



⚠ WARNING

The use of damaged slings, damaged rigging hardware and/or damaged sling protection may result in INJURY or DEATH. The strength and performance of slings, rigging hardware and sling protection is affected by wear and damage. It is critically important that sling users employ a three stage, inspection procedure: initial, frequent and periodic, performed by a Qualified Person*.

If damage is identified during an inspection, damaged items must be immediately removed from service and not be returned until approved by a Qualified Person*.

You may have encountered removal from service criteria for specific slings and rigging hardware permitting continued use at an acceptable level of wear and/or damage, provided it does not exceed specific limits. Quantifying an acceptable level of loss based on the original size for synthetic products may be difficult, due to the absorption of fluids or foreign substances resulting in swollen or bloated fibers.

Always consider the cost of failure and determine if the use of any item with “acceptable levels” of damage is worth the risk, given the potentially deadly consequences.

No visual inspection can accurately determine the residual strength of slings, rigging hardware and/or sling protection. Contact your Lift-It® safety professional for more information on sling inspection and/or training. A viable inspection program not only saves lives, but will enable personnel to make informed decisions that will enhance safety.

Removal from Service Criteria

ASME and Cardage Institute requires that nylon and polyester rope slings shall be immediately removed from service if any of the following conditions are present. The same removal criteria must be used when inspecting UHMPE Rope Slings.

- (a) Missing or illegible sling identification.
The sling must be identified or labeled with the following information:
 - (1) name or trademark of manufacturer, or if repaired, the entity performing repairs
 - (2) manufacturer’s code or stock number
 - (3) rated load for at least one hitch type and the angle upon which it is based
 - (4) type of fiber material
 - (5) number of legs, if more than one
- (b) Cuts, gouges, areas of extensive fiber breakage along the length and abraded areas on the rope.
- (c) Damage that is estimated to have reduced the effective diameter of the rope by more than 10%.
- (d) Uniform fiber breakage along the major part of the length of the rope in the sling such that the entire rope appears covered with fuzz or whiskers.
- (e) Inside the rope, fiber breakage, fused or melted fiber (observed by prying or twisting to open the strands) involving damage estimated at 10% of the fiber in any strand or the rope as a whole.
- (f) Discoloration, brittle fibers and hard or stiff areas that may indicate chemical damage, ultraviolet damage or heat damage.
- (g) Dirt and grit in the interior of the rope structure that is deemed excessive.
- (h) Foreign matter that has permeated the rope and makes it difficult to handle and may attract and hold grit.
- (i) Kinks or distortion in the rope structure, particularly if caused by forcibly pulling on loops (known as hockles).
- (j) Melted, hard, or charred areas that affect more than 10% of the diameter of the rope or affect several adjacent strands along the length that affect more than 10% of strand diameters.
- (k) Poor condition of thimbles or other components manifested by corrosion, cracks, distortion, sharp edges, or localized wear.
- (l) For hooks, removal criteria as stated in ASME B30.10.
- (m) For rigging hardware, removal criteria as stated in ASME B30.26.
- (n) Other conditions including visible damage that cause doubt as to the continued use of the sling.

UHMPE Plasma® Rope Sling Inspection



⚠ WARNING If any damage such as the following is present, DO NOT USE the UHMPE Rope Sling. If you identify any of the following damage, REMOVE DAMAGED ITEMS immediately from service, even if the damage you see is not as extensive as shown in the following photos; they are extreme examples provided for illustration purposes only. Remember, any doubt, DON'T!

Internal abrasion can be determined by pulling one strand away from other strands to inspect for powder, broken filaments or volume reduction.



Like New External

Like New Internal



Illegible Tag



Cuts



Excessive External Abrasion



Excessive Internal Abrasion



Discoloration



Melting



Fiber Breakage



Excessive Dirt



Excessive Wear & Abrasion



Other Conditions That Cause Doubt.

DAMAGED FITTINGS / RIGGING HARDWARE

10% or Greater Material Loss.



Deformation

Any visibly apparent bend or twist from the plane of the unbent hook.



Throat Opening

Any distortion causing an increase in throat opening of 5% not to exceed 1/4".





⚠️ WARNING To Users of Lift-It® UHMPE Rope Slings.

The **⚠️ WARNING** icon is used to alert sling users to potentially hazardous conditions and situations. “Must” denotes a mandatory requirement and is synonymous with the use of the term “shall”. Slings, rigging hardware and sling protection may be referred to collectively as “rigging”.

⚠️ WARNING This guide contains important safety information about the use of Lift-It UHMPE Rope Slings. However, it DOES NOT provide you with all the information you need to know in order to be considered trained and knowledgeable in load handling activities. The proper use of slings, rigging hardware and sling protection are only some of the many necessary ingredients for proper use. You must be properly trained and it is your responsibility to consider all risk factors prior to all load handling activities. Improper use and lack of proper training may result in severe INJURY or DEATH due to rigging failure, the unplanned release of tension, deadly recoil and/or impact force and/or loss of load control.

All Lift-It® Manufacturing Co. Inc. products are sold with the express understanding that all parties are thoroughly knowledgeable with safe and proper product usage. The manufacturer does not have complete knowledge or insight into the specific details and potential hazards associated with your particular set of circumstances. Sling users have the ultimate responsibility for proper use as specified in the applicable warnings, standards, regulations and laws. The improper use of slings, rigging hardware and sling protection by untrained persons is hazardous and may result in INJURY or DEATH. It is also important that sling users be thoroughly familiar with the manufacturer’s recommendations and safety information that accompanies our products.

Use by untrained persons is hazardous. Please contact us if you have questions at 800.377.5438 or email us at info@lift-it.com and NEVER TAKE CHANCES!

The American Society of Mechanical Engineers in the ASME B30.9 Sling Safety Standard, Section 9-X.1 clearly states the requirement for training. “Sling users shall be trained in the selection, inspection, cautions to personnel, effects of the environment and rigging practices, covered by this chapter.”

Rigging practices would include the use of UHMPE Rope Slings, rigging hardware and sling protection. Sling protection is a mandatory requirement for all UHMPE Rope Slings and synthetic slings whenever there is a possibility of damage from cutting and/or abrasion.

The user must have sufficient training and knowledge of all applicable standards to responsibly use our products. If you are unsure whether you are properly trained and knowledgeable or if you are unsure of what the standards and regulations require of you, ask your employer for information and/or training.

⚠️ WARNING DO NOT use UHMPE Rope Slings, rigging hardware, and/or sling protection until you are absolutely sure of what you are doing. Remember, failure to follow proper use, care and inspection criteria and/or the lack of skill, knowledge and care can result in severe INJURY or DEATH. UHMPE Rope Slings, rigging hardware and sling protection will fail if damaged, abused, misused, overloaded or improperly maintained resulting in INJURY and DEATH.

Training and Proper Use is always BETTER THAN INJURY, DEATH AND RECOVERY!

