



COMPANY POLICY, WARRANTY & GENERAL INFO

Company Policy

PAYMENT TERMS

New customers will be shipped on a COD basis, proforma, or credit card. Available on request is our Credit Card Authorization for as well as Application for New Account. Applications for 30 day net terms must be filled out completely and faxed or emailed to our office.

SALES TAX

It is the customer's responsibility to provide Miami Cordage with a signed "State Annual Resale Certificate for Sale Tax". If we do not have it on file, sales tax will be added to each order.

PRICING

Please call, email or fax the office with request for quotations.

RETURNS

If there is an error in our shipment please notify us within 48 hours. All returns must be authorized by Miami Cordage. It is the customer's responsibility to return the merchandise in good, resalable condition, and to provide the invoice number from which the merchandise came. All returns not due to our error are subject to a 20% restocking charge. Merchandise over 90 days from purchase may not be returned.

SHIPPING

All items ship via UPS Ground unless otherwise specified by the customer. Miami Cordage offers a delivery service for local customers and will also deliver to your freight forwarder at no additional charge. LTL shipping is also available, we will determine the best carrier for shipments. As always, Miami Cordage is available to calculate the best shipping rate for you, please feel free to contact us by phone or email.

Warranty

All products supplied by Miami Cordage / Florida Wire & Rigging Works, Inc. are guaranteed to be of good material and workmanship as originally made by the manufacturer of the products and are rated according to accepted industry standards (except where products are not of a standard nature and standards do not exist).

Rated capacities apply only to the products supplied in their new and unused condition. No other warranty conditions or guarantees, either expressed or implied are offered or considered valid.

The service life, performance, and strength are conditional upon:

- **The proper use, environment, loading, and handling of the product and the equipment it is used on**
- **Methods of attachment**
- **Careful and knowledgeable use of the product and therefore the responsibility of the customer/user and their employees**

Most accidents involving injuries to workmen, and damage to products and equipment are the result of improper lifting and handling of materials. It is, therefore, the responsibility of the customer and/or user of the product to determine the suitability of the product for any particular use. In addition to the rated capacities of the products, all applicable OSHA industry, trade association, federal, state and local regulations should be adhered to by the customer and/or user of the product. The customer/user should also read and comply with all operating instructions and warnings.

WARNING!

**READ ALL WARNINGS BEFORE USING THIS PUBLICATION.
FAILURE TO FOLLOW WARNINGS & INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH**

Anyone using this publication must read and understand all warnings and other information listed below and preceding and/or adjacent to the product description. The following apply to all of the products in this price list. Warnings specific to individual products are printed at the beginning of each product section.

All products are sold with the express understanding that the purchaser is thoroughly familiar with their correct application and safe use. Use all products properly, in a safe manner and for the application for which they were intended. Miami Cordage / Florida Wire & Rigging assumes no responsibility for the use or misapplication of any product sold by this firm. Responsibility for design and use decisions rests with the user.

REMEMBER: ANY PRODUCT WILL BREAK IF ABUSED, MISUSED, OVERUSED OR NOT MAINTAINED PROPERLY. Such breaks can cause loads to fall or swing out of control, possibly resulting in serious injury or death as well as major property damage.

Therefore:

1. Never exceed the Working Load Limit (WLL)
2. Match components properly
3. Keep out from under a raised load
4. Avoid shock loads
5. Inspect products regularly

It would be impossible in the scope of this publication to list all possible dangers and misapplications associated with the use of all products contained herein. However, in order to promote safe rigging habits, the most common hazards associated with the use of these products are outlined.

Working Load Limit (WLL)

This is the term used throughout the catalog. There are, however, other terms used in the industry which are interchangeable with the term Working Load Limit. These are: WLL, SWL, Safe Working Load, Rated Load Value, Resulting Safe Working Load, and Rated Capacity.

Never exceed the Working Load Limit.

The Working Load Limit is the maximum load which should ever be applied to a product, even when the product is new and when the load is uniformly applied - straight line pull only. Avoid side loading. All catalog ratings are based upon usual environmental conditions, and consideration must be given to unusual conditions such as extreme high or low temperatures, chemical solutions or vapors, prolonged immersion in salt water, etc. Such conditions or high-risk applications may necessitate reducing the Working Load Limit.

Working Load Limit will not apply if product has been welded or otherwise modified.

Matching of Components

Components must match. Make certain that components such as hooks, links or shackles, etc. used with wire rope (or chain or cordage) are of suitable material size and strength to provide adequate safety protection. Attachments must be properly installed and must have a Working Load Limit at least equal to the product with which they are used. Remember: Any chain is only as strong as its weakest link.

Raised Loads

Keep out from under a raised load. Take notice of the recommendation from the Safety Council Accident Prevention Manual concerning all lifting operations:

“All employees working at cranes or hoists or assisting in hooking or arranging a load should be instructed to **keep out from under the load**. From a safety standpoint, one factor is paramount: Conduct all lifting operations in such a manner, that if there were an equipment failure, no personnel would be injured. **This means keep out from under a raised load and keep out of the line of force of any load.**”

DO NOT OPERATE A LOAD OVER PEOPLE. DO NOT RIDE ON LOADS.

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Shock Loads

Avoid impacting, jerking or swinging of load as the Working Load Limit could be exceeded and the Working Load Limit will not apply. A shock load is generally significantly greater than a static load. **Avoid shock loads.**

Regular Inspections

Inspect products regularly for visible damage, cracks, wear, elongation, rust, etc. **Protect all products from corrosion.** The need for periodic inspections cannot be overemphasized. No product can keep operating at its rated capacity indefinitely. Periodic inspections help determine when to replace a product and reduce rigging hazards. Keep inspection records to help pinpoint problems and to ensure periodic inspection intervals.

Due to the diversity of the products involved and uses to which they can be put, it would be counterproductive to make blanket recommendations for inspection procedures and frequency. Best results will be achieved when qualified personnel base their decisions on information from rigging and engineering manuals and on experience from actual use in the field. Refer to sources listed on the following page.

Frequency of inspection will depend on environmental conditions, application, storage of product prior to use, frequency of use, etc. **When in doubt, inspect products prior to each use.** Carefully check each item for wear, deformation, cracks or elongation - a sure sign of imminent failure. Immediately withdraw such items from service.

Rust damage is another potential hazard. When in doubt about the extent of corrosion or other damage, withdraw the items from service.

Destroy, rather than discard, items that have been judged defective. They might be used again by someone not aware of the hazard involved.

Additional warnings and information on wire rope, chain, cordage, blocks and tools can be found in the Table of Contents by clicking on the warning symbol icon (). These should be read and understood thoroughly before using a particular item.

Definitions

Information contained in this catalog is subject to change; all weights and dimensions are approximate. Ratings are stated in short tons (2,000lb/ton) or pounds. All dimensions are in inches and all weights are in pounds, unless stated otherwise.

WORKING LOAD LIMIT (WLL)

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PROOF TEST LOAD (PROOF LOAD)

The term "Proof Test" designates a quality control test applied to the product for the sole purpose of detecting defects in material or manufacture. The Proof Test Load (usually twice the Working Load Limit) is the load which the product withstood without deformation when new and under laboratory test conditions. A constantly increasing force is applied in direct line to the product at a uniform rate of speed on a standard pull testing machine. The Proof Test Load does not mean the Working Load Limit should ever be exceeded.

BREAKING STRENGTH/ULTIMATE STRENGTH

Do not use breaking strength as a criterion for service or design purposes. Refer to the Working Load Limit instead.

Breaking Strength is the average force at which the product, in the condition it would leave the factory, has been found by representative testing to break, when a constantly increasing force is applied in direct line to the product at a uniform rate of speed on a standard pull testing machine. Proof testing to twice the Working Load Limit does not apply to hand-spliced slings.

Remember: Breaking Strengths, when published, were obtained under controlled laboratory conditions. Listing of the Breaking Strength does not mean the Working Load Limit should ever be exceeded.

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Definitions (Cont.)

SAFETY FACTOR (ALSO REFERRED TO AS DESIGN FACTOR)

An industry term that describes how much stronger the system is than it usually needs to be for an intended load. For the purposes of this catalog, the safety factor is computed by dividing the Breaking Load by the Working Load with a 5 to 1 ratio.

SHOCK LOAD

A load resulting from rapid change of movement, such as impacting, jerking or swinging of a static load. Sudden release of tension is another form of shock loading. Shock loads are generally significantly greater than static loads. Any shock loading must be considered when selecting the item for use in a system. Avoid shock loads as they may exceed the Working Load Limit.

ADDITIONAL REFERENCE MATERIALS

Consult the following sources for important technical literature and or safety manuals.

AMERICAN IRON & STEEL INSTITUTE

1101 17th Northwest Suite 1300
Washington, DC 20036
Telephone: 202/452-7100
Fax : 202-463-6573

THE CORDAGE INSTITUTE

350 Lincoln Street East
Hingham, MA 02043
Telephone: 781-749-1016
Fax : 781-749-9783

AMERICAN NATIONAL STANDARDS INSTITUTE

11 W. 42nd St., 13th Floor
New York, NY 10036
Telephone: 212-642-4900

THE HAND TOOLS INSTITUTE

25 N. Broadway
Tarrytown, NY 10591
Telephone: 914-332-0040
Fax : 914-332-1541

AMERICAN PETROLEUM INSTITUTE

Publications Department
1220 L. St. N.W.
Washington, DC 20005
Telephone: 202-682-8375
Fax : 202-682-8232

NATIONAL SAFETY COUNCIL

1121 Spring Lake Drive
Itasca, IL 60143-3201
Telephone: 630-285-1121

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

22 Law Drive
P.O. Box 2900
Fairfield, NJ 07007-2900
Telephone: 973-882-1167
Fax : 973-882-1717

OCCUPATIONAL SAFETY & HEALTH ADMIN.

Department of Labor
200 Construction Ave. N.W. Room N 3101
Washington, DC 20210
Telephone: 202-523-1452

AMERICAN SOCIETY FOR TESTING MATERIAL

100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Telephone: 610/832-9500
Fax : 610/832-9555

U.S. GOVERNMENT PRINTING OFFICE

Postal Code 9325
Superintendent of Documents
Washington, DC 20402
Telephone: 202-512-1800

CONSTRUCTION SAFETY ASSOC. OF ONTARIO

21 Voyager Court South
Etobicoke Ontario, Canada M9W5M7
Telephone: 416-674-2726
800-781-2726
Fax : 416-674-8866

WIRE ROPE TECHNICAL BOARD

P.O. Box 286
Woodstock, MD 21163-0286
Telephone: 410-461-7030

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ROPE

Safety Considerations

NEVER EXCEED THE WORKING LOAD LIMIT OF ROPE

Use Working Load Limits as published as guidelines only. Working Load Limit may have to be reduced when life, limb or valuable property are at risk, or other than new rope is used. When using multiple leg rope slings, the Working Load Limit of each leg will have to be reduced considerably. Consult industry recommendations for information such as published by the Cordage Institute. Working Load Limit does not apply if rope has been subjected to severe dynamic loading, which may not be visible.

AVOID OVERHEATING

Exposure to high temperatures will cause ropes to lose strength rapidly. Even temperatures as low as 150° F (66° C) can reduce the strength of some ropes by 50%. When using synthetic rope (especially polypropylene) on a capstan or a winch, be careful to avoid excessive friction which heats, melts and fuses the outer fibers of the rope. Avoid repeated surging or hard rendering around poles or over cross arms. Polyester rope resists overheating best because its melting point is highest.

ATTACHMENTS MUST HAVE AT LEAST THE SAME WORKING LOAD LIMIT AS THE ROPE USED

Hooks, links, shackles, etc. must be of suitable material and strength to provide adequate safety protection. Splice rope properly and use thimbles if applicable.

Choose rope to match gear or gear to match rope. Sheaves, pulleys, thimbles, etc. that do not match the size of rope being used can cause dangerous friction, abrasion, overload, etc.

KEEP OUT FROM UNDER A RAISED LOAD

Do not move load over people. Do not ride on load. Conduct all lifting operations in such a manner that if equipment were to fail or break, no personnel would be injured. This means **KEEP OUT FROM UNDER A RAISED LOAD, DO NOT OPERATE LOADS OVER PEOPLE AND KEEP OUT OF THE LINE OF FORCE.**

AVOID SHOCK LOADS

Rope that is strong enough to withstand a steady pull can be broken with a sudden jerk. Be aware of all possible dynamic loading situations. Avoid them when possible and allow for strong enough rope when they cannot be avoided. Keep in mind that the effects of dynamic loading are greater on shorter ropes than on longer ones and greater on low elongation ropes (such as Manila and polypropylene) than on high elongation rope (such as nylon). Never stand in the line of rope under strain. If the rope breaks it will recoil with considerable force, especially if it is nylon.

INSPECT ROPE FREQUENTLY

Closely examine entire length of rope for damage to determine general condition and detect localized wear. Excessive abrasion, fusing of outside fibers, hockles, rust or other chemical stains, broken fibers or other obvious damage to rope are reasons to retire rope from service. Internal damage can be assessed by twisting strands open and checking for powdered fiber. Rope that is suspected of having been exposed to severe shock loads or loads close to its catalog Breaking Strength should be retired immediately. Such damage may not be visible. Actual remaining strength of damaged or used rope can only be established by laboratory analysis and tension tests.

DESTROY, RATHER THAN DISCARD, ROPE TO BE RETIRED

It might be used again by someone not aware of the hazard or defect. This is best achieved by cutting it up into short pieces.

ROPE SLINGS

Refer to OSHA 1910.184 and ASME standard B30.9 for design factors and other important information. Other standards and information may apply in specific applications.

REFER TO "PROPER CARE OF ROPE" ON THE FOLLOWING PAGE FOR ADDITIONAL IMPORTANT CAUTIONS

PROPER CARE OF ROPE

AVOID ABRASION AND UNNECESSARY WEAR

Outer fibers as well as inner fibers contribute to a rope's strength. When outer fibers are worn by chafing or dragging over splintered, rough or gritty surfaces, the rope is worn and weakened. When rope is used on cleats, winchheads, etc. make sure they are smooth and use chafing gear if necessary.

AVOID SHARP ANGLES AND BENDS

Sharp angles greatly affect the strength of a rope. Any sharp angle or bend is a weak spot. Use thimbles or chafing gear or padding where possible. Knots are also weak spots. They can reduce strength by as much as 50% or more. Use splices instead. Splice rope correctly. When a small section of a rope has been worn or damaged, cut out the section and splice it together. Splice in extra tucks for synthetic fiber ropes. Use proper splicing procedures as outlined by the Cordage Institute. Do not re-splice rope that broke due to being overloaded - discard it instead. Its remaining strength will only be a fraction of the Working Load Limit when new. Prevent unraveling of rope - whip or tape cut ends.

AVOID SUSTAINED LOADS

Fiber ropes subjected to heavy loads for long periods of time can break well below catalog Breaking Strength. Natural fiber ropes such as Manila and Sisal have less ability to take sustained loads than synthetic fiber ropes such as nylon or polypropylene. Never exceed the Working Load Limit and do not subject fiber rope to sustained loads for more than two days.

AVOID RUST

All ropes, synthetic or natural, should be kept away from rusting iron or steel. Rust can cause rapid loss of strength, sometimes in as short a time as one to two weeks. If ropes become rust stained, inspect the extent of the stain. If it is halfway through the rope, then rope strength may be reduced by as much as 50%.

KEEP ROPE AWAY FROM CHEMICALS

Even though synthetic rope is generally considered to be resistant to damage from oils, gasoline, paint and most chemicals, exposure to any of these may cause some damage. Avoid contact with such things as storage battery solution, washing compounds or solutions, and animal wastes. Strong acids, alkalis and solvents can damage any rope. Natural fiber rope is extremely vulnerable to all chemicals and solvents.

AVOID THE USE OF SWIVELS IN ROPES UNDER LOAD

A loss of turn will cause permanent damage to the rope.

NEVER USE A NYLON LINE WHICH HAS A HIGH STRETCH FACTOR IN COMBINATION WITH ANOTHER ROPE OF LOW STRETCH

The nylon line will stretch and not carry its proportionate share of the load, thus putting extra strain on the other lines.

REVERSE ENDS OF THE ROPE PERIODICALLY

Especially in tackles and winches, reverse the rope end-for-end periodically so that all sections will be worn equally. Also, using a line in one direction over a winch many times can also damage the rope by twisting it too tight or untwisting it so that hockles occur. Kinks pulled through a restricted space such as a tackle block, can seriously damage rope fibers. The initial use should be in a clockwise direction, then reverse the rope periodically.

SLACK OFF GUYS IN WET WEATHER

When ropes are used as guy lines or other supports exposed to weather, they should be slacked off in wet weather, or damage to the rope, as well as what it is supporting, may result.

STORE ROPE PROPERLY

Rope is best stored in a dry, unheated place where air circulates freely, off the floor, and away from direct sunlight and other contact with the elements. Keep in mind that synthetic ropes will deteriorate in direct sunlight due to exposure to ultraviolet radiation. Light colored polypropylene especially is severely affected, smaller diameters more so than larger sizes. Natural fiber ropes (Manila and Sisal) will deteriorate in storage even under ideal conditions.

DRY ROPE PROPERLY

Whenever natural fiber ropes become wet they should always be thoroughly dried before they are stored or they will rot in a very short time. Do NOT dry synthetic fiber rope in direct sunlight.

KEEP ROPE CLEAN

Dirt on the surface of rope can become embedded inside and act as an abrasive on fibers. When rope gets dirty, wash it thoroughly with clean fresh water. Remember to dry natural fiber rope before storing.

REMOVE ROPE FROM COILS AND REELS PROPERLY

Regular right hand laid rope should be uncoiled in a counter clockwise direction.

Coiled rope: Lay the coil on the floor with the inside end at the bottom, then reach down through the center and pull the inside up through the coil.

Reeled rope: Remove the rope from a reel by pulling it off the top while the reel is free to rotate. Rope should never be taken from a reel lying on its end because it is more likely to kink or hockle or pull yarns on the wooden flange.

When substituting natural fiber rope with synthetic fiber ropes (or substituting one synthetic rope for another) substitution should not be made on a straight breaking strength-for-breaking strength basis only. Other important factors must be considered. Consult the Cordage Institute or other sources listed on page 4 for additional information.

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