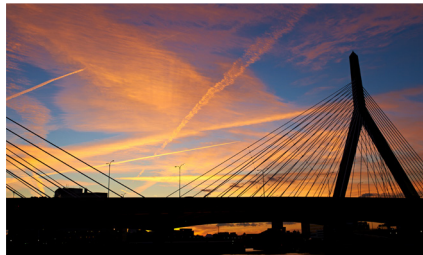


LOOSCO UZH

WIRE AND WIRE ROPE DIVISION

Wire and Wire Rope Condensed Catalog



About us.

For over 50 years Loos & Co., Inc. has pioneered and thrived in the highly critical profession of cable and wire rope manufacturing for use in aerospace flight controls, elevators, rigging and scaffolding where human lives are directly at stake. This valuable experience has taught us “the ropes” about what a difference wire makes. We can help make the difference for you too.

Founded in 1958, Loos & Co., Inc. evolved from a three-car garage business, originally situated behind the home of owner A. W. “Gus” Loos and his wife Joan, to a 220,000 square foot facility located in picturesque Pomfret, Connecticut.

Starting out as a manufacturer’s representative for hardware concerns, Mr. Loos imported wire rope and cable from Germany and Japan. Soon, he was stocking cable, tools and fittings, as well as re-reeling and packaging cable.

In 1962, Loos & Co. Inc. began to manufacture cable assemblies. Following in his success in previous market expansions, in 1964 Mr. Loos added the production capability to plastic-coat cables. With the acquisition of its own stranding and closing machines in 1971, Loos & Co., Inc. has been able to draw wire and strand it into cable in house.

Today, we can draw wire, strand cable, extrude plastics, manufacture hardware and tools for mechanical cable, and manufacture cable assemblies, as well as test and package all of the above.

Loos & Co., Inc. manufactures a wide variety of wire, aircraft cable, and wire rope. These products are used in aerospace, military, medical, and commercial applications, including aircraft flight controls, elevators, fitness equipment, rigging, and scaffolding operations. We are an OEM producer of cables for companies such as Boeing, Lockheed Martin, General Dynamics, and Bombardier.

Mission and Quality

For over 50 years, Loos & Co., Inc. has pioneered and thrived in the highly critical profession of wire and wire rope manufacturing for use in applications where human lives are directly at stake. This valuable experience has taught us “the ropes” about what a difference quality and performance make in your wire and wire rope applications. Now, we can help make the difference for you with your pulley and sheave applications, too.



“ We don’t want to be the biggest, we want to be the best – to be able to provide each individual customer, no matter how small, with the best service and selection.

—A.W. “Gus” Loos ”

Our Mission

The mission of Loos & Co., Inc. is to manufacture specialty wire and cable products for critical applications that demand the highest standards of performance and quality. Since the beginnings of the company in 1958, Loos & Co., Inc. has been the industry leader in the development of products for critical applications such as aerospace flight controls, elevators, rescue hoists, earthquake bracing, rigging, scaffolding, automotive controls, and exercise equipment. Loos & Co., Inc. actively seeks to manufacture specialty products that are beyond the expertise of our competitors.

Quality

Loos & Co., Inc. is a world class manufacturer of specialty wire and cable products. We practice continual improvement to ensure customer satisfaction. Our business plan demonstrates our commitment to meet customer requirements through specific, measurable objectives. Management reviews the effectiveness of our quality policy and quality management system on a regular basis. We communicate the results of these reviews throughout the organization.



Intertek

Common Construction



1 x 7 STRAND | Non-flexible

For straight load applications in smaller diameters, used as fishing line and leaders, as well as guy wire and messenger strand applications



7 x 7 AIRCRAFT CABLE | Moderately flexible

Used where extreme flexibility is not required, commonly in aircraft and automotive controls. Performs well in wide range of mechanical applications.



19 x 7 HOIST CABLE | Non-rotating, very flexible

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



6 x 19 CLASS | Flexible wire rope

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



1 x 19 STRAND | Non-flexible

Widely used as standard rigging on sailboats. It is well-suited for push/pull operations and guying 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 common applications



6 x 42 TILLER ROPE | Extremely flexible

Designed for flexibility, and used in specialized applications. Often used as tiller rope on sailboats.



6 x 37 CLASS | Flexible wire rope

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

SPECIFICATION	ROPE/CABLE	DESCRIPTION
ASTM A1023/M	Rope	Stranded carbon steel wire for general purposes
BMS 7-265 QPL-BMS 7-265	Rope	Boeing material specification
MIL-DTL-18375 QPL-18375	Rope	Flexible; corrosion-resistant; non-magnetic; for aircraft control
MIL-DTL-6117 QML-6117	Rope	Assemblies; aviation; swage type
MIL-DTL-83140 QPL-83140	Rope	Sainless steel preformed; rotation resistant; for aircraft rescue hoist, utility hoist and winching <i>Supersedes MIL-W-83140</i>
MIL-DTL-83420 QPL-83420	Rope	Flexible; for aircraft control <i>Supersedes MIL-W-83420, MIL-C-5424 and MIL-W-1511</i>
MIL-DTL-87161 QPL-87161	Strand	Non-flexible; for aircraft application <i>Supersedes MIL-W-87161, MIL-W-5693 and MIL-W-6940</i>
MIL-DTL-87218 QPL-87218	Cable	Cable; lockclad; for aircraft control
MIL-W-12567	Strand	Steel; (wires WS-3/U, WS-4/U, W90, W-115 & W-116)
MIL-W-18242	Rope & Rope Assemblies	Single-leg-corrosion resisting steel, minesweeping
RR-W-410	Rope & Strand	Federal specification for wire rope and strand
ADDITIONAL SPECS	DMS 2187, DMS 2192, DMS 2453, DMS 2114, DMS 1989, BAMS 511-011, BS24917, CM3862, CMS 511-01, P101, PS60043, ISO 2020, BS 2W 12:1989	

Standard Materials

Galvanized

MINIMAL CORROSION RESISTANCE

Zinc coated carbon steel offers some corrosion resistance. Remains ductile over long periods of working—generally higher breaking strength than stainless steels.

302/304 STAINLESS

GOOD CORROSION RESISTANCE

Also known as 18-8 (18% chromium 8% nickel). Most common grade of stainless steel. Provides good corrosion resistance with strength slightly lower than galvanized steel..

316 Stainless

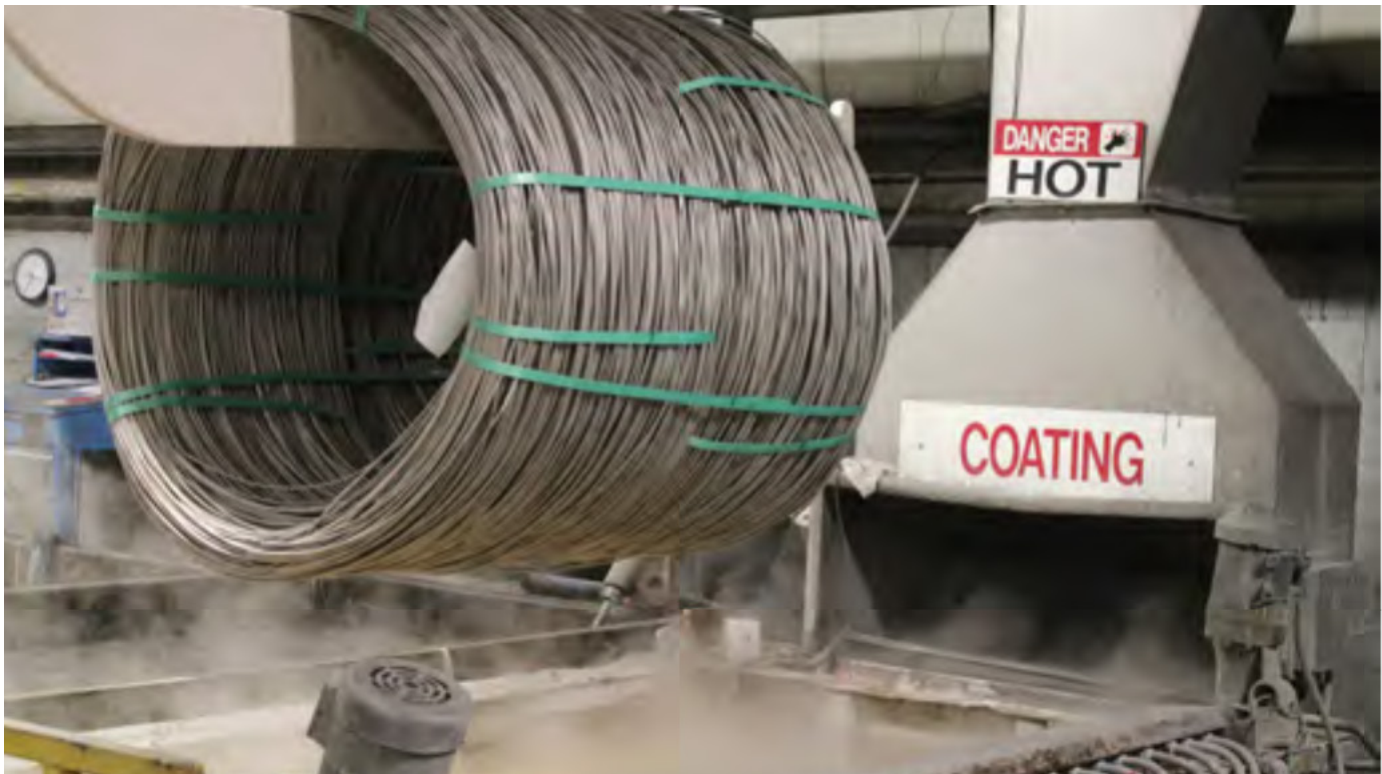
VERY GOOD CORROSION RESISTANCE

Used in highly corrosive environments, such as where sea spray is highly potent. Also used in the food and medical industries. Strength is approximately 10% less than 302/304 stainless.

Monel® and Inconel®

EXCELLENT CORROSION RESISTANCE

These two alloys available upon request. They have excellent corrosion resistance, although are generally lower in strength than other stainless alloys.



Technical Information

Service Life Over Pulleys

Cable or wire rope will give increased service if:

1. It operates over the largest possible pulley or sheave diameter
2. It is properly supported in the pulley or sheave groove

Working life of the individual wire strands is greatly reduced as the pulley or sheave diameter is diminished. The chart below shows minimum tread diameters over which various sizes and constructions of cable should operate.

Minimum Sheave Tread Diameters

RATIO	DESIRABLE MINIMUM, IN			CRITICAL MINIMUM, IN		
	42:1	24:1	12:1	26:1	18:1	10:1
CABLE, IN	6x7 7x7	6x19 7x19	6x31 7x31 6x37	6x7 7x7	6x19 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	3-1/4	-	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	2-1/2
1/4	10-1/2	6	3	7	4-1/2	3-1/8
5/16	13-1/8	7-1/2	3-3/4	8=3/4	5=5/8	3-3/4
3/8	15-3/4	9	4-1/2	10-1/2	6-3/4	4-3/8
7/16	18-3/8	10-1/2	5-1/4	12-1/4	7-7/8	
1/2	21	12	6	14	9	5

When designing a pulley groove, the groove should be 150% of the maximum tolerance of the wire rope.

EX: 1/8" 7 x 19 aircraft cable has a minimum tolerance of .014" (.125 min, .139 max).

Multiplying the .014" maximum tolerance by 150% = .021"

Adding .021" to .139" maximum diameter = .160" which should be the pulley groove dimension.

NOTE: When designing aircraft control cable systems, minimum ratio of cable diameter to pulley diameter is 35:1.

Wire Rope Stretch

In any cable or wire rope application, stretch may be a concern. There are two types of stretch in cable and wire rope – structural stretch and elastic stretch.

STRUCTURAL STRETCH: the lengthening of the lay in the construction of cable and wire rope as the individual wires adjust under load. Structural stretch in Loos & Co., Inc. products is less than 1% of the total cable length. This form of stretch can be completely removed by applying a cable or wire rope pre-stretching operation prior to shipment.

ELASTIC STRETCH: the actual physical elongation of the individual wires under load. The elastic stretch can be calculated by using this formula*:

$$E = [W \times G] / D^2$$

E = Elastic Stretch, as a % of length**

W = Weight of load, in pounds

D = Diameter of cable, in inches

G = Available in chart below

CONSTRUCTION	G FACTOR	
	GALVANIZED	SS 302/304
1x7	0.00000061	0.000000735
1x19	0.00000068	0.000000779
7x7	0.00001070	0.00001200
7x19	0.00001400	0.00001620
6x19 IWRC	0.00001360	0.00001570
6x25 IWRC	0.00001440	0.00001600
19 x7	0.00001780	0.00001970

Stretch calculator also available at www.loosco.com

*Elastic Stretch derived from this formula is an approximation

**Keep your units constant. The length of your cable must be calculated in inches to correspond with diameter measurement.

Aircraft Cable

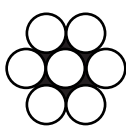
	DIAMETER		CONSTRUCTION	MIN. BREAK STRENGTH, LBS				BASE PART # Combine 2-letter part code at left with base part number
	Fraction	Decimal		MIL-DTL-83420		GF Galvanized	SF 302/304 Stainless Steel	
				WGT/100', LBS	OD Jacket			
Bare Aircraft Cable	1/32	0.031	3x7	0.15	N/A	110		03037
	3/64	0.047	7x7	0.42	N/A	270		04777
	1/16	0.063		0.75	N/A	480		06377
	3/32	0.094		1.70	N/A	920		09477
	1/16	0.063	7x19	0.75	N/A	480		06379
	3/32	0.094		1.70	N/A	1,000	920	09479
	1/8	0.125		2.90	N/A	2,000	1,760	12579
	5/32	0.156		4.50	N/A	2,800	2,400	15679
	3/16	0.188		6.50	N/A	4,200	3,700	18879
	7/32	0.219		8.60	N/A	5,600	5,000	21979
	1/4	0.250		11.00	N/A	7,000	6,400	25079
	9/32	0.281		13.90	N/A	8,000	7,800	28179
	5/16	0.313		17.30	N/A	9,800	9,000	31378
	3/8	0.375		24.30	N/A	14,400	12,000	37579
Jacketed Aircraft Cable	1/32	0.031	3x7	0.22	3/64			0313701
	3/64	0.047	7x7	0.49	1/16	270		0477701
				0.76	5/64			0477702
	1/16	0.063		0.93	3/32	480		0637701
				1.18	1/8			0637702
	3/32	0.094		1.85	5/32	920		0947701
				2.18				0947702
	1/16	0.063	7x19	0.93	3/32	480		0637901
				1.18	1/8			0637902
	3/32	0.094		1.99	1/8	1,000	920	0947901
				2.32	5/32			0947902
	1/8	0.125		3.62	3/16	2,000	1,760	1257901
				6.10	7/32	2,800	2,400	1567901
	5/32	0.156		7.51	9/32			1567902
				7.75	1/4	4,200	3,700	1887901
	3/16	0.188		9.20	5/16			1887902
				9.76	9/32	5,600	5,000	2197901
	7/32	0.219		11.55	11/32			2197902
				12.30	5/16	7,000	6,400	2507901
	1/4	0.250		14.42	3/8			2507902
16.18				13/32	8,000	7,800	2817901	
9/32	0.281	19.80	7/16	9,800	9,000	3137902		
5/16	0.313							

SF AND GF PART NUMBERS CONFORM TO MIL-DTL-83420 CURR. REV.. CUSTOM SIZES AND MATERIALS AVAILABLE UPON REQUEST.
*MBS MEASURED IN LBS.

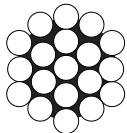
Commercial Strand

	DIAMETER		CONSTRUCTION	MIN. BREAK STRENGTH, LBS			Part #
	Fraction	Decimal		GC	SC	SZ	
				Galvanized	302/304 Stainless	316 Stainless	
Commercial Strand	1/32	0.031	1 x 7	150	150	150	00QXXXX
	3/64	0.047		375	375	300	011XXXX
	1/16	0.063		500	500	450	021XXXX
	5/64	0.078		800	932	700	131XXXX
	3/32	0.094		1200	1200	1080	031XXXX
	1/8	0.125		**	2100	1640	041XXXX
	5/32	0.156		3300	3300	**	051XXXX
	3/16	0.188		4400	4700	3500	061XXXX
	7/32	0.219			**	**	071XXXX
	1/4	0.250			8500	7650	081XXXX
	5/16	0.313		13200	11900	101XXXX	
	3/8	0.375		18000	16200	121XXXX	
	1/2	0.500				161XXXX	
	1/32	0.031	1 x 19	185	185	**	002XXXX
	3/64	0.047		375	345	320	012XXXX
	1/16	0.063		500	500	450	022XXXX
	5/64	0.078		1000	800	**	132XXXX
	3/32	0.094		1200	1200	1000	032XXXX
	1/8	0.125		2100	2100	1780	042XXXX
	5/32	0.156		330	3200	2800	052XXXX
3/16	0.188	1700		4700	4000	062XXXX	
7/32	0.219	6300		6300	6300	071XXXX	
1/4	0.250	8200		8200	6900	082XXXX	
5/16	0.313	12500	12500	10600	102XXXX		
3/8	0.375	17500	17500	14800	122XXXX		
1/2	0.500		30000	27000	162XXXX		

Notes



1 x 7



1 x 19

Package quantity can be specified at time of order. Please call 800/533.5667 for more information.

Domestic Wire Rope

As a manufacturer we can build custom products to meet your requirements. If you are looking for something that you can not find in this catalog please call 800-533-5667 for a detailed quotation.

	DIAMETER		WT/100 LBS	MIN. BREAK STRENGTH, LBS			Part # Combine 2-letter part code at left with base part number
	Fraction	Decimal		SW	SY	SZ	
				302/304 SS	305 SS	316 SS	
6 x 19 Class Wire Rope	7/16	0.438	35.6	15,900	**	14,900	4362506
	1/2	0.500	45.8	22,200	17,500	20,520	5062506
	9/16	0.563	59.0	27,800	**	24,300	5662506
	5/8	0.625	71.5	34,100	30,100	29,800	6262506
	3/4	0.750	92.2	48,400	45,700	42,000	7562506
	7/8	0.875	143.0	64,800	Call 800.533.5667 for a detailed quote	58,000	8762506
	1	1.000	187.0	83,300		80,000	1062506
	1-1/8	0.250	240.0	103,700		80,440	1162506
		1-1/4	0.313	290.0	126,200		110,000
6 x 37 Class Wire Rope	3/16	0.188	6.5	3,000		2,500	1863713
	1/4	0.250	10.0	5,400		4,860	2563713
	5/16	0.313	18.0	8,300		7,470	3163713
	3/8	0.375	24.0	11,700		10,530	3763713
	7/16	0.438	33.0	15,400		14,200	4363713
	1/2	0.500	43.0	22,200		18,360	5063637
	9/16	0.563	54.0	27,800		21,760	5663637
	5/8	0.625	67.0	34,100		28,260	6263637
	7/8	0.875	131.0	64,800		53,730	8763637
	1	1.000	170.0	83,300		69,570	1063637
	1-1/8	1.125	216.0	103,700		82,110	1163637
	1-1/8	1.250	266.0	126,200		100,640	1263637



Coated Cable

Loos & Co., Inc. Coated Cable is available for almost all of our cable and wire rope constructions with many different jacketing materials and nearly infinite color combinations. With a fully capable extrusion department, we are able to coat cable between 1/32" and 1 and 3/8". For more information, or to request a customized product, please contact a product manager by email (sales@loosco.com) or by phone (800) 533-5667..

STANDARD EXTRUSIONS OF COATED CABLE

POLY-VINYL-CHLORIDE (PVC):

PVC is the most commonly used plastic for mechanical cable coatings. Reasonably priced and flexible, PVC carries excellent weatherability and UV resistance — something that degrades most plastics. Operating temperatures range from 30° to 180°F (-1°C to 82°C). Vinyl is supplied in a range of hardness and durometers — which create a spectrum from hard and stiff to soft and spongy. Color choices are nearly endless — from vivid brights and soft pastels to metal flakes and safety orange. Let us know what you need, and we can make it happen.

NYLON SERIES:

With wide-ranging flexibility and chemical/fatigue resistance, our nylon jackets can be tailored to fit your application. When you need a jacketed cable with a high cycle life, nylon is what you're looking for. Our EXERFLEXPRO® fitness cable and MIL-DTL-83420 aircraft cable are clear illustrations of its longevity.



POLYETHYLENE (PE):

Polyethylene is primarily used as electrical insulation. Through its wide acceptance and large production, it's become one of the least expensive plastics. Flexible in thin coatings, and stiff in thick coatings, PE has limited abrasion resistance. Most mechanical cables will shy away from PE for this reason. Operating temperatures range from -40° to 203°F (-40° to 95°C). Chemical resistance and weatherability are two highly sought after traits with PE. Naturally, its color is a milky-white translucent.

POLYPROPYLENE (PP):

PP has found itself in many basic applications of mechanical cable. It has good abrasion and chemical resistance, and is easy to process. Light in weight, and reasonably priced, PP is only hampered by a narrow operating temperature range. It is not recommended for applications below 0°F (-18°C). UV rays will degrade the material, giving it only fair weatherability.

Jacketed Cable Tolerances		
BARE CABLE	JACKETED CABLE, MAX	STD TOL OUT
3/64 to 1/8	up to 1/4	± 0.007
5/32 to 1/4	up to 3/8	± 0.010
9/32 to 3/8	up to 1/2	± 0.015
7/16 to 1/2	up to 3/4	± 0.020



Translucent (clear)



White



Yellow



Flourescent Yellow



Fourescent Green



Green



Blue



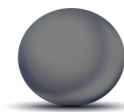
Red



Flourescent Red



Orange



Translucent (smoke)



Black

Specialty Coated Cables

Reflexite®

Wire rope is, at its core, a safety product. Whether lifting, pulling or securing a load, the strength and flexibility of wire rope makes it a superior choice when you need to protect lives and assets.



Loos & Co., Inc. has combined the mechanical properties of wire rope with the added safety of light reflective plastic coating to make Reflexlite®, a safety product which provides a visual barrier for outlining hazards in any application.

Reflexlite® is designed to enhance low light or night time visibility where delineation is needed to see hazardous objects or situations. A 1/8" wide strip of reflective material creates a brilliant series of silver-white dashes reflected directly back to a light source, and can be seen from a distance of several hundred feet. Applications for Reflexlite® include:

Tower guy wires Roadside guardrails Barricades Mine safety lighting

Reflexlite® is available in several size and color combinations. For more information, please contact a product manager by email (sales@loosco.com) or by phone (800) 533-5667.

EXERFLEX PRO® FITNESS CABLE

For more than a decade, the world's leading fitness equipment manufacturers and repair professionals have relied on Loos & Co., Inc. cable as the only cable used in their equipment. Developed in our research and manufacturing facility in Pomfret, Connecticut, Exerflex Pro® builds on the Loos & Co., Inc. tradition of providing fitness equipment manufacturers, equipment owners, and equipment repair professionals the highest level of cable performance and safety on the market.



Manufacturers and owners alike can rely on Exerflex Pro® for an extended service life in their equipment. Our exacting quality standards and extensive testing processes mean you will always receive cable that is certified to provide the strength and endurance required on today's high performance fitness equipment.

Equipment owners will see an immediate return after installing Exerflex Pro®. Cable smoothness and flexibility will provide their customers a top quality exercise experience. Fewer service calls and less downtime lead to lower operational costs and higher customer satisfaction. Please see the table below for your fitness cable ordering needs.

DIAMETER		WT/100'	OD Jacket	Min. Break Strength	Recommended Pulley DIA	Part#
Fraction	Decimal					
3/32	0.094	2.4	5/32	980	2.25	GFO947904
1/8	0.125	3.9	3/16	2,000	3.00	GF1257902
5/32	0.156	5.5	7/32	2,800	3.75	GF1567904
3/16	0.188	7.8	1/4	4,200	4.50	GF1887903
1/4	0.250	14.8	5/16	7,000	6.00	GF2507902

Cable Assemblies

With over 50 years of experience, Loos & Co., Inc. is the market leader for critical assembly applications. We can build you the highest quality cable assemblies at a reasonable cost when you need them. We maintain large inventories of both bare and coated cable as well as fittings to satisfy your needs. Our efficient work cells translate to short lead times for quick prototypes or thousands of assemblies.

Aircraft Control and Military Cable Assemblies

Our cable assemblies are a critical element in both the highly specialized aircraft industry and on mission critical military applications. Because of our experience and proven attention to the highest level of quality assurance, we supply nearly all major military and commercial aircraft manufacturers. We can cross reference all NSN's part numbers, or drawing numbers from any design activity. This includes Army, Navy and OEM Manufacturers.

Our experience in the aircraft cable assembly market speaks for itself. We supply almost every major manufacturer of commercial and military aircraft with mission-critical assemblies. Additionally, Loos & Co., Inc. is licensed by Lockheed Martin to manufacture C-130 B-H Certified Parts for global distribution.

Loos & Co., Inc. also manufactures lock-clad cable assemblies. Lock-clad cable is manufactured by swaging aluminum tubing over a 7x7 or 7x19 galvanized or stainless steel cable. Although they were originally developed for aircraft control applications, lock-clad assemblies have found additional industrial applications.

Commercial Cable Assemblies

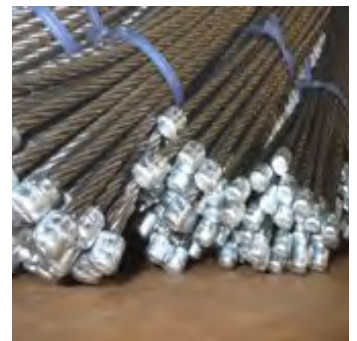
Our manufacturing cells are state-of-the-art. Our value is unbeatable. Our inventory is the industry's largest. We have the capability to produce assemblies for every application in a timely, cost sensitive manner.

Zinc Die Cast

Zinc die casting for cable assemblies is a process by which molten zinc is applied to the ends of cable inside of a die to create a custom end fitting. By eliminating machined hardware and the labor to apply it to the cable, zinc die casting eliminates much of the cost associated with manufacturing cable assemblies. Each application is custom and there are tooling costs associated with set up and manufacture. Therefore, medium to large volume applications will see the greatest cost savings and return on investment for switching your design to zinc die cast.

Almost any style of hardware can be die cast. Keep in mind that the cable and the zinc need to enter the die, so there are some limitations to sizes and shapes.

For volumes ranging from one to one million, trust us to deliver the highest quality cable assemblies. Contact a product manager to learn more.



Designing Cable Assemblies

Take advantage of our capabilities. We manufacture the highest quality cable assemblies using only the best parts. Our manufacturing facility will build your cable assemblies at a reasonable price without sacrificing quality. Below is a graphic demonstrating different types of assemblies and how to accurately measure them.

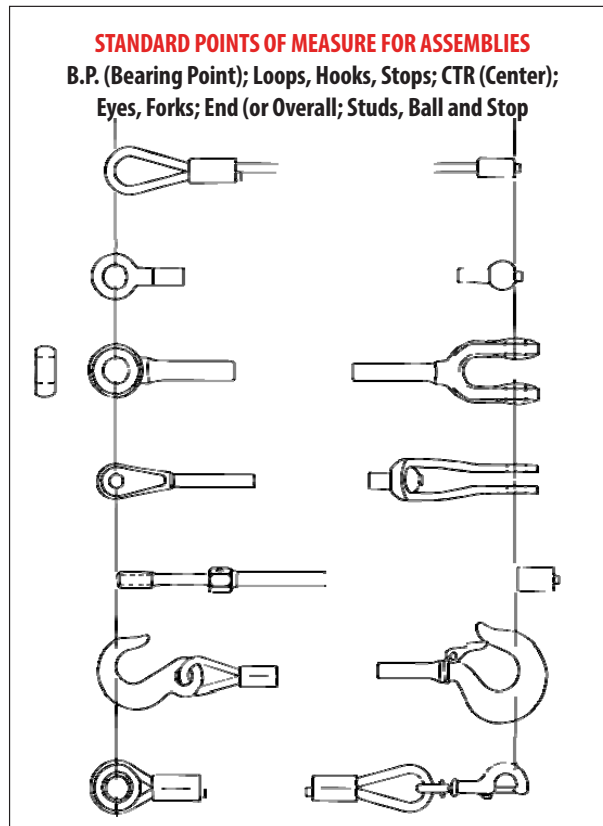
Cable Assembly Applications

Loos & Co., Inc. provides cable assemblies for most applications, including, but not limited to:

- Aircraft Flight Controls
- Automotive
- Construction
- Displays
- Fall Protection
- Fitness Equipment
- High Mast Lighting
- Hunting/Fishing
- Lighting Fixtures
- Machinery
- Marine
- Material Handling
- Medical Devices
- Military
- Netting
- Railing
- Rescue Hoists
- Safety and Security
- Sailboat Rigging
- Sporting Goods
- Structural
- Theatrical
- Winching
- Zinc Die Casting

Cable Assembly Tolerances

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 after review of your requirements and mutual agreement regarding methods of inspection.



LENGTH, FT		TOLERANCE STANDARD, IN	
[exclusive, inclusive]	Aircraft Critical	Cable 0 < 5/8"	Cable 0 > 5/8"
[0,6]	± .06	± .1/8	± 1/4
[6, 10]	± .09	± .3/16	± 3/8
[10, 20]	± .012	± .1/4	± 1/2
[20, 40]	± .19	± .3/8	± 3/4
[40, 60]	± .25	± .1/2	± 1
[60, 80]	± .44	± .7/8	± 1-3/4
[80, 100]	± .50	± 1	± 2
>100	± .56	± .1%*	± 2%*

*Percentage per foot—tolerance is rounded up to the next whole inch

Wire Products

For half a century, Loos & Co., Inc. has pioneered and thrived in the highly critical profession of wire drawing for use in commercial, military, aerospace, medical and specialty industries. This valuable experience has made us the pre-eminent wire manufacturer in service, quality, and reliability. Because quality and performance matter, trust only Loos & Co., Inc. wire products.

Capabilities

We draw round wire into finished products from sizes .0015" to .312". We work with a variety of standard alloys, which can be viewed on the following page. Our wire is available in a wide range of packaging options ranging from coils and carriers to spools and reels. When ordering, please be sure to specify if you have any specific packaging requirements.

Types of Wire Offered

Loos & Co., Inc. provides cable assemblies for most applications, including, but not limited to:

- Annealed Wire
- Knitting Wire
- Knitted Wire Mesh
- Safety Lock Wire
- Music Wire
- Electro Polish Quality
- Spring Wire
- Brush Mesh
- Well Measuring Wire
- Weaving Wire



Wire Chemistries

We specialize in stainless steel and high nickel exotic alloys, and hold stock to ensure short lead times. Quick delivery alloys include 302, 304, 305, 316, 321, 347, 400 Series, MONEL® and INCONEL®.

NOMINAL CHEMICAL COMPOSITION NICKEL ALLOY													
TYPE	C MAX	MN MAX	P MAX	S MAX	SI MAX	Cr	Ni	Mo MAX	Co/Ta MAX	Other Elements			
201	0.15	5.5 - 7.5	0.060	0.03	1.0	16.00 - 18.00	3.50 - 5.50	-	-	N 0.250 Max.			
202	0.15	7.5 - 10.0	0.060	0.03	1.0	17.00 - 19.00	4.00 - 6.00	-	-	N 0.250 Max.			
301	0.15	2.0	0.045	0.03	1.0	16.00 - 18.00	6.00 - 8.00	-	-	-			
302	0.15	2.0	0.045	0.03	1.0	17.00 - 19.00	8.00 - 10.00	-	-	-			
303	0.15	2.0	0.200	0.15 Min.	1.0	17.00 - 19.00	8.00 - 10.00	-	-	-			
303SE	0.15	2.0	0.200	0.06	1.0	17.00 - 19.00	8.00 - 10.00	-	-	Se 0.150 Min.			
304	0.08	2.0	0.045	0.03	1.0	18.00 - 20.00	8.00 - 10.50	-	-	-			
304L	0.03	2.0	0.045	0.03	1.0	18.00 - 20.00	8.00 - 12.00	-	-	-			
305	0.12	2.0	0.045	0.03	1.0	17.00 - 19.00	10.50 - 13.00	-	-	-			
308	0.08	2.0	0.045	0.03	1.0	19.00 - 21.00	10.00 - 12.00	-	-	-			
309	0.20	2.0	0.045	0.03	1.0	22.00 - 24.00	12.00 - 15.00	-	-	-			
309S	0.08	2.0	0.045	0.03	1.0	22.00 - 24.00	12.00 - 15.00	-	-	-			
310	0.25	2.0	0.045	0.03	1.5	24.00 - 26.00	19.00 - 22.00	-	-	-			
310S	0.08	2.0	0.045	0.03	1.5	24.00 - 26.00	19.00 - 22.00	-	-	-			
314	0.25	2.0	0.045	0.03	1.5 - 3.0	23.00 - 26.00	19.00 - 22.00	-	-	-			
316	0.08	2.0	0.045	0.03	1.0	16.00 - 18.00	10.00 - 14.00	2.0 - 3.0	-	-			
316L	0.03	2.0	0.045	0.03	1.0	16.00 - 18.00	10.00 - 14.00	2.0 - 3.0	-	-			
316F	0.08	2.0	0.200	0.10 Min.	1.0	16.00 - 18.00	10.00 - 14.00	1.75 - 3.0	-	-			
317	0.08	2.0	0.045	0.03	1.0	18.00 - 20.00	11.00 - 15.00	3.0 - 4.0	-	-			
317L	0.03	2.0	0.045	0.03	1.0	18.00 - 20.00	11.00 - 15.00	3.0 - 4.0	-	-			
321	0.08	2.0	0.045	0.03	1.0	17.00 - 19.00	9.00 - 12.00	-	-	Ti 5x C Min.			
330	0.20	2.0	0.030	0.03	0.75 - 1.5	17.00 - 20.00	34.00 - 37.00	-	-	-			
347	0.02	2.0	0.045	0.03	1.0	17.00 - 19.00	9.00 - 13.00	-	-	Cb-Ta 10 x C Min.			
348	0.08	2.0	0.045	0.03	1.0	17.00 - 19.00	9.00 - 13.00	-	-	Cb-Ta 10 x C Min.			
18-9 LW	0.10	2.0	0.045	0.03	1.0	17.00 - 19.00	8.00 - 10.00	-	-	Cu 3.0-4.0			
384	0.08	2.0	0.045	0.03	1.0	15.00 - 17.00	17.00 - 19.00	-	Co 0.20 Ta 0.1	Cb+Ta 8 X C Min			
Nitronic 32	0.15	11.00-014.0	0.060	0.03	1.0	116.50 - 19.00	0.50 - 2.50	-	-	N.20-.45			
Nitronic 33	0.08	11.5 - 14.5	0.060	0.03	1.0	17.00 - 19.00	2.25 - 3.75	-	-	-			
Nitronic 40	0.08	8.0 - 10.0	0.060	0.03	1.0	19.00 - 21.00	5.50 - 7.50	-	-	-			
Nitronic 50	0.03 - 0.06	4.0 - 6.0	0.040	0.03	1.0	20.50 - 23.50	11.50 - 13.50	1.5 - 3.0	-	-			
Nitronic 60	0.10	1.0 - 9.0	-	-	3.5 - 4.5	16.00 - 18.00	8.00 - 9.00	-	-	Co 0.10 - 0.30			
Hardenable by Heat Treatment	410	0.15	1.00	0.040	0.03	1.0	11.5 - 13.5	-	-	-			
	416	0.15	1.25	0.060	0.15 Min.	1.0	12.0 - 14.0	-	-	-			
	420	0.15 Min.	1.00	0.040	0.03	1.0	12.0 - 14.0	-	-	-			
	17-4PH	0.07	1.00	0.040	0.03	1.0	15.5 - 17.5	3.00 - 5.00	-	-	-		
	17-7PH	0.09	1.00	0.040	0.03	1.0	16.0-0 18.0	6.50 - 7.75	-	-	-		
Non-Hardenable	409	0.08	1.0	0.045	0.045	1.0	0.50 - 11.75	-	-	-			
	430	0.12	1.00	0.040	0.030	1.0	16.00 - 18.00	-	-	-			
Monel® Alloy	400	66.5	0.15	1.00	1.20	0.012	0.25	31.50	-	-			
NOMINAL CHEMICAL COMPOSITION NICKEL ALLOY													
TYPE	Ni	C	Mn	Fe	S	Si	Cu	Cr	Cl	Ti	Mg	Cb	Mo
200	99.5	0.08	0.18	0.20	0.005	0.18	0.13	-	-	-	-	-	-
201	99.5	0.041	0.18	0.20	0.005	0.13	0.13	-	-	-	-	-	-
205	99.5	0.08	0.18	0.10	0.004	0.08	0.08	-	-	0.030	0.05	-	-
211	95.0	0.10	4.75	0.38	0.008	0.08	0.13	-	-	-	-	-	-
212	97.0	0.20	2.00	0.75	0.015	0.0	0.20	-	-	-	-	-	-
220	98.5	0.04	0.10	0.05	0.004	0.03	0.05	-	-	0.030	0.05	-	-
230	99.5	0.05	0.08	0.05	0.004	0.02	0.05	-	-	0.0030	0.06	-	-
Monel® Alloy	400	66.5	0.15	1.00	1.20	0.012	0.25	31.50	-	-	-	-	-
Inconel® Alloys	600	76.0	0.08	0.50	8.00	0.008	0.25	15.5	-	-	-	-	-
	601	60.5	0.05	0.50	14.10	0.007	0.25	0.50	23.0	1.35	-	-	-
	625	61.0	0.05	0.25	2.50	0.0048	0.25	-	21.5	0.20	0.20	-	+Ta 3.650 9.0
	X-750	73.0	0.04	0.50	7.00	0.005	0.25	0.25	15.5	0.70	2.50	-	+Ta 0.950 -
	751	72.5	0.05	0.50	7.00	0.005	0.25	0.25	15.5	1.20	2.30	-	+Ta 0.950 -
Incoloy® Alloys	800	32.5	0.05	0.75	46.00	0.008	0.50	0.38	21.0	0.38	0.38	-	-
	801	32.0	0.05	0.75	44.50	0.008	0.50	0.25	20.5	-	1.13	-	-
	802	32.5	0.35	0.75	46.00	0.008	0.38	-	21.0	0.58	0.75	-	-
	804	41.0	0.05	0.75	25.40	0.008	0.38	0.25	29.5	0.30	0.80	-	-
	805	36.0	0.12	0.75	Bal.	0.020	0.50	0.50	7.5	-	-	-	0.50



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