

WIRE ROPE HARDWARE & TOOLS GLOSSARY



LEXCO

Lexco Cable aims to delight customers by supplying value added wire rope related products.

Wire Rope Hardware & Tools Glossary

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Wire Rope Clips, Clamps, Wire Stops

<p>Wire Rope Clip Nicknames: Cable Clamp, Wire Rope Clamp</p>		<p>A wire rope clip is comprised of a U-bolt with a saddle and hex nuts and is typically used to form loops. Because you only need a wrench to tighten the nuts, it is ideal for field installations. For diameters 7/16" and below, a minimum of 2 wire rope clips is recommended for a loop. For diameters 1/2" - 5/8", a minimum of 3 wire rope clips is recommended. For diameters 3/4" - 7/8" a minimum of 4 wire rope clips is recommended. For more information, please visit the Wire Rope section of Lexcocable.com</p>
<p>Safe-Line Clamp</p>		<p>A safe-line clamp, which conforms to MS16843, is designed for forming wire rope loops. Only one clamp per loop is required.</p>
<p>Fist Grip Clip</p>		<p>Similar to the wire rope clip except, the Fist Grip Clip has two saddles per unit for additional strength.</p>
<p>Wire Stop</p>		<p>A wire stop refers to a barrel which has a cross hole for a wire or cable to go through. To secure the wire or cable in place, a set screw tightens from the top of the barrel. Wire ropes are typically used with push-pull controls, such as throttle applications.</p>

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Essential Rigging: Turnbuckles, Shackles

<p>Turnbuckle</p>		<p>A turnbuckle has an externally threaded end fastened into an internally threaded mating body. It is used to adjust the length of a wire rope or threaded rod assembly. A traditional wire rope rigging turnbuckle will use either eyes, hooks, or jaw ends (pictured left), which are threaded into both sides of the turnbuckle body. One side of the turnbuckle body has left-hand threads and the other side has right-hand threads. A swage turnbuckle means that on one side of the body, there is a threaded stud providing an in-line connection to a wire rope assembly.</p>
<p>Shackle</p>		<p>A shackle is a convenient way of attaching a wire rope assembly to a load. It comes in a u-shape, called a chain shackle, or a bow-shape, called an anchor shackle. Both of these configurations are available with three different styles of fastener: screw-pin, round-pin, and safety-bolt.</p> <p>Lexco abbreviations:</p> <ul style="list-style-type: none"> SPAS = Screw-Pin Anchor Shackle RPAS = Round-Pin Anchor Shackle SAS = Safety Anchor Shackle SPCS = Screw-Pin Chain Shackle RPCS = Round-Pin Chain Shackle SCS = Safety Chain Shackle

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Eye Hardware: Eye Bolts, Eye Nuts, Pad Eyes

<p>Eye Bolt</p>		<p>An eye bolt is often connected to a wire rope loop. The stem of the eye bolt has external thread. An eye bolt is available with machine thread and lag thread for wood connections, which don't have rear access. It is available in forged construction, wire bent wire formed, and in a variety of lengths. Machinery eye bolts have a short stem, which is fully threaded. Forged eye bolts are available with a shoulder under the eye or less the shoulder, which is referred to as plain pattern.</p>
<p>Eye Nut</p>		<p>The eye nut is essentially an eye bolt less its shank with internal threads installed. An eye nut can be threaded onto an eye bolt, threaded rod, and bolts. It is typically used for lifting, since the eye nut is a convenient attachment point.</p>
<p>Pad Eye</p>		<p>Not all fastening applications involve thread; consequently, a pad eye is an eye nut with no threads. It is installed and used by welding it at its base to the connecting piece.</p>

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Wire Rope Loop Attachments: Hooks, Links, Snaps, Rings, Lanyard Mounting Tabs

<p>Hook</p>		<p>A hook is commonly attached to wire rope assembly loop ends. Examples include S-hooks, eye hoist hooks, and clevis grab hooks. Hooks provide a fast way of securing a wire rope assembly.</p>
<p>Snap Hook Spring Hook Nickname: Carabiner</p>		<p>Snap hooks have a spring-loaded gate, which allows them to easily snap over your connecting hardware. They're convenient for attaching to wire rope loops, but they also have many other fastening applications. They are made in zinc-plated steel as well as stainless steel.</p>
<p>Quick Link</p>		<p>A load-bearing piece of hardware, the quick link is fast-connecting. Its standard shape is rectangular, but it is also available in wide jaw, pear shape, delta shape, and square. Made in zinc-plated steel as well as stainless steel, it is commonly attached to wire rope loops. Installation is as simple as turning the hex screw.</p>
<p>Bolt Snap Nickname: Trigger Snap</p>		<p>The most common application for a bolt snap is to connect a dog leash to a dog collar. However, it is also used in luggage, as well as industrial marine, agricultural, and construction applications. It is available with fixed eye or swivel eye options and made in zinc die-cast, nickel-plated steel, stainless steel, and brass.</p>

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Wire Rope Loop Attachments: Hooks, Links, Snaps, Rings, Lanyard Mounting Tabs: CONTINUED...

<p>Round & “D” Ring</p>		<p>Typically used for connecting rope and webbing, Lexco also attaches round and “D” rings to wire rope loop assemblies.</p>
<p>Lanyard Mounting Tab</p>		<p>In this fitting, a metal stamping with two round holes, one hole is used to connect the wire rope loop and the opposite hole is used to connect a screw.</p>
<p>Mid-link</p>		<p>A mid-link is similar in appearance to a non-rotating swivel and is typically used with chain in order to connect chain links.</p>

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Specialty Rigging: Swivels, Pullies

<p>Swivel</p>		<p>One purpose of a swivel is to prevent a load from spinning. The swivel rotates so that the wire, rope, or chain doesn't have to twist. It is available in light-duty and heavy-duty options depending on the load. Heavy-duty swivels come with different end configurations such as eyes and jaws.</p>
<p>Tiller Clamp</p>		<p>Lexco carries a number 3 tiller clamp for 1/8 cable and a number 4 tiller clamp for 5/32 and 3/16 cable. They are both two-part clamps, which are fastened by a bolt. Typical applications include security, lanyards, and E-stop pull cords. You can order the bolt in different driver styles such as Phillips head and theft-resistant head.</p>
<p>Pulley</p>		<p>The wheel of the pulley is called a sheave. Lexco can supply pulleys and sheaves for both fibrous rope and wire rope applications.</p>

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Tools: Cutting Tools, Swaging Tools, Crimping Tools, Tension Gauges

<p>Cutting Tool</p>		<p>Lexco carries a line of hand tools for cutting wire rope. They provide a clean cut edge, which is important for connecting end fittings.</p>
<p>Swaging Tool</p>		<p>Lexco rents swaging tools to our cable railing customers. The hydraulic swaging head and die allow a customer to create a clean finish just as if it were installed in our factory.</p>
<p>Crimping Tool</p>		<p>A crimping tool is appropriate for crimping sleeves and button stops onto wire rope. Typically, it's used for installing aluminum and copper sleeves and button stops in diameters from 1/32 to 5/16. Hand tool crimped assemblies are typically 1/3 weaker than a factory swaged equivalent assembly. These hand crimping tools are convenient for field installation and prototype work.</p>
<p>Tension Gauge</p>		<p>A tension gauge is designed to measure the tension of an installed wire rope assembly. A common application is for cable railings where a minimum specification for tension must be met.</p>

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Threaded Rod Assembly Hardware: Threaded Rods, Clevises & Yoke Ends

<p>Threaded Rod</p>		<p>The most common type is all thread rod, this rod is continuously threaded. Another variety is called tie rod. With tie rods, typically only the very ends of the rods are threaded.</p>
<p>Clevises & Yoke Ends</p>		<p>These pieces are end fittings that are designed for threading onto threaded rod. Yoke ends come in standardized sizing, whereas clevises are more customizable. They also can be used on wire rope assemblies. Sometimes they're threaded onto wire rope threaded studs. When you're ordering a clevis, you can specify the grip (distance between the ears), thread size/pitch, and pin hole ID.</p>

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Odds and Ends: Fitness Cable Parts, Nylon Cable Ties

<p>Fitness Cable Part</p>		<p>A fitness cable part includes a few specialty fittings for fitness cable assembly applications. Rubber and plastic balls are used as stoppers. Bolts with a thru hole are used for connecting an assembly to a weight stack. Lexco also has eye ends that are shorter than our industrial eyelets.</p>
<p>Nylon Cable Tie Nickname: Zip Tie</p>		<p>Lexco uses cable ties frequently for packing assemblies in specific bundles or coil sizes. Other applications include wire and cable management. They are convenient, non-threaded fasteners, available in natural Nylon as well as UV-resistant black Nylon.</p>

Have questions? Need Information? CONTACT US TODAY!

Wire rope products are utilized in vastly diverse industries and environments. Our job at Lexco Cable is to guide our customers' decisions in selecting the optimal combination of wire rope products for their unique applications.

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