system on a regular basis. The results of this review are communicated to employees throughout the organization.

OUR OPERATING PHILOSOPHY

Loos & Co., Inc. products are manufactured to meet the requirements of our customers. Through our continuous improvement program, Loos & Co., Inc. strives to provide defect free products. The services associated with these products are intended to meet or exceed customer expectations. In partnership with our customers both internal and external, and with our suppliers, the company is organized to provide the people, equipment, material and methods required to promptly offer functional, reliable products with minimal waste. Loos & Co., Inc. suppliers and subcontractors are committed to the same quality.



WIRE DIVISION

*Specialists in Stainless Steel
Nickel Alloy & Speciality Wire*



**ROPE WIRE, SPRING WIRE,
COLD HEADING WIRE, BRIGHT
DIAMOND DRAWN WIRE,
WEAVING WIRE, LASHING
WIRE, ANNEALED SAFETY
LOCKING WIRES, ELECTRO
POLISH QUALITY (EPQ)**

WIRE DIVISION

**We Manufacture AND Ship From Stock
Stainless Steel & Nickel Alloy Wire:**

- Spring Wire
- Well Measuring Wire
- Safety Locking Wire
- Cold Heading Wire
- Electro Polish Quality (EPQ)
- Annealed Wire
- Bright Diamond Drawn Wire
- Tie Wire



Quick Delivery on our Specialities including: 302, 303, 304, 305, 316, 321, 347, 400 Series, 17-7 pH, MONEL® and INCONEL® Alloys.

.004" to .312" Round Wire

TENSILE STRENGTHS OF COMMON STAINLESS STEEL WIRE GRADES

Sizes & Conditions	302	304	305	316/317	321	347	INCONEL® ALLOY 600	MONEL® ALLOY 400	430	
.005 - .030"	Annealed	100-130,000	100-130,000	100-130,000	95-130,000	105-135,000	94-130,000	100-120,000	70-85,000	70-90,000
	1/4 Hard	140-190,000	140-175,000	130-165,000	130-175,000	160-200,000	130-170,000	120-145,000	90-110,000	90-110,000
	1/2 Hard	190-240,000	180-215,000	165-200,000	175-210,000	200-230,000	170-205,000	145-165,000	110-140,000	110-130,000
.031 - .125"	3/4 Hard	240-290,000	220-265,000	200-250,000	210-235,000	230-270,000	205-230,000	165-185,000	140-160,000	130-150,000
	Full Hard	290-360,000	270-350,000	230-280,000	235-275,000	270-340,000	230-275,000	185-215,000	170-210,000	150-200,000
	Annealed	95-115,000	95-115,000	95-115,000	95-115,000	95-115,000	95-115,000	90-110,000	70-80,000	85-100,000
.125 - 250"	1/4 Hard	130-160,000	120-155,000	135-160,000	130-170,000	130-160,000	130-160,000	110-130,000	80-100,000	105-120,000
	1/2 Hard	165-230,000	160-210,000	150-210,000	165-205,000	160-200,000	160-200,000	130-150,000	100-130,000	115-130,000
	3/4 Hard	195-260,000	190-255,000	180-230,000	205-235,000	200-230,000	200-230,000	150-180,000	110-150,000	120-140,000
.125 - 250"	Full Hard	230-360,000	225-300,000	210-280,000	230-275,000	235-275,000	230-275,000	175-210,000	140-180,000	130-160,000
	Annealed	90-115,000	90-110,000	90-105,000	85-105,000	95-105,000	85-105,000	90-105,000	65-79,000	75-90,000
	1/4 Hard	120-140,000	115-140,000	120-140,000	110-130,000	120-140,000	110-130,000	110-130,000	80-100,000	95-100,000
.125 - 250"	1/2 Hard	145-170,000	145-170,000	145-170,000	125-155,000	145-170,000	125-155,000	130-150,000	100-130,000	100-115,000
	3/4 Hard	170-200,000	175-200,000	170-200,000	140-180,000	170-200,000	140-180,000	150-170,000	110-140,000	110-125,000
	Full Hard	190-230,000	200-240,000	190-230,000	160-190,000	190-230,000	160-190,000	160-190,000	120-150,000	125-140,000

WIRE DIVISION WELL MEASURING LINE

WE OFFER STAINLESS STOCK:

- 10,000
- 15,000
- 20,000
- 25,000 Ft. Reels

REEL:

= 24" X 15" X 17"
2 1/4" Arbor Hole

STAINLESS SELECTIONS:

302/304 = High Strength,
Good Corrosion Resistance
316 = Excellent Corrosion
Resistance

GRADE OR ALLOY	SIZE TOLERANCE (IN)	LBS.BREAKING STRENGTH				90° BENDS 3/16" RADIUS	WEIGHT PER 1000 FT. (LBS.)	RELATIVE SHEAVE DIA. INCHES
		MIN.		MAX.				
		LBS.	KSI	LBS.	KSI			
T-302 (AISI -304 OR	.066±.001	862	252.0	961	281.0	7 MIN.	11.91	10
	.072±.001	1018	250.0	1132	278.0	7 MIN.	14.17	11
	.082±.001	1278	242.0	1431	271.0	7 MIN.	18.37	12.5
	.092±.001	1582	238.0	1782	268.0	7 MIN.	23.14	14.5
	.105±.001	2009	232.0	2269	262.0	5 MIN.	30.14	17
	.108±.001	2080	227.0	2354	257.0	5 MIN.	31.88	18
	.125±.001	2724	222.0	3105	253.0	5 MIN.	42.71	21
T-316 (AISI -316 OR	.066±.001	736	215.0	838	245.0	7 MIN.	11.91	11.5
	.072±.001	875	215.0	998	245.0	7 MIN.	14.17	12.5
	.082±.001	1083	205.0	1241	235.0	7 MIN.	18.37	15
	.092±.001	1363	205.0	1562	235.0	7 MIN.	23.14	17
	.105±.001	1732	200.0	1992	230.0	5 MIN.	30.14	19.5
	.108±.001	1786	195.0	2061	225.0	5 MIN.	31.88	20.5
	.125±.001	2270	185.0	2638	215.0	5 MIN.	42.71	25

NOTE: Not recommended for use in brine or H2S over .05 PSIA.

WIRE DIVISION (AISI) CHEMICAL COMPONENTS

TYPE	C MAX.	Mn MAX.	P MAX.	S MAX.	Si MAX.	Cr	Ni	Mo MAX.	OTHER ELEMENTS					
201	0.15	5.50-7.50	.060	.030	1.00	16.00-18.00	3.50-5.50		N 0.25 Max.					
202	0.15	7.50-10.00	.060	.030	1.00	17.00-19.00	4.00-6.00		N 0.25 Max.					
301	0.15	2.00	.045	.030	1.00	16.00-18.00	6.00-8.00		-					
302	0.15	2.00	.045	.030	1.00	17.00-19.00	8.00-10.00	-	-					
303	0.15	2.00	.20	.15 Min.	1.00	17.00-19.00	8.00-10.00	-	-					
303SE	0.15	2.00	.20	.060	1.00	17.00-19.00	8.00-10.00		Se 0.15 Min					
304	0.08	2.00	.045	.030	1.00	18.00-20.00	8.00-10.50		-					
304L	0.03	2.00	.045	.030	1.00	18.00-20.00	8.00-12.00		-					
305	0.12	2.00	.045	.030	1.00	17.00-19.00	10.50-13.00		-					
308	0.08	2.00	.045	.030	1.00	19.00-21.00	10.00-12.00		-					
309	0.20	2.00	.045	.030	1.00	22.00-24.00	12.00-15.00		-					
309S	0.08	2.00	.045	.030	1.00	22.00-24.00	12.00-15.00		-					
310	0.25	2.00	.045	.030	1.50	24.00-26.00	19.00-22.00		-					
310S	0.08	2.00	.045	.030	1.50	24.00-26.00	19.00-22.00		-					
314	0.25	2.00	.045	.030	1.50-3.00	23.00-26.00	19.00-22.00		-					
316	0.08	2.00	.045	.030	1.00	16.00-18.00	10.00-14.00	2.00-3.00	-					
316L	0.03	2.00	.045	.030	1.00	16.00-18.00	10.00-14.00	2.00-3.00	-					
316F	0.08	2.00	.20	.10 Min.	1.00	16.00-18.00	10.00-14.00	1.75-3.00	-					
317	0.08	2.00	.045	.030	1.00	18.00-20.00	11.00-15.00	3.00-4.00	-					
317L	0.03	2.00	.045	.030	1.00	18.00-20.00	11.00-15.00	3.00-4.00	-					
321	0.08	2.00	.045	.030	1.00	17.00-19.00	9.00-12.00		Ti 5x C Min.					
330	0.20	2.00	.030	.030	.75-1.50	17.00-20.00	34.00-37.00		-					
347	0.02	2.00	.045	.030	1.00	17.00-19.00	9.00-13.00		Cb-Ta 10 x C Min.					
348	0.08	2.00	.045	.030	1.00	17.00-19.00	9.00-13.00		Cb-Ta 10x Min.					
384	0.08	2.00	.045	.030	1.00	15.00-17.00	17.00-19.00		Ta 0.10 Max. Co 0.20 Max. - Cb + Ta 8					
18-9 LW	0.10	2.00	.045	.045	1.00	17.00-19.00	8.00-10.00		8x C Min.					
Nitronic 32	0.15	11.00-14.00	.060	.060	1.00	16.50-19.00	.50-2.50	-	Cu 3.0-4.0					
Nitronic 33	0.08	11.50-14.50	.060	.060	1.00	17.00-19.00	2.25-3.75	-	N .20-.45					
Nitronic 40	0.08	8.00-10.00	.060	.060	1.00	19.00-21.00	5.50-7.50	-	N .20-.40					
Nitronic 50	.03-.06	4.00-6.00	.040	.060	1.00	20.50-23.50	11.50-13.50	1.50-3.00	N .15-.40 N .20-.40					
Nitronic 60	0.10	7.00-9.00			3.50-4.50	16.00-18.00	8.00-9.00	-	Co .10-.30 V .10-.30 N .08-.18					
HARDENABLE (BY HEAT TREATMENT) TYPES														
410	0.15	1.00	.040	.030	1.00	11.50-13.50			-					
416	0.15	1.00	.060	.15 Min.	1.00	12.00-14.00			-					
420	0.15 Min.	1.00	.040	.030	1.00	12.00-14.00	3.00-5.00		-					
17-4PH	0.07	1.00	.040	.030	1.00	15.50-17.50			-					
17-7PH	0.09	1.00	.040	.030	1.00	16.00-18.00	6.50-7.75	-	-					
NON-HARDENABLE TYPES														
409	0.08	1.00	.045	.045	1.00	10.50-11.75			Ti 6 x C Min.					
430	0.12	1.00	.040	.030	1.00	16.00-18.00			-					
NOMINAL CHEMICAL COMPOSITION NICKEL ALLOYS														
TYPE	Ni	C	Mn	Fe	S	Si	Cu	Cr	Al	Ti	Mg	Cb	Mo	OTHERS
200	99.5	0.08	0.18	0.2	.005	0.18	0.13			-	-	-	-	
201	99.5	.01	0.18	0.2	.005	0.13	0.13			-	-	-	-	
205	99.5	.08	0.18	0.10	.004	0.08	0.08			.03	.05	-	-	
211	95.0	.10	4.75	0.38	.008	0.08	0.13			-	-	-	-	
212	97.0	.20	2.00	0.75	.015	0.15	0.13			-	-	-	-	
220	99.5	.04	0.10	0.05	0.03	0.03	0.08			.03	.05	-	-	
230	99.5	.05	0.08	0.05	0.02	0.02				.003	.06	-	-	
MONEL® (NICKEL-COPPER) ALLOYS														
400	66.5	.15	1.00	1.25	.012	0.25	31.5							
INCONEL® (NICKEL-CHROMIUM) ALLOYS														
600	76.0	.08	0.5	8.00	.008	0.25	0.25	15.5	-				9.00	-
601	60.5	.05	0.5	14.1	.007	0.25	0.50	23.0	1.35					-
625	61.0	.05	0.25	2.5	.008	0.25		21.5	0.20	0.20				-
X-750	73.0	.04	0.50	7.0	.005	0.25	0.25	15.5	0.70	2.50				+Ta 3.65
751	72.5	.05	0.50	7.0	.005	0.25	0.25	25.5	1.20	2.30				+Ta 0.95 +Ta 0.95
INCOLOY® (NICKEL-IRON-CHROMIUM) ALLOYS														
800	32.5	.05	0.75	46.0	.008	0.50	0.38	21.0	0.38	0.38				-
801	32.0	.05	0.75	44.5	.008	0.50	0.25	20.5		1.13				-
802	32.5	.35	0.75	46.0	.008	0.38	-	21.0	0.58	0.75				-
804	41.0	.05	0.75	25.4	.008	0.38	0.25	29.5	0.30	0.60			0.50	-
805	36.0	.12	0.75	Bal.	.020	0.50	0.50	7.5						-

Incoloy, Inconel and Monel are trademarks of Special Metals Corporation.

WIRE GAUGE SYSTEMS AND OTHER DATA

GAUGE NUMBERS					DIAMETER			SECTIONAL AREA		LENGTH:	GAUGE NUMBERS					DIAMETER			SECTIONAL AREA		LENGTH:
Steel Wire Gauge	American Wire Gauge (B. & S.)	Birmingham or Stubs	British Imperial Standard	Reduction by 64ths	INCHES		Millimeters (Decimality)	Square Inches	Circular Mils	Feet per Pound	Steel Wire Gauge	American Wire Gauge (B. & S.)	Birmingham or Stubs	British Imperial Standard	INCHES		Millimeters (Decimality)	Square Inches	Circular Mils	Feet per Pound	
					Decimally										Reduction by 64ths	Decimally					
1	1	1		19/64	.3000	7.620	.070686	90000	4.118		18	19	20	19	.0403	1.024	.0012756	1624.1	228.2		
		.296875		7.541	.0692	88135.	4.105	.0400	1.016						.0012566	1600.0	231.6				
		.2893		7.348	.065733	83694.	4.428	.0360	.9144						.0010179	1296.0	286.0				
		.2840		7.214	.063347	80656.	4.595	.0359	.9119						.0010122	1288.8	287.6				
				.2830	7.188	.062902	80089	4.627						.0350	.8890	.00096211	1225.0	302.5			
2		2	2	9/32	.28125	7.144	.062126	79102.	4.685	20	20	21	21	1/32	.0348	.8839	.00095115	1211.0	306.0		
				.2760	7.010	.059829	76176.	4.865	.0320						.8128	.00080425	1024.0	361.9			
				.265625	6.747	.055415	70557.	5.252	.0317						.8052	.00078924	1004.9	368.8			
		3		.2625	6.668	.054119	68906.	5.378						.03125	.7938	.00076699	976.56	379.5			
				.2590	6.579	.052685	67081.	5.525						.0286	.7264	.00064242	817.96	453.1			
3	2		3	1/4	.2576	6.543	.052117	66358.	5.585	23	22	22	22		.0285	.7239	.00063794	812.25	456.3		
					.2520	6.401	.049876	63504.	5.836						.0280	.7112	.00061575	784.00	472.7		
					.2500	6.350	.049087	62500.	5.930						.0258	.6553	.00052279	665.64	556.8		
					.2437	6.190	.046645	59390.	6.240						.0253	.6426	.00050273	640.09	579.0		
		4		.2380	6.045	.044488	56644.	6.543						.0250	.6350	.00049087	825.00	593.0			
4	3		4	15/64	.234375	5.953	.0431443	54932.	6.745	24	23	24	24		.0240	.6096	.00045239	576.00	643.4		
					.2320	5.893	.042273	53824.	6.885						.0230	.5842	.00041548	529.00	700.6		
					.2294	5.827	.041331	52624.	7.042						.0226	.5740	.00040115	510.76	725.6		
					.2253	5.723	.039867	50760.	7.301						.0220	.5588	.00038013	484.00	765.7		
					.2200	5.588	.038013	48400.	7.657						.0204	.5182	.00032685	416.16	890.5		
5	4		5	7/32	.21875	5.556	.037583	47852.	7.745	26	24	25	25		.0201	.5105	.00031731	404.01	917.3		
					.2120	5.385	.035299	44944.	8.2446						.0200	.5080	.00031416	400.00	926.5		
					.2070	5.258	.033654	42849.	8.649						.0181	.4597	.00025730	327.61	1131.		
					.2043	5.189	.032781	41738.	8.879						.0180	.4572	.00025447	324.00	1144.		
				.203125	5.159	.032405	41260.	8.984						.0179	.4547	.00025165	320.41	1157.			
6	5	6	6	3/16	.2030	5.156	.032366	41209.	8.993	27	26	27	27		.0173	.4394	.00023506	299.29	1238.		
					.1920	4.877	.028953	36864.	10.05						.0164	.4166	.00021124	268.96	1378.		
					.1875	4.763	.027612	35156.	10.54						.0162	.4115	.00020612	262.44	1412.		
		7		.1819	4.620	.025987	33088.	11.20						.0160	.4064	.00020106	256.00	1448.			
				.1800	4.572	.02544	32400.	11.44						.0159	.4039	.00019856	252.81	1466.			
7		7	7	11/64	.1770	4.469	.024606	31329.	11.83	29	27	28	28	1/64	.015625	.3969	.00019175	244.14	1518.		
					.1760	4.470	.024329	30976.	11.96						.0150	.3810	.00017671	225.00	1647.		
8	6	8	8		.171875	4.366	.023210	29541.	12.54	30	28	28			.0148	.3759	.00017203	219.04	1711.		
					.1650	4.191	.021883	27225.	13.61					.0142	.3607	.00015837	201.64	1860.			
				.1620	4.115	.020612	26244.	14.12						.0140	.3556	.00015394	196.00	1912.			
9	7	9	8	5/32	.1600	4.064	.020106	25600.	14.48	31	28	29	29		.0136	.3454	.00014527	184.96	2004.		
					.15625	3.969	.019175	24414.	15.18						.0132	.3353	.00013685	174.24	2127.		
					.1483	3.767	.017273	21993.	16.85						.0130	.3302	.00013273	169.00	2193.		
					.1480	3.759	.017203	21904.	16.92						.0128	.3251	.00012868	183.84	2262.		
				.1443	3.665	.016354	20822.	17.80						.0126	.3200	.00012899	158.75	2334.			
10	8	10	9	9/64	.1440	3.658	.016286	20736.	17.87	33	29	30	30		.0124	.3150	.00012076	153.76	2410.		
					.140625	3.572	.015531	19775.	18.75						.0120	.3048	.00011310	144.00	2574.		
					.1350	3.429	.014314	18225.	20.33						.0118	.2997	.00010936	139.24	2662.		
					.1340	3.404	.014103	17956.	20.64						.0116	.2946	.00010568	134.56	2754.		
				.1285	3.264	.012969	16512.	22.44						.0113	.2870	.00010029	127.69	2902.			
11		11	11	1/8	.1280	3.251	.012868	16384.	22.62	34	30	31	33	34		.0108	.2743	.000091609	116.64	3177.	
					.1250	3.175	.012272	15625.	23.72							.0104	.2642	.000084949	108.16	3426.	
					.1205	3.061	.011404	14520.	25.52							.0100	.2540	.000078540	100.00	3706.	
					.1200	3.048	.011310	14400.	25.74							.0095	.2413	.000070882	90.25	4106.	
					.1160	2.946	.010588	13456.	27.54							.0092	.2337	.000066476	84.64	4379.	
12	9	12	12	7/64	.1144	2.906	.010279	13087.	28.32	36	31	32	35		.0092	.2286	.000063617	81.00	4575.		
					.109375	2.778	.0093956	11963.	30.97						.00893	.2268	.000062631	79.74	4647.		
					.1090	2.769	.0093313	11881.	31.19						.0085	.2159	.000056745	72.25	5129.		
					.1055	2.680	.0087417	11130.	33.80						.0084	.2134	.000055418	70.56	5252.		
				.1040	2.642	.0084949	10816.	34.26						.0080	.2032	.000050266	64.00	5791.			
13	10	13	13	3/32	.1019	2.588	.0081553	10384.	35.69	39	32	33	34		.00795	.2019	.000049639	63.20	5864.		
					.0950	2.413	.0070882	9025.0	41.06						.0076	.1930	.000045365	57.76	6416.		
					.09375	2.381	.0069029	8789.1	42.17						.0075	.1905	.000044179	56.25	6588.		
					.0920	2.337	.0066478	8464.0	43.79						.00708	.1798	.000039369	50.13	7393.		
				.0915	2.324	.0065755	8372.3	44.27						.0070	.1778	.000038485	49.00	7563.			
14	11	14	14	5/64	.0907	2.304	.0064611	8226.5	45.05	41	34	37	38		.0068	.1727	.000036317	46.24	8015.		
					.0830	2.108	.0054106	6889.0	53.80						.0066	.1676	.000034212	43.56	8508.		
					.0808	2.052	.0051276	6528.6	56.77						.0063	.1600	.000031173	39.69	9337.		
					.0800	2.032	.0050266	6400.0	57.91						.0062	.1575	.000030191	38.44	9641.		
				.078125	1.984	.0047937	6103.5	60.72						.0060	.1524	.000028274	36.00	10294.			
15	13	15	15	1/16	.0720	1.829	.0040715	5184.0	71.49	44	35	35	39		.0058	.1473	.000026421	33.64	11017.		
					.0650	1.651	.0033183	4225.0	87.42						.00581	.1425	.000024718	31.47	11776.		
					.0641	1.626	.0032271	4108.8	90.28						.0055	.1397	.000023758	3-24	12251.		
					.0640	1.626	.0032170	4096.0	90.48						.0052	.1321	.000021237	27.04	13706.		
				.0625	1.588	.0030680	3906.3	94.87						.0050	.1270	.000019365	25.00	14824.			
16	14	16	16		.0580	1.473	.0026421	3364.0	110.2	47	36	40	41		.0048	.1219	.000018096	23.04	16085.		
					.0571	1.450	.0025607	3260.4	113.7						.0046	.1168	.000016619	21.16	17514.		
					.0560	1.422	.0024630	3136.0	118.2						.00445	.1130	.000015553	19.80	18715.		
					.0540	1.372	.0022902	2915.0	127.1						.0044	.118	.000015205	19.36	19143.		
				.0508	1.290	.0020268	2580.6	143.6						.0040	.1016	.000012566	16.00	23163.			
17	15	17	17		.0490	1.245	.0018857	2401.0	154.4	48	37	40	42		.00396	.1006	.000012316	15.68	23633.		
					.0480	1.219	.0018095	2304.0	160.9						.0036	.09144	.000019179	12.96	25491.		
					.0475	1.207	.0017721	2256.3	164.3						.00353	.08966	.000097868	12.46	26497.		
					.046875																

WIRE ROPE DIVISION



1 X 7 PREFORMED STAINLESS STEEL STRAND NON-FLEXIBLE TYPE 302/304



MILITARY SPECIFICATION

Latest Revision MIL-DTL-87161 Wire Strand, Non-Flexible for Aircraft Application Type I. Composition B: Corrosion-Resistant: Super-seeding MIL-W-5693. SEE QPL-87161 FOR QUALIFIED COMPANIES.



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.55	375	SF04717	3/64
□	.55	375	SC04717	3/64
△	85	500	SF06317	1/16
□	.85	500	SC06317*	1/16
□	1.4	800	SC07817	5/64
□	2.0	1,200	SC09417*	3/32
□	2.7	1,480	SC10917	7/64
□	3.5	1,830	SC12517	1/8
□	5.5	2,900	SC15617	5/32
□	7.3	3,900	SC18817*	3/16
□	10.6	6,300	SC21917	7/32
□	13.7	8,500	SC25017*	1/4
□	17.6	10,700	SC28117	9/32
□	20.5	13,200	SC31317*	5/16
□	30.0	18,000	SC37517*	3/8
□	40.0	26,000	SC43817	7/16
□	56.2	33,700	SC50017*	1/2

*Denotes Stock Item

1x7, 3x3, 3x7 STAINLESS STEEL MINIATURE STRAND AND CABLE TYPE 302/304 ALL COMMERCIAL GRADE

CODE	APPROX. WEIGHT PER 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	CONST.	BASE PART NUMBER	DIAM IN INCHES
□	.033	25	1X7	SC01217	.012
□	.055	40	1X7	SC01517	.015
□	.073	55	1X7	SC01817	.018
□	10	74	1X7	SC02117	.021
□	13	100	1X7	SC02417	.024
□	.17	125	1X7	SC02717	.027
□	.23	150	1X7	SC03117	.031
□	.30	210	1X7	SC03617	.036
□	.40	290	1X7	SC04217	.042
□	.05	40	3X3	SC02033	.020
□	.19	110	3X7	SC03137	.031
□	.97	650	3X7	SC07837	.078

*Denotes Stock Item

1 X 19 PREFORMED STAINLESS STEEL STRAND NON-FLEXIBLE TYPE 302/304



MILITARY SPECIFICATION

Latest Revision MIL-DTL-87161 Wire Strand, Non-Flexible for Air-

craft Application Type I. Composition B: Corrosion-Resistant: Super-seeding MIL-W-5693. SEE QPL-87161 FOR QUALIFIED COMPANIES.



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	0.55	375	SF04719	3/64
□	0.55	375	SC04719*	3/64
△	0.85	500	SF06319	1/16
□	0.85	500	SC06319*	1/16
△	1.4	800	SF07819	5/64
□	1.4	800	SC07819	5/64
△	2.0	1,200	SF09419	3/32
□	2.0	1,200	SC09419*	3/32
△	2.7	1,600	SF10919	7/64
□	2.7	1,600	SC10919	7/64
△	3.5	2,100	SF12519*	1/8
□	3.5	2,100	SC12519*	1/8
△	5.5	3,300	SF15619	5/32
□	5.5	3,300	SC15619*	5/32
△	7.7	4,700	SF18819	3/16
□	7.7	4,700	SC18819*	3/16
△	10.2	6,300	SF21919	7/32
□	10.2	6,300	SC21919*	7/32
△	13.5	8,200	SF25019	1/4
□	13.5	8,200	SC25019*	1/4
△	17.0	10,300	SF28119	9/32
□	17.0	10,300	SC28119*	9/32
△	21.0	12,500	SF31319	5/16
□	21.0	12,500	SC31319*	5/16
△	29.4	17,500	SF37519	3/8
□	29.4	17,500	SC37519*	3/8
□	41.0	22,500	SC43819	7/16
□	52.1	30,000	SC50019	1/2
□	67.0	36,200	SC56319	9/16
□	85.5	47,000	SC62519	5/8

Bright, highly polished, Type 304 strand is also available for yacht rigging. At Loos & Co., Inc. we do recommend using Type 316 strand for sailboats that will be sailing in or near salt water.

*Denotes Stock Item

3 X 7 PREFORMED STAINLESS STEEL AIRCRAFT CABLE TYPE 302/304



MILITARY SPECIFICATION

Latest Revision MIL-DTL-87161 Wire Strand, Non-Flexible for Air-craft Application Type I. Composition B: Corrosion-Resistant: Super- seding MIL-W-5693. SEE QPL-87161 FOR QUALIFIED COMPANIES.



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.19	110	SF03137	1/32
□	.19	110	SC03137	1/32

*Denotes Stock Item

7 X 7 PREFORMED STAINLESS STEEL AIRCRAFT CABLE FLEXIBLE TYPE 302/304

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.42	270	SF04777*	3/64
□	.42	270	SC04777*	3/64
△	.75	480	SF06377*	1/16
□	.75	480	SC06377*	1/16
□	1.1	650	SC10977	5/64
△	1.6	920	SC12577*	3/32
□	1.6	920	SC09477	3/32
□	2.2	1,260	SC10977	7/64
□	2.8	1,700	SC12577*	1/8
□	4.3	2,400	SC15677*	5/32
□	6.2	3,700	SC18877*	3/16
□	8.3	4,800	SC21977	7/31
□	10.6	6,100	SC25077*	1/4
□	13.4	7,400	SC28177	9/32
□	16.7	9,000	SC31377	5/16
□	23.6	12,000	SC37577	3/8
□	34.2	15,600	SC43877	7/16
□	44.0	23,300	SC50077	1/2
□	55.0	26,600	SC56377	9/16
□	68.0	32,500	SC62577	5/8
□	97.0	46,000	SC75077	3/4
□	124.0	59,280	SC87577	7/8
□	161.7	76,290	SC10077	1

*Denotes Stock Item

7 X 19 PREFORMED STAINLESS STEEL AIRCRAFT CABLE FLEXIBLE TYPE 302/304



MILITARY SPECIFICATION

Latest Revision MIL-DTL-87161 Wire Strand, Non-Flexible for Air-craft Application Type I. Composition B: Corrosion-Resistant: Super- soding MIL-W-5693. SEE QPL-87161 FOR QUALIFIED COMPANIES.



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUM- BER	DIAM. IN INCHES
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	.42 .75 .75	270 480 480	SC04779* SF06379* SC06379*	3/64 1/16 1/16
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1.7 1.7 2.3	920 920 1,260	SF09479* SC09479* SC10979*	3/32 3/32 7/64
<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	2.9 2.9 4.5	1,760 1,760 2,400	SF12579* SC12579* SF15679*	1/8 1/8 5/32
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	4.5 6.5 6.5	2,400 3,700 3,700	SC15679* SF18879* SC18879*	5/32 3/16 3/16
<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	8.6 8.6 11.0	5,000 5,000 6,400	SF21979 SC21979 SF25079*	7/32 7/32 1/4
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	11.0 13.9 13.9	6,400 7,800 7,800	SC25079* SF28179 SC28179	1/4 9/32 9/32
<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	17.3 17.3 24.3	9,000 9,000 12,000	SF31379* SC31379* SF37579*	5/16 5/16 3/8
<input type="checkbox"/>	24.3	12,000	SC37579*	3/8

6 X 19 CLASS PREFORMED STAINLESS STEEL WIRE ROPE I.W.R.C. - TYPE 302/304

FEDERAL SPECIFICATION RR-W-410, Latest Amendment, Type 1, Class 2, Construction 4, Filler Wire (6x25)

APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
35.6	15,900	SW4362506*	7/16
45.8	22,200	SW5062506*	1/2
59	27,800	SW5662506*	9/16
71.5	34,100	SW6262506*	5/8
92.2	48,400	SW7562506*	3/4
143	64,800	SW8762506*	7/8
187	83,300	SW1062506*	1
240	103,700	SW1162506*	1-1/8
290	126,200	SW1262506*	1-1/4

*Denotes Stock Item

6 X 37 CLASS PREFORMED STAINLESS STEEL WIRE ROPE I.W.R.C. - TYPE 302/304

FEDERAL SPECIFICATION RR-W-410, Latest Amendment, Type I, Class 3, Construction 6, Warrington-Seale, 1-Op

APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
6.5	3,000	SW1863713	3/16
10	5,400	SW2563713	1/4
18	8,300	SW3163713	5/16
24	11,700	SW3763713*	3/8
33	15,900	SW4363737	7/16
43	22,200	SW5063637*	1/2
54	27,800	SW5663637	9/16
67	34,100	SW6263637*	5/8
96	48,400	SW7563637	3/4
131	64,800	SW8763637*	7/8
170	83,300	SW1063637*	1
216	103,200	SW1163637	1-1/8
266	126,200	SW1263637	1-1/4

*Denotes Stock Item


6 X 42 NON-PREFORMED STAINLESS STEEL WIRE ROPE TYPE 302/304









FEDERAL SPECIFICATION RR-W-410, Latest Amendment, Type III, Class 6, (construction only)

APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUM- BER	DIAM. IN INCHES
1.8	700	SR12564	1/8
4	1,600	SR188864	3/16
7	3,200	SR25064	1/4
11	4,900	SR31364	5/16
16	6,900	SR37564	3/8
21	9,300	SR43864	7/16
28	12,000	SR50064	1/2
35	15,000	SR56264	9/16
43	18,400	SR62564	5/8
61	26,200	SR75064	3/4
82	35,600	SR87564	7/8
108	46,500	SR10064	1
136	59,000	SR11264	1-1/8
169	72,500	SR1256403	1-1/4

*Denotes Stock Item

19 X 7 PREFORMED STAINLESS STEEL WIRE ROPE TYPE 302/304

 **MILITARY SPECIFICATION** Latest Revision MIL-DTL-83140, Wire Rope; Steel Preformed, Non-rotating, for Aircraft Rescue Hoist and Cargo Handling, Type I

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
	4.5	2,160	SF15697	5/32
	6.5	3,330	SF18797*	3/16
	8.6	4,500	SF21997*	7/32
	11	5,760	SF25097*	1/4
	17.3	8,100	SF31397	5/16
	24.3	10,800	SF37597*	3/8
	45.8	20,520	SF50097*	1/2
	71.5	31,500	SF62597	5/8

*Denotes Stock Item

3/32" & 1/8" 19X7'S ARE ALSO AVAILABLE

1X7 PREFORMED STAINLESS STEEL UTILITY STRAND TYPE EXTRA CORROSION-RESISTANT - NON-FLEXIBLE

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
10.6	5,700	SZ21917	7/32
13.7	7,650	SZ25017	1/4
17.6	9,650	SZ28117	9/32
20.5	11,900	SZ31317	5/16
30.0	16,200	SZ37517	3/8
45.0	23,400	SZ43817	7/16
56.0	30,200	SZ50017	1/2

1X19 PREFORMED STAINLESS STEEL STRAND TYPE 316 EXTRA CORROSION-RESISTANT NON-FLEXIBLE FOR YACHT RIGGING

APPROX. WEIGHT 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
3.5	1,780	SZ12519LYR*	1/8
5.5	2,800	SZ15619LYR*	5/32
7.7	4,000	SZ18819LYR*	3/16
10.2	5,350	SZ21819LYR*	7/32
13.5	6,900	SZ25019LYR*	1/4
21.0	10,600	SZ31319LYR*	5/16
30.0	14,800	SZ37519LYR*	3/8
41.0	20,000	SZ43819LYR	7/16
52.1	27,000	SZ50019LYR	1/2
67.0	32,400	SZ56219LYR	9/16
85.5	422,00	SZ62519LYR	5/8

*Denotes Stock Item

LARGER DIAMETERS AVAILABLE UP TO 3/4"



7 X 7 PREFORMED STAINLESS STEEL CABLE TYPE 316 (EXTRA CORROSION-RESISTANT)

APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
.75	360	SZ06377*	1/16
1.6	700	SZ09477*	3/32
2.85	1,360	SZ12577*	1/8

*Denotes Stock Item ADDITIONAL DIAMETERS AVAILABLE

7 X 19 PREFORMED STAINLESS STEEL CABLE CABLE TYPE 316 (EXTRA CORROSION-RESISTANT)

APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
2.9	1,300	SZ12579*	1/8
4.5	2,000	SZ15679	5/32
6.5	2,900	SZ18879*	3/16
11.0	4,900	SZ25079*	1/4
17.3	7,600	SZ31379*	5/16
24.3	11,000	SZ37579*	3/8

*Denotes Stock Item ADDITIONAL DIAMETERS AVAILABLE

6 X 19 CLASS PREFORMED STAINLESS STEEL WIRE I.W.R.C. - TYPE 316 (EXTRA CORROSION-RESISTANT) 6 x 25 CONSTRUCTION



COMMERCIAL GRADE

APPROX. WEIGHT 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
35.6	15,000	SZ4362506	7/16
45.8	20,500	SZ5062506*	1/2
59	24,300	SZ5662506*	9/16
71.5	29,800	SZ6252506*	5/8
92.2	42,000	SZ7562506	3/4
143	58,000	SZ8762506	7/8
187	80,000	SZ1062506	1
240	90,440	SZ1162506	1-1/8
290	110,000	SZ1262506	1-1/4

*Denotes Stock Item

6 X 37 CLASS PREFORMED STAINLESS STEEL WIRE ROPE I.W.R.C. - TYPE 316 (EXTRA CORROSION-RESISTANT)

APPROX. WEIGHT 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUM- BER	DIAM. IN INCHES
65	2,55	SZ1863713	3/16
10	4,860	SZ2563713	1/4
18	7,470	SZ3163713	5/16
24	10,530	SZ3763713	3/8
33	14,200	SZ4363713	7/16
43	18,360	SZ5063637	1/2
54	21,760	SZ5663637	9/16
67	28,260	SZ6263637	5/8
96	39,960	SZ7563637	3/4
131	53,730	SZ8763637	7/8
170	69,570	SZ1063637	1
216	82,110	SZ1163637	1-1/8
266	100,640	SZ1263637	1-1/4

7 X 7 PREFORMED STAINLESS STEEL WIRE CABLE TYPE 305 NON-MAGNETIC TO MIL-DTL-18375

SEE QPL-18375 FOR QUALIFIED COMPANIES - COMMERCIAL QUALITY IS ALSO AVAILABLE

APPROX. WEIGHT 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
.75	360	SY06377*	1/16
1.6	700	SY09477*	3/32

7 X 19 PERFORMED STAINLESS STEEL CABLE TYPE 305 NON-MAGNETIC TO MIL-DTL-18375

SEE QPL-18375 FOR QUALIFIED COMPANIES - COMMERCIAL QUALITY IS ALSO AVAILABLE

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
2.9	1,300	SY12579*	1/8
4.5	2,000	SY15679	5/32
6.5	2,900	SY18879*	3/16
11.0	4,99	SY25079*	1/4
17.3	7,600	SY31379	5/16
24.3	11,000	SY37579	3/8

*Denotes Stock Item

6 X 19 PREFORMED STAINLESS STEEL WIRE ROPE I.W.R.C. - TYPE 305 NON-MAGNETIC

APPROX. WEIGHT 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
35.6	14,900	SY4362506	7/16
45.8	19,300	SY5062506	1/2
59.0	24,300	SY5662506	9/16
71.5	30,100	SY6262506	5/8
105.2	42,900	SY7562506	3/4
143	58,000	SY8762506	7/8
187	75,200	SY1062506	1

Cables can be fabricated in accordance with MIL-DTL-18242, Type IV. This specification requires each strand be fabricated in one operation and shall be the Warrington Construction. Prices on demand for MIL-DTL-18242. Type III and V are also available.

7 X 7, 7 X 19 MONEL CABLE

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
7 X 7 MONEL			
.45	135	MC04777*	3/64
.83	215	MC06377*	1/16
1.8	480	MC09477*	3/32
3.1	850	MC12577*	1/8
4.9	1,350	MC15677	5/32
7.0	1,900	MC18877	3/16
9.5	2,600	MC21977	7/32
12.5	3,400	MC25077	1/4
15.8	4,300	MC28177	9/32
19.5	5,300	MC31377	5/16
28.0	7,650	MC37577	3/8
7 X 19 MONEL			
1.8	480	MC09479*	3/32
3.3	875	MC12579*	1/8
5.2	1,350	MC15679*	5/32
7.5	1,950	MC18879*	3/16
10.5	2,650	MC21979	7/31
13.5	3,500	MC25079*	1/4
17.0	4,400	MC28179	9/32
21.0	5,450	MC31379	5/16
30.0	7,850	MC37579	3/8

*Denotes Stock Item

GALVANIZED CABLES

AVAILABLE IN 3 GRADES:

GOOD: IMPORTED QUALITY

BETTER: DOMESTIC COMMERCIAL QUALITY

BEST: MILITARY SPECIFICATION QUALITY



THIS SECTION FOR:

BETTER: DOMESTIC COMMERCIAL QUALITY

BEST: MILITARY SPECIFICATION QUALITY

1 X 7 PREFORMED GALVANIZED STRAND NON-FLEXIBLE



MILITARY SPECIFICATION

Latest Revision MIL-DTL-87161 Wire Strand, Non-Flexible for Air-craft Application Type I. Composition B: Corrosion-Resistant: Super- seding MIL-W-5693. SEE QPL-87161 FOR QUALIFIED COMPANIES.



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
<input type="checkbox"/>	.06	40	GC01617	1/64
<input type="checkbox"/>	.25	185	GC03117	1/32
<input type="checkbox"/>	.55	375	GF04717	3/64
<input type="checkbox"/>	.55	375	GC04717	3/64
<input type="checkbox"/>	.85	500	GF06317	1/16
<input type="checkbox"/>	.85	500	GC06317	1/16
<input type="checkbox"/>	1.4	800	GC07817	5/64
<input type="checkbox"/>	2.0	1,200	GC09417	3/32
<input type="checkbox"/>	2.7	1,600	GC10917	7/64
<input type="checkbox"/>	3.5	2,100	GC12517	1/8

1 X 19 PREFORMED GALVANIZED STRAND NON-FLEXIBLE



MILITARY SPECIFICATION

Latest Revision MIL-DTL-87161 Wire Strand, Non-Flexible
for Air-craft Application Type I. Composition B: Corro-
sion-Resistant: Super- soding MIL-W-5693. SEE QPL-87161
FOR QUALIFIED COMPANIES.



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUM- BER	DIAM. IN INCHES
<input type="checkbox"/>	.25	185	GC03119	1/32
<input checked="" type="checkbox"/>	.55	375	GF04719	3/64
<input type="checkbox"/>	.55	375	GC04719*	3/64
<input checked="" type="checkbox"/>	.85	500	GF06319	1/16
<input type="checkbox"/>	.75	500	GC06319	1/16
<input checked="" type="checkbox"/>	1.4	800	GF07819	5/64
<input type="checkbox"/>	1.4	800	GC07819	5/64
<input checked="" type="checkbox"/>	2.0	1,200	GF09419	3/32
<input type="checkbox"/>	2.0	1,200	GC09419*	3/32
<input checked="" type="checkbox"/>	2.7	1,600	GF10919	7/64
<input type="checkbox"/>	2.7	1,600	GC10919	7/64
<input checked="" type="checkbox"/>	3.5	2,100	GF12519	1/8
<input type="checkbox"/>	3.5	2,100	GC12519	1/8
<input checked="" type="checkbox"/>	5.5	3,300	GF15619	5/32
<input type="checkbox"/>	5.5	3,300	GC15619*	5/32
<input checked="" type="checkbox"/>	7.7	4,700	GF18819	3/16
<input type="checkbox"/>	7.7	4,700	GC18819*	3/16
<input checked="" type="checkbox"/>	10.2	6,300	GF21919	7/32
<input type="checkbox"/>	10.2	6,300	GC21919*	7/32
<input checked="" type="checkbox"/>	13.5	8,200	GF25019	1/4
<input type="checkbox"/>	13.5	8,200	GC25019*	1/4
<input checked="" type="checkbox"/>	17.0	10,300	GF28119	9/32
<input type="checkbox"/>	17.0	10,300	GC28119	9/32
<input checked="" type="checkbox"/>	21.0	12,500	GF31319	5/16
<input type="checkbox"/>	21.0	12,500	GC31319	5/16
<input checked="" type="checkbox"/>	30.1	17,500	GF37519	3/8
<input type="checkbox"/>	30.1	17,500	GC37519	3/8

*Denotes Stock Item

3 X 7 PREFORMED GALVANIZED AIRCRAFT CABLE



MILITARY SPECIFICATION

MIL-DTL-83420. Latest Amendment, Wire Rope, Flexible for Aircraft Control, Type I - Non-Jacketed Wire Rope, Composition A – Carbon, Carbon Steel, Zinc Coated, or Zinc and Tin Coated, Superseding MIL-W-1511. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUM- BER	DIAM. IN INCHES
△	.16	110	GF03137*	1/32
□	.16	110	GC03137	1/32

*Denotes Stock Item

7 X 7 PERFORMED GALVANIZED AIRCRAFT CABLE



MILITARY SPECIFICATION

MIL-DTL-83420. Latest Amendment, Wire Rope, Flexible for Aircraft Control, Type I - Non-Jacketed Wire Rope, Composition A – Carbon, Carbon Steel, Zinc Coated, or Zinc and Tin Coated, Superseding MIL-W-1511. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUM- BER	DIAM. IN INCHES
△	.36	270	GF04777*	3/64
□	.36	270	GC04777*	3/64
△	.75	480	GF06377*	1/16
□	.75	480	GC06377*	1/16
△	1.6	920	GF09477*	3/32
□	1.6	920	GC09477*	3/32
□	2.8	1,700	GC12577*	1/8
□	4.3	2,600	GC15677*	5/32
□	6.2	3,700	GC18877*	3/16
□	10.6	6,100	GC25077*	1/4

*Denotes Stock Item

7 X 19 PREFORMED GALVANIZED AIRCRAFT CABLE



MILITARY SPECIFICATION

MIL-DTL-83420. Latest Amendment, Wire Rope, Flexible for Aircraft Control, Type I - Non-Jacketed Wire Rope, Composition A – Carbon, Carbon Steel, Zinc Coated, or Zinc and Tin Coated, Superseding MIL-W-1511. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Oil Free - Dry Condition

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.75	480	GF06379*	1/16
□	.75	480	GC06379	2/26
△	1.7	1,000	GF09479*	3/32
□	1.7	1,000	GC09479*	3/32
△	2.9	2,000	GF12579*	1/8
□	2.9	2,000	GF18879*	1/8
△	4.5	2,800	GF15679*	5/32
□	4.5	2,800	GC15679*	5/32
△	6.5	4,200	GF18879*	3/16
□	6.5	4,200	GC18879*	3/16
△	8.6	5,600	GF21979*	7/32
□	8.6	5,600	GC21979	7/32
△	11.0	7,000	GF25079*	1/4
□	11.0	7,000	GC25079*	1/4
△	13.9	8,000	GF28179	9/32
△	17.3	9,800	GF31379*	5/16
□	17.3	9,800	GC31379*	5/16
△	24.3	14,400	GF37579*	3/8
□	24.3	14,400	GC37579*	3/8

*Denotes Stock Item

CABLE LAID CONSTRUCTION WIRE ROPE

A cable laid wire rope is constructed of smaller diameter cables which have been closed into a finished wire rope. For example, if you used 7 cables of 1/16" 7 x 7 and closed them into a wire rope, you would have a 3/16" diameter 7 x 7 x 7 containing 343 individual wires. The end product is a highly flexible, strong wire rope that can be spliced easily into slings or other assemblies. Loos & Company offers cable laid wire rope in the following diameters:

7 X 7 X 7 GALVANIZED

7X7X7 GALVANIZED			
APPROX. WEIGHT PER 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
3.36	1,750	GC156777	5/32
5.82	2,800	GC188777	3/16
9.23	4,000	GC250777	1/4
13.06	6,000	GC313777	5/16
21.46	10,000	GC375777	3/8
34.43	16,000	GC500777	1/2
7X7X7 STAINLESS STEEL TYPE 302/304			
3.36	1,750	SC156777	5/32
5.82	2,800	SC188777	3/16
9.23	4,000	SC250777	1/4
13.06	6,000	SC313777	5/16
21.46	10,000	SC375777	3/8
34.43	16,000	SC500777	1/2
7X7X19 GALVANIZED			
60	28,000	GC625779	5/8
88	40,000	GC750779	3/4
119	52,000	GC875779	7/8
156	66,000	GC1000779	1
7X7X19 STAINLESS STEEL 302/304			
60	28,000	SC625779	5/8
88	40,000	SC750779	3/4
119	52,000	SC875779	7/8
156	66,000	SC1000779	1

STANDARD PLASTICS GROUP

POLY-VINYL-CHLORIDE (PVC)

is the most commonly used plastic for mechanical cable coatings, especially where cost is a factor. Vinyl is flexible, has good weathering resistance and has excellent resistance to the ultra violet rays of the sun which degrades many plastics. The operating temperature range of vinyl is between -30°F (-35°C) and $+180^{\circ}\text{F}$ ($+80^{\circ}\text{C}$). Vinyl is supplied in a wide range of hardnesses or durometers. It is available from very hard and stiff to soft and spongy. AS A STANDARD WE HAVE SELECTED 90 DUROMETER (shore "A"). This durometer is suitable for the majority of applications, however, if your particular application requires low or high temperature environment, unusual abrasion resistance or special atmosphere or environmental problems, we will "tailor" a cable and plastic coating to your measurements. Vinyl is easily colored in a wide range of the spectrum from bright vivid colors to soft pastels, from metal flake to international orange. Again, we will "tailor" a color to fit your needs. We can supply a vinyl coating to meet MIL-I-631. Please contact us with your specific requirement (Type, Form, Grade, Class).

POLYETHYLENE (PE)

is primarily an electrical insulation plastic. Because of its wide acceptance and large production it is one of the least expensive plastics. It is quite flexible in thin wall thickness but stiff in heavy wall thickness. It does not have good abrasion resistance; as a result it is rarely used as the outside jacket of a mechanical cable. We use it primarily as an insulation material in electromechanical cables. The operating temperature range for polyethylene is between -40°F (-40°C) and $+200^{\circ}\text{F}$ ($+95^{\circ}\text{C}$), it has good resistance to chemicals and good weathering properties. Polyethylene's natural color is a milky-white translucent. Polyethylene meets MIL-I-631, Type A, Form U, Grade A, Class II.

POLYPROPYLENE (PP)

has found several basic applications in the mechanical cable industry. It has good abrasion resistance, good chemical resistance, and is easy to process. It is light in weight and reasonably priced. Polypropylene has a narrow temperature range, however, and is not recommended for cold applications below 0°F (-18°C) nor applications above 200°F (95°C). Its weatherability is only fair because it is degraded by the ultraviolet rays of the sun.



LOLON® ENGINEERING PLASTICS

LOLON® "A"

Its flexibility compares with vinyl, but has much better fatigue and abrasion resistance. LOLON® "A" holds up well in temperatures between -40°F (-40°C) to $+200^{\circ}\text{F}$ ($+95^{\circ}\text{C}$) and offers good chemical resistance. This is an excellent choice when flexibility and toughness are required. Natural color is clear (transparent) with a slightly green tint. LOLON® "A" will meet Military Specifications: MIL-P-22096, Type III, and MIL-W-29020.

LOLON® "B"

One of the first of Loos & Company's special formulations of plastic coating for mechanical cables. Compared with LOLON® "A" it is slightly less flexible, however, LOLON® "B" offers superior abrasion and fatigue resistance. It possesses good chemical resistance and operates satisfactorily in a temperature range between -40°F (-40°C) and $+200^{\circ}\text{F}$ ($+95^{\circ}\text{C}$). LOLON® "B" is light tan in color, slightly transparent.

LOLON® "F"

A very broad range of applications are served by LOLON® "F". Flexibility is exceptional, chemical resistance is good. Its superior quality is its ability to operate in an extremely wide temperature range, from -65°F (-54°C) to $+230^{\circ}\text{F}$ ($+110^{\circ}\text{C}$). A desired plastic for cable coatings where the cable operates over pulleys, especially in severe cold. Natural color is a transparent or clear. LOLON® "F" will meet Military Specification MIL-W-83420.

LOLON® "G"

Like LOLON® "B", "E", and "F", LOLON® "G" is an exceptionally tough plastic with abrasion resistance, good bearing characteristics, light in weight and good chemical resistance. Its real claim to fame is its ability to withstand higher temperatures and will operate satisfactorily between -20°F (-29°C) and $+250^{\circ}\text{F}$ ($+120^{\circ}\text{C}$). LOLON® "G" also has heat and light stabilizers built in which improves its weatherability. Natural color is black. This plastic meets the following Military Specifications: MIL-C-23812, MIL-W-21632, MIL-C-15452, and MIL-C-2193

LOLON® "I"

Similar to LOLON® "F" except has slightly better heat stability. Will operate in temperatures up to $+250^{\circ}\text{F}$ ($+120^{\circ}\text{C}$). Severe cold resistance is almost as good as LOLON® "F". Will operate at -65°F (-54°C). Flexibility not quite as good as LOLON® "F". Natural color is transparent or clear. Chemical resistance is good.

LOLON® "J"

Except for a few very special applications, this formulation has been gradually replaced by LOLON® "B". LOLON® "B" is less expensive and yet more flexible, tougher and generally is superior to LOLON® "J". We continue to list LOLON® "J" only because it is specified occasionally. LOLON® "J" will meet military specification MIL-M-22096, Type II.

LOLON® "M"

Another super-plastic. In addition to its remarkable flex-life, LOLON® "M" has excellent abrasion resistance, is tough to cut, will operate in a temperature range between -60°F (-54°C) and $+300^{\circ}\text{F}$ ($+150^{\circ}\text{C}$). It is resistant to many chemicals and a broad range of oils and solvents. It is mildew and fungus resistant, has good electrical properties for low voltage applications, is available in colors. Its natural color is a "Creamy-tan"; with ultraviolet inhibitors added its natural color is black. From a cost standpoint it is slightly more expensive but its long life in applications running over pulleys offsets this minor disadvantage.

Loos offers jacketed cables in a wide variety of colors. Typically we stock nylon and vinyl cables in the following colors: Natural, Clear, Black, Red, Orange and Yellow. Custom colors are also available. Just send us a sample of the color you wish to be matched.

Loos also will jacket your cable. Please contact the sales department with your requirements.

LOOS & CO SUPPLIES WIRE ROPE AND CABLE TO THE MILITARY

SPECIFICATIONS LISTED BELOW:

MIL-W-12567	Wire Strand, Steel, (Wires WS-3/U, WS-4/U, W-90, W-115 and W-116)	MIL-DTL-83420	Wire Rope. Flexible. For Aircraft Control Supersedes MIL-C-5424 and MIL-W-1511)
MIL-DTL-18242	Wire Rope and Wire Rope Assemblies; Single Leg-Corrosion Resisting Steel. Minesweeping	MIL-DTL-87161	Wire Strand, Nonflexible, For Aircraft Application (Supersedes and Replaces MIL-W-5693 and Mil-W-6940)
MIL-DTL-18375	Cable, Steel (Corrosion-Resisting, Non-Magnetic) Flexible. Preformed (For Aeronautical Use)	MIL-DTL-87218	Lock Clad Control Cable material for Aircraft Flight Controls & Control Cable Assemblies
MIL-W-21632	Wire Ropes, Steel, Bare and Nylon Covered, Corrosion-Resisting, Flexible. Preformed. Oceanographic and Bathythermographic	MIL-W-21632	Wire Rope and Strand
MIL-DTL-83140	Wire Rope: Steel, (Stainless Steel) Preformed, Non-rotation, for Aircraft Rescue Hoist and Cargo Handling (Winching)		

Loos & Co. Standard Materials and Applications

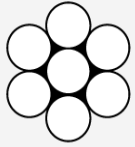
Galvanized: Zinc coated carbon steel offers some corrosion resistance. It remains ductile over long periods of working. Usually higher break strengths than stainless steels.

302/304 Stainless Steel: Also known as 18-8 (18% chrome and 8% nickel.) This alloy is the most common of stainless steel alloys providing good corrosion resistance and strength comparable to galvanized carbon steel grades.

316 Stainless Steel: Extra corrosion resistant. Used in high corrosive atmospheres such as the Gulf of Mexico and the Caribbean where salt spray is highly potent. Approximately 10% less strength than 302 Stainless Steel.

305 Stainless Steel: Slightly more corrosion resistant than 302. This alloy is largely non-magnetic, perfectly suited for applications in aeronautical and naval fields.

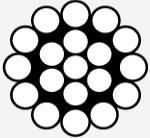
Metals such as Monel and Inconel are also available. If a metal is available as wire, we can make cable from it.



1 x 7 STRAND

NON FLEXIBLE

For straight load applications, in smaller diameters used as fishing leaders and line. In larger diameters it's used for guy wire and messenger strand applications.



1 x 19 STRAND

NON FLEXIBLE

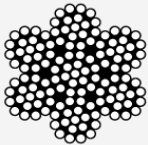
Widely used as standing rigging on sail boats. It is also well suited for push-pull, and guying applications.



7 X 7 AIRCRAFT CABLE

MODERATLY FLEXIBLE

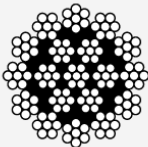
For use where extreme flexibility is not necessary. Commonly used in aircraft and automotive controls, it performs highly in a wide range of mechanical applications.



7 X 19 AIRCRAFT CABLE

VERY FLEXIBLE

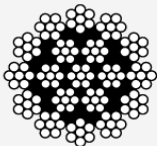
Used when flexibility and fatigue are concerns. Aircraft controls, running rigging on sailboats, exercise equipment, winches and garage doors are all common applications.



19 X 7 CABLE

NON ROTATING VERY FLEXIBLE

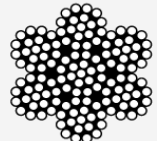
Used when a single line hoisting operation is necessary. Standard equipment on helicopter rescue winch applications.



6 X 19 & 6 X 37 CLASS WIRE ROPE

FLEXIBLE

True working wire ropes. These constructions are used extensively in heavy duty hoisting cranes. Also used in shovels, dredges, skidders, excavators, logging and oil field applications.



Loos & Co. is also an approved manufacturer to the following specifications:

Boeing BMS 7-265, Beechcraft BS24917, McDonnell Douglas: DMS2220 Comp A, Comp B, Comp C, DMS - 1989, DMS - 2114 TY1 and TY2, DMS 2187, DMS 2192 and also DMS 2453 (ref DMS 2220). Please visit our web site to see other specifications.

1 X 7 STAINLESS STEEL MINIATURE STRAND

NYLON JACKETED TYPE 302/304

COMMERCIAL GRADE Nylon Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
<input type="checkbox"/>	.11	80	SC211701	.021 - .040
<input type="checkbox"/>	.14	100	SC0241701	.024 - .040
<input type="checkbox"/>	.19	125	SC0271701*	.027 - .040
<input type="checkbox"/>	.25	150	SC0301701	.030 - .050
<input type="checkbox"/>	.33	210	SC0361701	.036 - .050
<input type="checkbox"/>	.45	290	SC0421701	.042 - .060

*Denotes Stock Item

3 X 7 STAINLESS STEEL MINIATURE STRAND

NYLON JACKETED TYPE 302/304



MILITARY SPECIFICATION

MIL-DTL-83420. Latest Amendment, Wire Rope, Flexible for Aircraft Control, Type II - Jacketed Wire Rope, Composition B - Corrosion-Resistant Steel. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Nylon Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
<input type="checkbox"/>	.22	110	SF0313701*	1/32 - 3/64
<input type="checkbox"/>	.22	110	SC0313702	1/32 - 3/64
<input type="checkbox"/>	.43	230	SC0473702	3/64 - 1/16

*Denotes Stock Item

7 X 7 TYPE 302/304 STAINLESS STEEL AIRCRAFT GROUNDING CABLE JACKET WITH LOLON® "M"

MAXIMUM ELECTRICAL RESISTANCE: 10 OHMS PER 75 FEET

COMMERCIAL GRADE MEETS LATEST COMMERCIAL SPECIFICATIONS

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
<input type="checkbox"/>	2.2	920	SC0947724*	3/31 - 5/32

*Denotes Stock Item

7 X 7 STAINLESS STEEL AIRCRAFT CABLE

NYLON JACKETED TYPE 302/304



MILITARY SPECIFICATION

MIL-DTL-83420. Latest Amendment, Wire Rope, Flexible for Aircraft Control, Type II - Jacketed Wire Rope, Composition B - Corrosion-Resistant Steel. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Nylon Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.49	270	SF0477701*	3/64 - 1/16
□	.49	270	SC0477710*	3/64 - 1/16
△	.76	270	SF0477702*	3/64 - 5/64
□	.76	270	SC0477711	3/64 - 5/64
△	.9	480	SF0637701*	1/16 - 3/32
□	.9	480	SC0637708	1/16 - 3/32
△	1.2	480	SF0637702*	1/16 - 1/8
□	1.2	920	SF0947701*	3/32 - 1/8
△	2.4	920	SF0947702	3/32 - 5/32
□	2.4	920	SC0947714*	3/32 - 5/32
□	2.8	920	SC0947715	3/32 - 3/16
□	5.1	1,700	SC1257724	1/8 - 1/4
□	4.8	2,400	SC1567710	5/32 - 3/16
□	7.5	3,700	SC1887731	3/16 - 5/16

7 X 7 STAINLESS STEEL AIRCRAFT

CABLE CLEAR VINYL JACKETED TYPE 302/304



COMMERCIAL GRADE Plastic Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
□	.5	270	SC0477701	3/64 - 1/16
□	1.3	480	SC0637702*	1/16 - 1/8
□	2.0	920	SC0947704	3/32 - 1/8
□	2.4	920	SC0947705	3/32 - 5/32
□	2.8	920	SC0947706*	3/32 - 3/16
□	3.9	1,700	SC1257702	1/8 - 1/4
□	5.1	1,700	SC1257711	1/8 - 1/4
□	11.2	3,700	SC1887707	3/16 - 5/16

*Denotes Stock Item

7X7 STAINLESS STEEL TYPE 302/304

LIFELINE CABLES, WHITE VINYL JACKETED

COMMERCIAL GRADE Plastic Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
<input type="checkbox"/>	1.3	480	SC0637701	1/16 - 1/8
<input type="checkbox"/>	2.0	920	SC0947701*	3/32 - 1/8
<input type="checkbox"/>	3.9	1,700	SC1257701*	1/8 - 3/16
<input type="checkbox"/>	3.9	1,700	SC1257708*	1/8 - 7/32
<input type="checkbox"/>	5.1	1,700	SC1257712	1/8 - 1/4
<input type="checkbox"/>	8.0	3,700	SC1887701*	3/16 - 1/4
<input type="checkbox"/>	9.1	3,700	SC1887702	3/16 - 5/16
<input type="checkbox"/>	11.2	3,700	SC1887703	3/16 - 3/8
<input type="checkbox"/>	14.2	6,100	SC2507701*	1/4 - 3/8

*Denotes Stock Item

7 X 19 STAINLESS STEEL AIRCRAFT CABLE

CLEAR VINYL JACKETED TYPE 302/304

COMMERCIAL GRADE Plastic Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
<input type="checkbox"/>	3.9	1,760	SC1257902*	1/8 - 3/16
<input type="checkbox"/>	5.5	2,400	SC1567902*	5/32 - 7/32
<input type="checkbox"/>	7.8	3,700	SC1887902	3/16 - 1/4
<input type="checkbox"/>	12.5	6,400	SC2507901	1/4 - 5/16
<input type="checkbox"/>	14.8	6,400	SC2507902	1/4 - 3/8

*Denotes Stock Item

7 X 19 STAINLESS STEEL TYPE 302/304

MARINE CABLE, WHITE VINYL JACKETED

COMMERCIAL GRADE Plastic Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
<input type="checkbox"/>	6.8	2,400	SC1567940	5/32 - 7/32
<input type="checkbox"/>	8.0	3,700	SC1887901*	3/16 - 1/4

*Denotes Stock Item

7 X 19 STAINLESS STEEL AIRCRAFT CABLE NYLON JACKETED TYPE 302/304



MILITARY SPECIFICATION

MIL-DTL-83420. Latest Amendment, Wire Rope, Flexible for Aircraft Control, Type II - Jacketed Wire Rope, Composition B - Corrosion-Resistant Steel. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Nylon Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.93	480	SF0637901*	1/16 - 3/32
□	.93	480	SC0637910	1/16 - 3/32
△	1.2	480	SF0637902*	1/16 - 1/8
□	1.2	480	SC0637911	1/16 - 1/8
△	2.0	920	SF0947901*	3/32 - 1/8
△	2.3	920	SF0947902	3/32 - 5/32
△	3.9	1,760	SF125901*	1/8 - 3/16
□	3.9	1,760	SC1257917	1/8 - 3/16
△	6.1	2,400	SF1567901	5/32 - 7/32
□	6.1	2,400	SC1567913	5/32 - 7/32
△	7.5	2,400	SF1567902	5/32 - 9/32
△	7.8	3,700	SF1887901*	3/16 - 1/4
□	7.8	3,700	SC1887912	3/16 - 1/4
△	9.2	3,700	SF1887902	3/16 - 5/16
△	9.8	5,000	SF2197901	7/32 - 9/32
△	11.6	5,000	SF2197902	7/32 - 11/32
△	12.5	6,400	SF2507901*	1/4 - 5/16
□	12.5	6,400	SC2507915	1/4 - 5/16
△	14.4	6,400	SF2507902	1/4 - 3/8
□	14.4	6,400	SC2507910	1/4 - 3/8
△	16.2	7,600	SF2817901	9/32 - 13/32
□	19.6	9,000	SC3137909	5/16 - 3/8
△	21.7	9,000	SF3137901	5/16 - 7/16
□	21.7	9,000	SC3137911	5/16 - 7/16
□	27.2	12,000	SC3757911	3/8 - 7/16
△	27.2	12,000	SF3757901	3/8 - 1/2
□	27.2	12,000	SC3757912	3.8 - 1/2

*Denotes Stock Item

3X7 GALVANIZED AIRCRAFT CABLE

NYLON JACKETED



MILITARY SPECIFICATION

MIL-DTL-83420. Latest Amendment, Wire Rope, Flexible for Aircraft Control, Type II - Jacketed Wire Rope, Composition B - Corrosion-Resistant Steel. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Nylon Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.22	110	GF0313701*	1/32 - 3/64
□	.22	110	GC0313702	1/32 - 3/64

*Denotes Stock Item Add 20% for Tinned Finish

3x19 GALVANIZED OCEANOGRAPHIC CABLE

PLASTIC IMPREGNATED



COMMERCIAL GRADE Plastic Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
□	3.2	1,870	GM1253901	1/8 - 3/16
□	4.8	2,340	GM1563901	5/32 - 7/32
□	7.4	4,000	GM1883901	3/16 - 7/16
□	12.9	6,650	GM2503901	1/4 - 5/16
□	21.0	9,900	GM3133901	5/16 - 7/16
□	30.9	13,900	GM3753901	3/8 - 1/2

*Denotes Stock Item

7X7 GALVANIZED AIRCRAFT CABLE

LOOSLAY® PLASTIC IMPREGNATED



COMMERCIAL GRADE Plastic Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
□	2.9	1,700	GL1257701	1/8 - 5/32
□	4.6	2,600	GL1567701	5/32 - 3/16
□	6.5	3,700	GL1887701	3/16 - 1/4
□	10.9	6,100	GL2507701	1/4 - 5/16

*Denotes Stock Item

7 X 7 GALVANIZED AIRCRAFT CABLE NYLON JACKETED



MILITARY SPECIFICATION

Mil-DTL-83420. Latest Amendment, Wire Rope Flexible, for Aircraft Control, Type II - Jacketed Wire Rope, Composition A - Carbon Steel, Zinc Coated, or Zinc and Tin Coated. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Nylon Jacketed
Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.62	270	GF047701*	3/64 - 1/16
□	.62	270	GC0477702*	3/64 - 1/16
△	.76	270	GF0477702	3/64 - 5/64
△	1.2	480	GF0637701*	1/16 - 3/32
□	1.2	480	GC0637703	1/16 - 3/32
△	1.4	480	GF0637702	1/16 - 1/8
□	1.4	480	GC0637704	1/16 - 1/8
△	2.0	920	GF0947701	3/32 - 1/8
□	2.0	920	GC0947704*	3/32 - 1/8
△	2.4	920	GF0947702	3/32 - 5/32
□	1.4	290	GC0947727	3/32 - 5/32
□	2.8	290	GC0947705*	3/32 - 3/16
□	3.9	1,700	GC1257715*	1/8 - 3/16
□	5.1	1,700	GC1257723	1/8 - 1/4
□	4.8	2,600	GC1567710	5/32 - 3/16
□	7.5	3,700	GC1887715	3/16 - 1/4
□	11.2	3,700	GC1887723	3/16 - 5/16

*Denotes Stock Item

7 X 7 GALVANIZED AIRCRAFT CABLE CLEAR VINYL JACKETED



COMMERCIAL GRADE Plastic Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
□	.62	270	GC 0477701*	3/64 - 1/16
□	1.2	480	GC 0637701*	1/16 - 3/32
□	1.4	480	GC 0637702*	1/16 - 1/8
□	2.0	920	GC 0947701*	3/32 - 1/8
□	2.4	920	GC 0447702	3/32 - 5/32
□	2.8	920	GC 0947703*	3/32 - 3/16
□	3.9	1,700	GC 1257701*	1/8 - 3/16
□	7.5	3,700	GC 1887701*	3/16 - 1/4
□	11.2	3,700	GC 1887707	3/16 - 5/16

*Denotes Stock Item

7 X 19 GALVANIZED AIRCRAFT CABLE NYLON JACKETED



MILITARY SPECIFICATION

Mil-DTL-83420. Latest Amendment, Wire Rope Flexible, for Aircraft Control, Type II - Jacketed Wire Rope, Composition A - Carbon Steel, Zinc Coated, or Zinc and Tin Coated. SEE QPL-83420 FOR QUALIFIED COMPANIES



COMMERCIAL GRADE

Nylon Jacketed
Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
△	.93	480	GF0637901*	1/16 - 3/32
△	1.2	480	GF0637902*	1/16 - 1/8
△	2.2	1,000	GF0947901*	3/32 - 1/8
□	2.2	1,000	GC0947908	3/32 - 1/8
△	2.4	1,000	GF0947902	3/32 - 5/32
□	2.4	1,000	GC0947909	3/32 - 5/32
□	2.8	1,000	GC0947913	3/32 - 3/16
△	3.9	2,000	GF1257901	1/8 - 3/16
□	3.9	2,000	GC1257902	1/8 - 3/16
□	5.1	2,000	GC1257913	1/8 - 1/4
△	5.5	2,800	GF1567901	5/32 - 7/32
△	7.5	2,800	GF1567902	5/32 - 9/32
□	5.5	2,800	GC1567909	5/32 - 7/32
△	7.8	4,200	GF1887901	3/16 - 1/4
□	7.8	4,200	GC1887902	3/16 - 1/4
△	9.3	4,200	GF1887902	3/16 - 5/16
□	9.3	4,200	GC1887915	3/16 - 5/16
△	9.8	5,600	GF2197901	7/32 - 9/32
△	11.6	5,600	GF2197902	7/32 - 11/32
△	12.5	7,000	GF2507901	1/4 - 5/16
□	12.5	7,000	GC2507915	1/4 - 5/16
□	14.8	7,000	GC2507916	1/4 - 3/8
△	16.2	8,000	GF2817901	9/32 - 13/32
□	19.6	9,800	GC3137909	5/16 - 3/8
△	21.7	9,800	GF3137901	5/16 - 7/16
□	21.7	9,800	GC3137911	5/16 - 7/16
□	27.2	14,400	GC3757911	3/8 - 7/16
△	29.3	14,400	GF3757901	3/8 - 1/2
□	29.3	14,400	GC3757922	3/8 - 1/2

*Denotes Stock Item

7 X 19 GALVANIZED AIRCRAFT CABLE
CLEAR VINYL JACKETED

COMMERCIAL GRADE Plastic Jacketed Mechanical Strand and Cable

CODE	APPROX. WEIGHT 100 FT. IN LBS.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
<input type="checkbox"/>	2.4	1,000	GC0947901*	3/32 - 5/32
<input type="checkbox"/>	2.8	1,000	GC0947904*	3/32 - 3/16
<input type="checkbox"/>	3.9	2,000	GC1257901*	1/8 - 3/16
<input type="checkbox"/>	5.1	2,000	GC1567904*	1/8 - 1/4
<input type="checkbox"/>	5.5	2,800	GC1567904	5/32 - 1/4
<input type="checkbox"/>	7.8	4,200	GC1887901*	3/16 - 1/4
<input type="checkbox"/>	9.3	4,200	GC1887909*	3/16 - 5/15
<input type="checkbox"/>	12.5	7,000	GC2507901*	1/4 - 5/16
<input type="checkbox"/>	14.8	7,000	GC2507910	1/4 - 3/8
<input type="checkbox"/>	19.6	9,800	GC3137901	5/16 - 3/8
<input type="checkbox"/>	21.7	9,800	GC3137906	5/16 - 7/16
<input type="checkbox"/>	27.2	14,400	GC3757901	3/8 - 7/16
<input type="checkbox"/>	29.3	14,400	Gc3757907	3/8 - 1/2

*Denotes Stock Item

REMEMBER:

Galvanized cables are available in 3 grades, MIL-SPEC, Domestic and Import



THIS SECTION IS FOR:

IMPORTED GALVANIZED**7X7 PREFORMED GALVANIZED CABLE
'GOOD' IMPORTED GRADE**

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
.75	480	GC06377*	1/16
1.6	920	GC09477*	3/32
2.85	1,700	GC12577*	1/8

*Denotes Stock Item

**7X19 PREFORMED GALVANIZED CABLE
'GOOD' IMPORTED GRADE**

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
2.9	2,000	GC12579*	1/8
4.5	2,800	GC15679*	5/32
6.5	4,200	GC18879*	3/16
8.6	5,600	GC21979*	7/32
11.0	7,000	GC25079*	1/4
17.3	9,800	GC31379*	5/16
24.3	14,400	GC37579*	3/8

*Denotes Stock Item

IMPORTED GALVANIZED

CLEAR VINYL JACKETED

7X7 PREFORMED GALVANIZED CABLE

'GOOD' IMPORTED GRADE, CLEAR VINYL JACKETED

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
1.15	480	GC0637701*	1/16 - 3/32
1.35	480	GC0637702*	1/16 - 1/8
2.0	920	GC0947701*	3/32 - 1/8
2.4	920	GC0947702	3/32 - 5/32
2.8	920	GC0947703*	3/32 - 3/16
3.9	1,700	GC1257701*	1/8 - 3/16
7.5	3,700	GC1887701*	3/16 - 1/4
11.2	3,700	GC1887707	3/16 - 5/16

*Denotes Stock Item

7X19 PREFORMED GALVANIZED CABLE

'GOOD' IMPORTED GRADE, CLEAR VINYL JACKETED

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
3.9	2,000	GC1257901*	1/8 - 3/16
5.1	2,000	GC1257907*	1/8 - 1/4
5.5	2,800	GC1567904	5/32 - 1/4
7.8	4,200	GC1887901*	3/16 - 1/4
9.3	4,200	GC1887909*	3/16 - 5/16
12.5	7,000	GC2507901*	1/4 - 5/15
14.8	7,000	GC2507910	1/4 - 3/8
19.6	9,800	GC3137901	5/16 - 3/8
21.7	9,800	GC3137906	6/16 - 7/16
27.2	14,400	GC3757901	3/8 - 7/16
29.3	14,400	GC3757907	3/8 - 1/2

*Denotes Stock Item

IMPORTED GALVANIZED

NYLON JACKETED

7X7 PREFORMED GALVANIZED CABLE

'GOOD' IMPORTED GRADE, NYLON JACKETED

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
1.15	480	GC0637703*	1/16 - 3/32
1.35	480	GC0637704*	1/16 - 1/8
2.0	920	GC0947704*	3/32 - 1/8
2.4	920	GC0947727	3/32 - 5/32
2.8	920	GC0947705*	3/32 - 3/16
3.9	1,700	GC1257715*	1/8 - 3/16
7.5	3,700	GC1887715	3/16 - 1/4

*Denotes Stock Item

7X19 PREFORMED GALVANIZED CABLE

'GOOD' IMPORTED GRADE, NYLON JACKETED

APPROX. WEIGHT PER 100 FT.	MINIMUM BREAK STRENGTH IN LBS.	BASE PART NUMBER	DIAM. IN INCHES
3.9	2,000	GC1257902*	1/18 - 3/16
5.1	2,000	GC1257913	1/8 - 1/4
7.8	4,200	GC1887902*	3/16 - 1/4
9.3	4,200	GC1887915	3/16 - 5/16
12.5	7,000	GC2507915*	1/4 - 5/16
14.8	7,000	GC2507916	1/4 - 3/8
19.6	9,800	GC3137909	5/16 - 3/8
21.7	9,800	GC3137911	5/16 - 7/16
27.2	14,400	GC2757911	3/8 - 7/16

*Denotes Stock Item

WIRE DIVISION

EXERFLEX PRO®

Because Quality and Performance Matter

For more than two decades, the world’s leading fitness equipment repair professionals have relied on EXERFLEX PRO® fitness cable and accessories as the ONLY cable used to repair their customer’s equipment. Manufactured in the USA, EXERFLEX PRO® fitness cable builds on Loos & Company’s tradition of providing fitness equipment OEMs, equipment owners, and equipment repair professionals the highest level of cable performance and safety on the market.

7x19 Black Preformed Galvanized Fitness Cable	Diameter		Breaking Strength, LBS	Recommended Pulley DIA	Part #
	Bare Cable	After Jacket			
Custom colors and sizes are available upon request.	3/32"	5/32"	980	2-1/4"	GF0947904
	1/8"	3/16"	2,000	3"	GF1257902
	5/32 ¹	7/32"	2,800	3-3/4"	GF1567904
	3/16"	1/4"	4,200	4-1/2"	GF1887903
	1/4"	5/16"	7,000	6"	GF2507902

Why EXERFLEX PRO® is the Superior Choice:



It enhances user experience.

Equipment owners will see an immediate return after installing EXERFLEX PRO®. Cable smoothness and flexibility will provide their customers with a top quality exercise experience.



It provides unmatched safety.

Each lot of EXERFLEX PRO® fitness cable by Loos & Co., Inc. is tested and certified – reducing failures under strain and lessening the risk of injury.



It reduces the cost of ownership.

Equipment owners will require fewer service calls and less downtime for their equipment. Repair professionals can eliminate the need for multiple service calls to replace inferior cables.



It ensures long cable life.

Manufacturers and owners rely on EXERFLEX PRO® for an extended service life in their equipment. Strict quality standards and extensive testing ensure that cable meets the strength and endurance required on today’s fitness equipment. And we don’t just say it, we certify it in writing.

CANVEYOR® CABLES

For over thirty years Loos & Co. has manufactured and perfected it's Canveyor® cable line. Since 1973 the Canveyor® Trademark has been a recognized symbol of quality and reliability at canneries throughout the world. Loos and Co. wants to make sure that the only downtime your line sees is when you want it.

Canveyor® is easy to splice. We take the time to perform precise proper preforming. This care for construction and Loos and Co's exclusive Lolon® coatings provide the best can conveying cable available

OUR STOCK CANVEYOR® CABLES ARE:

LOLON® COATED CANVEYOR®

1/4" dia 7 x 19 Canveyor® Cable Jacketed to .390" O.D.

Galvanized Steel Minimum
Break Strength = 7000 lbs.
Stainless Steel Minimum
Break Strength = 6400 lbs.
Weight - 141 lbs./1000 ft.

Galvanized
#GC25079CCV
#GC25079BCV
Stainless
#SC25079CCV
#SC25079BCV

All part #'s with "CCV" suffix are clear, and with "BCV" suffix are black coated

5/16" dia 6 x 19 Canveyor® Polycore Cable Jacketed to .390" O.D.

Galvanized Steel Minimum Break
Strength = 8700 lbs.
Stainless Steel Minimum Break
Strength = 7700 lbs.
Weight - 185 lbs./1000 ft.

Galvanized
#GP31369CCV
#GP31369BCV
Stainless
#SP31369CCV
#SP31369BCV

All part #'s with "CCV" suffix are clear, and with "BCV" suffix are black coated

We Also Offer Slit Lolon® Tubing to Recoat Spliced Areas.

When you order your Canveyor cable tell us what length and diameter you use and we'll be happy to offer our competitive Canveyor® splice price.

CABLE ASSEMBLIES

Illustrated on the following pages are only a few of the types of assemblies available. Send us a print of what you require; we will forward a quotation immediately.



RAPID RIGGING SERVICE

For A.O.G. (aircraft on ground) or other emergencies, our "Rapid Rigging Service" can ship that needed cable assembly within forty-eight (48) hours of receiving your order. We maintain large inventories of both bare and coated cable as well as fittings to satisfy your immediate needs. For that emergency requirement, please contact Loos & Co., Inc. We'll bend over backwards to help you.



Refer to the **CABLEWARE TECHNOLOGY DIVISION CATALOG** for our complete line of fittings

DON'T SEE WHAT YOU NEED?

We'll make custom or special cable ends to your specifications

HOW TO DESIGN YOUR ASSEMBLY

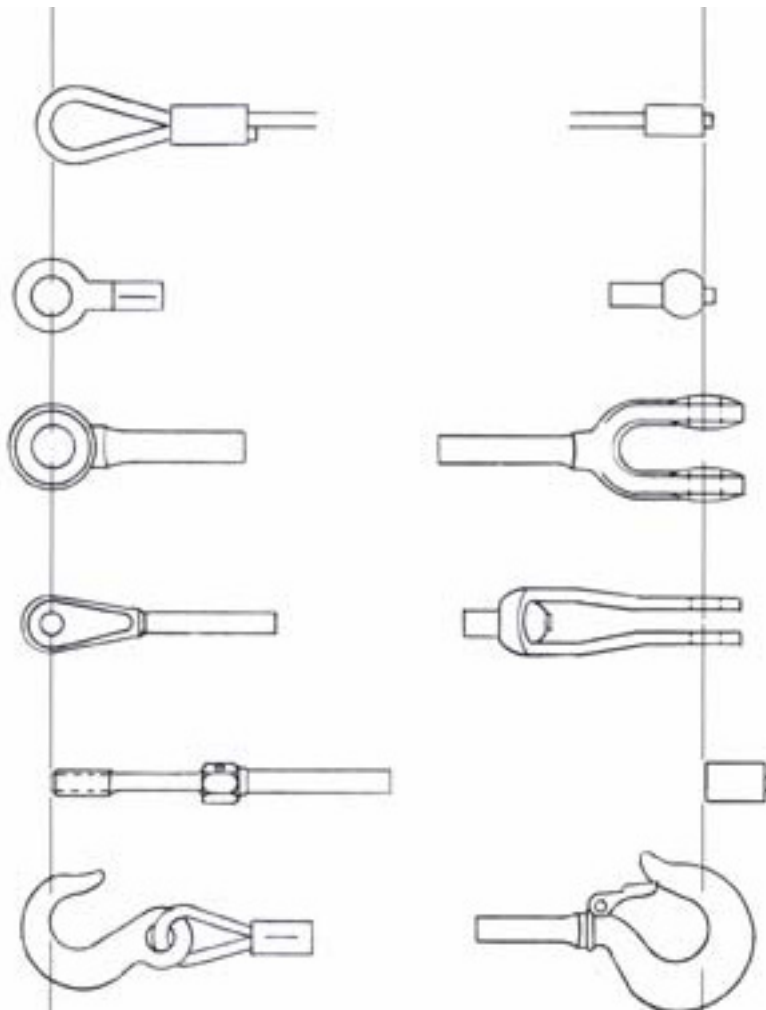
Take advantage of our capabilities. We make all the components and we can build you the highest quality assemblies at reasonable cost when you need them. Our efficient work cells translate to short lead times for quick prototypes or thousands of assemblies. The next few pages will point you in the right direction for your application and design.

STANDARD POINTS OF MEASURE FOR ASSEMBLIES

B.P. (Bearing Point) - Loops, Hooks, Stops

Ctr. (Center) - Eyes, Forks

End (or Overall) - Studs, Ball, Stop



DON'T SEE WHAT YOU NEED?

We'll make custom or special cable ends to your specifications

Loos & Co _____

CABLE ASSEMBLIES

RFQ#: _____

COMPANY NAME _____

CONTACT _____

ADDRESS _____

PHONE # _____

FAX # _____

P/N - DESCRIPTION _____

QTY.: _____

BARE CABLE DIA.: _____ CABLE CONSTRUCTION _____

CABLE MATERIAL: GALV. SS MIL SPEC (IF REQUIRED): _____

OTHER: _____ COATING MATERIAL: _____

PROOFLOAD (IF REQUIRED): _____

COATING DIA.:

ASSEMBLY MIN.

BREAKING STRENGTH: _____

FITTING: A _____ MATERIAL _____

B _____ MATERIAL _____

C _____ MATERIAL _____

APPLICATION:

APPLICABLE SPECIFICATIONS _____

PACKAGING REQUIREMENTS: _____

Need a quote? Make a copy of this specification sheet, fill out completely, and mail or FAX us the request. we will respond immediately.

TOLERANCES & GUIDELINES FOR ASSEMBLIES

STANDARD LENGTH TOLERANCES FOR CABLE ASSEMBLIES AND CUT-LENGTH CABLE

Liberal tolerances allow a faster rate of production and lower cost. The "standard" tolerances shown in the chart normally permit a cost saving over "close" tolerances. Tolerances closer than those shown can be supplied at a higher cost upon (1) reviewing your specific requirements and (2) mutual agreement regarding methods of inspection.

TOLERANCE IN INCHES PLUS OR MINUS			
Length in Feet	Aircraft Assys.	Up To 5/16"	Above 5/16"
0-6	.063"	.125"	.250"
Over 6-10	.094"	.187"	.375"
Over 10-20	.125"	.250"	.500"
Over 20-40	.187"	.375"	.750"
Over 40-60	.375"	.500"	1.00"
Over 60-80	.438"	.875"	1.75"
Over 80-100	.500"	1.00"	2.00"
>100	.563"	1%	2%

*Percentage per foot - Round tol. up to next whole inch

CABLE DIAMETER RELATED TO PULLEY OR SHEAVE DIAMETER

Cable or wire rope will give increased service if (1) it operates over the largest possible pulley or sheave diameter and (2) it is properly supported in the pulley or sheave groove. Working life of the individual wire strand is greatly reduced as the pulley or sheave diameter is diminished. The chart shows minimum tread diameters over which various sizes and constructions of cable should operate.

OUTSIDE-DIAMETER TOLERANCES FOR PLASTIC COATED CABLE

Inner Cable Diameter in Inches	Coated to Outside-Diameter in Inches	Standard Tolerance of O.D in Inches
3/65 to 1/8	up to 1/4 max.	± .007
5/32 to 1/4	up to 3/8 max.	± .010
9/32 to 3/8	up to 1/2 max.	± .015
7/16 to 1/2	up to 3/4 max.	± .020

MINIMUM TREAD DIAMETER FOR PULLEYS OR SHEAVES

	Desirable Min. in Inches Pulley Dia : Cable Dia			Critical Min. in Inches Pulley Dia : Cable Dia		
	42:1	24:1	12:1	28:1	18:1	10:1
Cable diameter in inches	6x7 or 7x7	6x19 or 7x19	6x31 7x31 6x37	6x7 or 7x7	6x19 or 7x19	6x31 7x31 6x37
1/16	2-5/8			1-3/4		
3/32	2-15/16	2-1/4	-	2-5/8	1-11/16	
1/8	5-1/4	3	-	3-1/2	2-1/4	
5/32	6-9/16	3-3/4	-	4-3/8	2-7/8	
3/16	7-7/8	4-1/2	-	5-1/4	3-3/8	
7/32	9-3/16	5-1/4	-	6-1/8	4	
1/4	10-1/2	6	3	7	4-1/2	2-1/2
5/16	13-1/8	7-1/2	3-3/4	8-3/4	5-5/8	3-1/8
3/8	15-3/4	9	4-1/2	10-1/2	6-3/4	3-3/4
7/16	18-3/8	10-1/2	5-1/4	12-1/4	7-7/8	4-3/8
1/2	21	12	6	14	9	5

The above chart provides recommendations for standard applications. Critical applications, and environmental factors may dictate higher ratios than noted.

CUSTOM ZINC DIE CAST

CABLE FITTINGS/ASSEMBLIES



ADVANTAGES OF ZINC:

END FITTINGS ON CABLE ASSEMBLIES

- Holds break strength on cable
- Less expensive than swaging
- Less expensive than machined parts
- Intricate shapes and undercuts
- Elimination of secondary operations

TYPICAL APPLICATIONS

CABLE ASSEMBLIES

Balls, Threaded Studs, Plugs, Cylinders, Peanuts, Eyes, Forks, Stops, Single and Double Spades, Custom Fittings

MATERIALS

ZAMAC 5: Most common zinc die casting alloy. Strength, ductility, and impact strength. Best for wide variety of cable assemblies uses.

SIZE

Max. 1 oz.
(approx. .5 cubic")

DESIGNATION	ASTM Designation B240-64 SAE General Designation	AG41A 925 ZAMAC 5
COMPOSITION	Cu Copper	0.75-1.25
	Al Aluminum	3.9-4.3
	Mg Magnesium	0.03-0.06
	Fe Iron Pb Lead Cd Cadmium	0.075 0.004 0.003
MECHANICAL PROPERTIES	Sn Tin Ni Nickel Zn Zinc (99.99+% Purity)	0.002 Remainder
	Charpy Impact Strength, ft. lb. 1/4 x 1/4-in. bar, as cast	483
	Charpy Impact Strength, after 10 yrs. indoor aging	40
	Tensile Strength psi, as cast	47,600
	Tensile Strength psi, after 10 yrs. indoor aging	39,300
	Elongation % in 2" as cast	7
	Elongation % in 2" after 10 yrs. indoor aging	13
Expansion inches per inch after 10 yrs. indoor aging	0.0001	
OTHER PROPERTIES AND CONSTANTS (AS CAST)	Brinell Hardness	91
	Compression Strength -lb/sq. in.	87,000
	Electrical Conductivity - Mhos./cm. cube at 20 °C	153,000
	Melting Point - °C	386.1
	Melting Point - °F	727.0
	Modulus of Rupture-lb-sq. in.	105,000
	Shearing Strength -lb/sq. in.	38,000
	Solidification Point -°C	380.4
	Solidification Point °F	716.7
	Solidification Shrinkage in./ft.	0.14
Specific Gravity	6.7	
	Specific Head-cal/gmrC	0.10
	Thermal Conductivity-cal/sec./sq. cm/cmPC at 18°C	0.26
	Thermal Expansion per °C	0.0000274
	Thermal Expansion per °F	0.0000152
	Transverse Deflection-in.	0.16
	Weight-lb/cubic inch	0.24

LOCK-CLAD CABLE to MIL-DTL-87218

Lock-clad Cable is manufactured by swaging aluminum tubing over a 7x7 or 7x19 galvanized or stainless steel cable. Originally developed for aircraft control applications, Lock-clad has found additional industrial applications where the following properties are advantageous.

- A. Stretch is reduced substantially.
- B. Sag is virtually eliminated.
- C. A smooth cylindrical surface finish allows lock-clad to be sealed when routed through pressurized bulkheads.
- D. Vibration or "singing" is reduced.

Lock-clad is supplied almost exclusively as a complete assembly with swaged fittings attached to fit the customer's needs. Since Lock-clad is supplied rigid, the swaged on aluminum cladding can be removed at any point, for any distance, if necessary to pass over a pulley or perform a flexible action between two rigid sections. (See illustration.) MIL-DTL-87218 is a QPL specification. Loos is one of two companies listed on the QPL.

SPECIFICATIONS								
TYPE OF CABLE INSIDE	INNER DIAMETER		OUTER CLADDING DIAMETER		CABLE CONSTRUC- TION	BREAKING STRENGTH (LBS.)	WEIGHT IN LBS. PER FOOT	MAX. AVIALABLE LENGTH OF CLAD SECTION
	in	mm	in	mm				
GALVANIZED	3/32	2.5	.201 ±.003	5.1	7X7	920	.75 oz.	30 ft.
GALVANIZED	1/8	3.2	.250 ±.003	6.5	7X19	2000	1.25 oz.	30 ft.
STAINLESS	3/32	2.5	.201 ±.003	5.1	7X7	920	.75 oz.	30 ft.
STAINLESS	1/8	3.2	.250 ±.003	6.5	7X19	1760	1.25 oz.	30 ft.

PRICES FOR ALL LOCK-CLAD ON QUOTATION

FUSED CUT WIRE ROPE AND CABLE



No need to get unraveled by frayed cable ends. Loos electrically cuts mechanical cable at high speed, fusing all end wires together, saving you time, reducing waste, cutting inventory, and greatly improving your product. Loos also offers mechanically cut cable for both plastic coated and bare cable. Cut to your tolerance on precision production machines that cut true at high speeds.

STRETCH: STRUCTURAL AND ELASTIC

In your particular application stretch may be a concern. There are two forms of STRETCH in cable and wire rope. There is structural stretch which is the lengthening of the lay in the construction as wires adjust under load. Structural stretch in Loos and Co. products is less than one percent of the length.

This can also be removed completely in a pre-stretching operation if necessary. The second form of stretch is ELASTIC. Elastic stretch is the actual physical elongation of individual wires under load. The elastic stretch can be determined as follows:

$$E = \frac{W \times G}{D^2}$$

WHERE: E = Elastic stretch, % of length.
 W = Weight of load, pounds.
 D = Diameter of cable or wire rope, inches.
 G = See chart below.

You can download our "Stretch Calculator" from our web site. It takes the same information from above and calculates the stretch for you.

"G" FACTOR

CABLE/WIRE ROPE	"G" FACTOR	CABLE/WIRE ROPE	"G" FACTOR
1X7 302 S.S	.00000735	1 x 7 Galv.	.00000661
1X19 302 S.S	.00000779	1 x 19 Galv.	.00000698
7X7 302 S.S	.0000120	7 x 7 Galv.	.0000107
7X19 302 S.S	.0000162	7 x 19 Galv.	.0000140
6X19 IWRC 302 S.S	.0000157	6 x 19 IWRC Galv.	.0000136
6X37 IWRC 302 S.S	.0000160	6 x 37 IWRC Galv.	.0000144
19X7 302 S.S	.0000197	19 x 7 Galv.	.0000178

Elastic stretch as derived from above is an approximation

GLOSSARY OF WIRE ROPE TERMS

Eye or Eye Splice – A loop with or without a thimble formed in the end of a wire rope

Factor of Safety – Ratio of breaking strength of a wire rope to total rope stress

Fatigue – Term commonly applied to progressive fracture of wires of a rope

Fiber Centers – Cords of rope made of vegetable fiber or synthetic fiber used in the center of a strand

Fiber Cores – Cords or rope made of vegetable fiber or synthetic fiber used in the core of a wire rope

Filler Wire – Small auxiliary wires in a strand for spacing and positioning other wires

Fitting – Any accessory used as an attachment for wire rope

Flat Rope – Wire rope made of parallel alternating right lay and left lay ropes sewn together by relatively soft wires

Fleet Angle – Angle between position of a rope at the extreme end wrap on a drum, and a line drawn perpendicular to the axis of the drum through the center of the nearest fixed sheave

Galvanize – To coat with zinc to protect against corrosion

Galvanized Rope – Rope made of galvanized wire

Galvanized Strand – Strand made of galvanized wire

Galvanized Wire – Wire coated with zinc

Grades, Rope – Classification of wire rope by its breaking strength. In order of increasing breaking strengths they are Iron, Traction, Mild Plow Steel, Plow Steel, Improved Plow Steel, Extra Improved Plow Steel

Grades, Strand – Classification of strand by its breaking strength. In order of increasing breaking strengths they are Common, Siemens Martin, High Strength and Extra-high Strength. A Utilities grade strand is also made to meet special requirement

Grooved Drum – Drum with grooved surface to accommodate and guide the rope

Grooves – Depressions in the periphery of a sheave or drum for positioning and supporting a rope

Guard Rail Cable – A galvanized wire rope or strand erected along a highway

Guy Line – Strand or rope, usually galvanized, for holding a structure in position

High Strength Strand – Grade of galvanized or bright strand

Idler – Sheave or roller used to guide or support a rope

Independent Wire Rope Core – Wire rope used as the core of a larger rope

Internally Lubricated – Wire rope or strand having all wires coated with lubricant

Iron Rope – See “Grades, Rope”

IWRC – “Independent Wire Rope Core”

Kink – Sharp bend in a wire rope that permanently distorts the wires and strands

Lagging – External wood covering on a reel of rope or strand

Lang Lay Rope – Wire rope in which the wires in the strands in the rope are laid in the same direction

Lay – Manner in which wires are helically laid into strands or strands into rope

GLOSSARY OF WIRE ROPE TERMS

- Left Lay** – (a) Strand – Strand in which the cover wires are laid in a helix having a left-hand pitch – (b) Rope – Rope in which the strands are laid in a helix having a left-hand pitch
- Marline Spike** – Tapered steel pin used in splicing wire rope
- Messenger Strand** – Galvanized strand or bronze strand used to support telephone and electric cables
- Mild Plow** – See “Grades, Rope”
- Modulus of Elasticity** – Mathematical quantity giving the ratio, within the elastic limit, between a definite range of unit stress on a wire rope, to the corresponding elongation
- Mooring Lines** – Galvanized wire rope, usually 6x12, 6x24 or spring lay construction, for holding ships to dock
- Non-Rotating Wire Rope** – 18x7 wire rope consisting of a 6x7 left lay Lang lay inner rope covered by twelve 7-wire strands right lay regular lay – also 19x7’s.
- Peening** – Permanent distortion of outside wire in a rope caused by pounding
- Plow Steel** – See “Grades, Rope”
- Preece Test** – A recognized standard of testing the galvanized coating on wire
- Preformed Wire Rope** – Wire rope in which the strands are permanently shaped, before fabrication into the rope, to the helical form they assume in the wire rope
- Preformed Strand** – Strand in which the wires are permanently shaped, before fabrication in the strands, to the helical form they assume in the strand
- Prestretching** – Stressing a wire rope or strand before use under such a tension and for such a time that the constructional stretch is largely removed
- Reel** – The flanged spool on which wire rope or strand is wound for storage or shipment
- Regular Lay Rope** – Wire rope in which the wires in the strands and the strands in the rope are laid in opposite directions
- Reserve Strength** – Strength represented by the inner wires of a wire rope
- Reverse Bend** – Reeving of a wire rope over sheaves and drums so that it bends in opposite directions
- Reverse Lay** – synonymous with “Alternate Lay”
- Right Lay** – (a) Strand – Strand in which the cover wires are laid in a helix having a right-hand pitch, similar to a right-hand screw – (b) Rope – Rope in which the strands are laid in a helix having a right-hand pitch, similar to a right-hand screw
- Rollers** – Relatively small diameter cylinders which are free to turn while supporting ropes
- Safe Working Load** – Proper load which the rope may carry economically and safely
- Sash Cord** – Term applied to small 6x7 wire ropes commonly made of iron, bronze or copper wires
- Seale** – A strand construction having one size of cover wires with the same number of one size of wires in the inner layer and each layer having the same length and direction of lay.
- Seize** – To bind securely the end of a wire rope or strand with seizing wire or strand
- Seizing Strand** – Small strand usually of 7 wires made of soft annealed wire
- Seizing Wire** – soft annealed wire

GLOSSARY OF WIRE ROPE TERMS

Slings, Braided – A very flexible sling composed of several individual wire ropes braided into a single sling

Smooth Faced Drum – Drum with a plain face, not grooved

Spiral Groove – Groove which follows the path of a helix around the drum, as the thread of a screw

Splicing – Interweaving of two ends of ropes so as to make a continuous or endless length without appreciably increasing the diameter. Also making a loop or eye in the end of a rope by tucking the ends of the strands

Stainless Steel Rope – Wire rope made of chrome-nickel steel wires having great resistance to corrosion

Steel Clad Rope – Rope with individual strands spirally wrapped with flat steel wire

Stone Sawing Strand – Usually a 3-wire strand used in quarrying stone or slate

Strand – An arrangement of wires helically laid about an axis. or another wire or fiber center to produce a symmetrical section

Swaged Fittings – Fittings in which wire rope is inserted and attached by cold flowing method

Tag Line – A small wire rope used to prevent rotation of a load

Tapered Drum – Grooved hoisting drum of tapering diameter

Tapering & Welding – Reducing the diameter of the end of a wire rope and welding it to facilitate reeving

Thimble – Grooved metal fitting to protect the eye of a wire rope

Tiller Rope/Cable – A very flexible operating rope, commonly made by cable laying six 6x7 ropes around a fiber core resulting in a 6x42 construction. Also a 3/32" 7x7 galvanized cable coated to an outside diameter of 3/16" with vinyl or nylon.

Tinned Wire – Wire coated with tin

Turnbuckle – Device attached to wire rope for making limited adjustments in length. It consists of a barrel and right and left hand threaded bolts

Warrington – A strand construction in which one layer of wires, usually the outer, is composed of alternating large and small wires

Wire (round) – Single continuous length of metal cold drawn from a rod

Wire Rope – A plurality of strands laid helically around an axis or a core

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needs.

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