



Sling Inspection Criteria

Out of service criteria for Web Slings, Tuflex Roundslings, Chain Slings and Wire Rope Slings based on OSHA and Lift-All standards.



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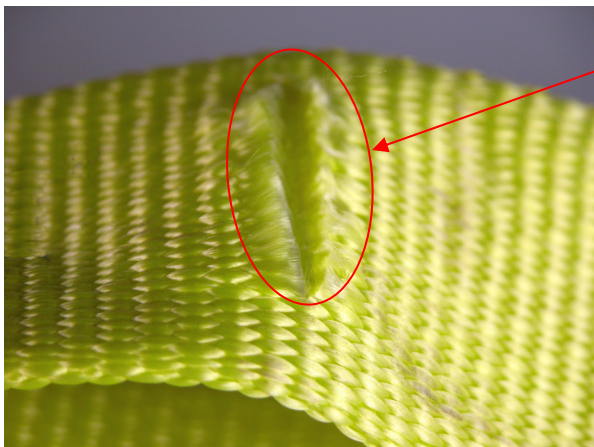
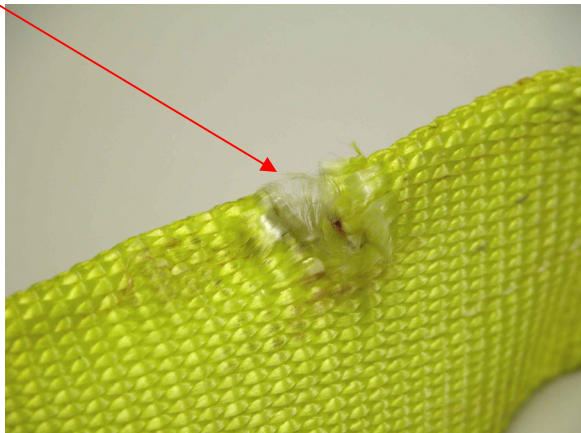
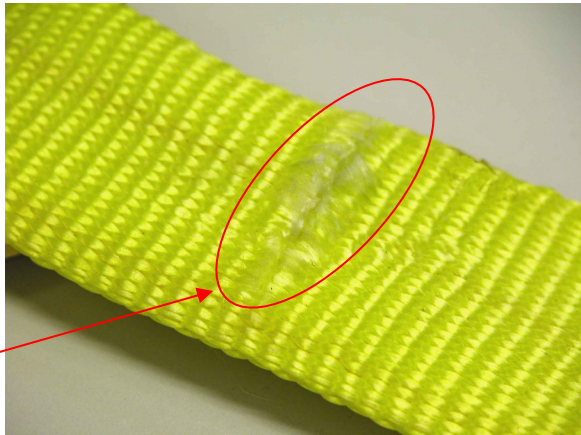
INSPECTION CRITERIA for WEB SLINGS

All slings should be inspected for damage prior to each use to assure that their strength has not been compromised. The following photos illustrate some of the common damage that occurs to indicate that the sling must be taken out of service:

THE DAMAGE: Surface and Edge Cuts – It is important to realize that all of the fibers in web slings contribute to the strength of that sling. When there have been a significant number of fibers broken in a web sling, as shown here, that sling should be taken out of service.

WHAT TO LOOK FOR: Broken fibers of equal length indicate that the sling has been cut by an edge. **Red core warning yarns may or may not be visible with cuts and are not required to show before removing slings from service.**

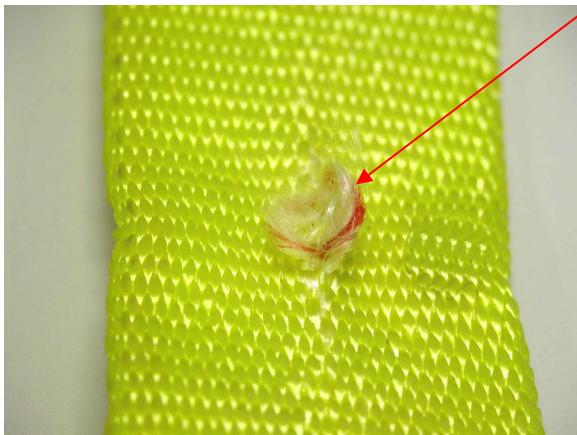
TO PREVENT: Use **wear pads** between the sling and all edges that come in contact with the sling.



THE DAMAGE: Holes/Snags/Pulls

WHAT TO LOOK FOR: Punctures or areas where fibers stand out from the rest of the sling surface.

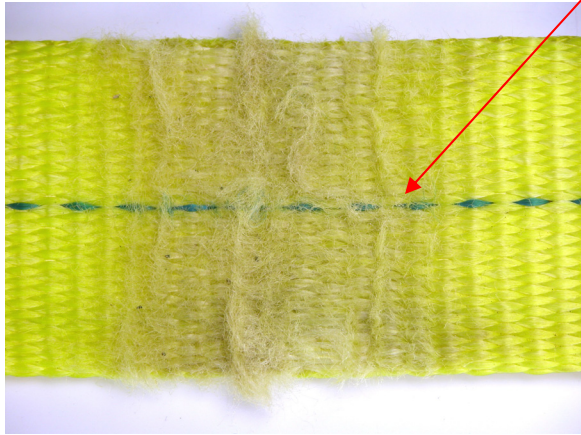
TO PREVENT: Avoid sling contact with protrusions, both during lifts and while transporting or storing.



THE DAMAGE: Abrasion

WHAT TO LOOK FOR: Areas of the sling that look and feel **fuzzy** indicate that the fibers have been broken by being subject to contact and movement against a rough surface. Affected areas are usually stained.

TO PREVENT: Never drag slings along the ground. Never pull slings from under loads that are resting on the sling. Use wear pads between slings and rough surface loads.

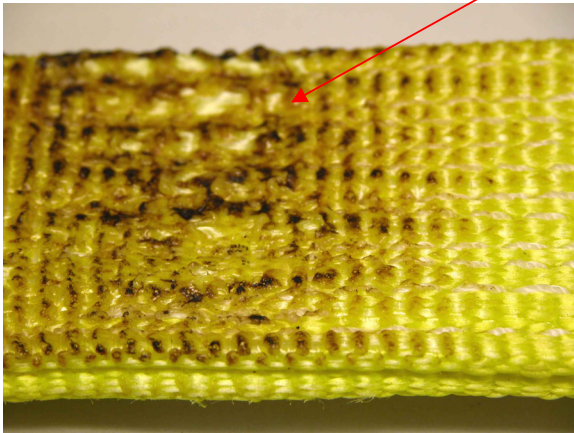


INSPECTION CRITERIA for WEB SLINGS

THE DAMAGE: **Heat/Chemical**

WHAT TO LOOK FOR: **Melted or charred fibers** anywhere along the sling. Heat and chemical damage can look similar and they both have the effect of damaging sling fibers and compromising the sling's strength. Look for discoloration and/or fibers that have been fused together and often feel hard or crunchy.

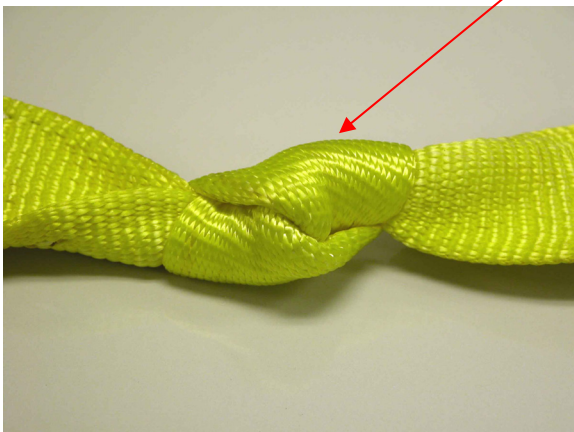
TO PREVENT: Never use nylon or polyester slings where they can be exposed to temperatures in excess of 200°F. Never use nylon or polyester slings in or around chemicals without confirming that the sling material is compatible with the chemicals being used.



THE DAMAGE: **Knots** compromise the strength of all slings by not allowing all fibers to contribute to the lift as designed. Knots may reduce sling strength by up to 50%.

WHAT TO LOOK FOR: Knots are rather obvious problems as shown below.

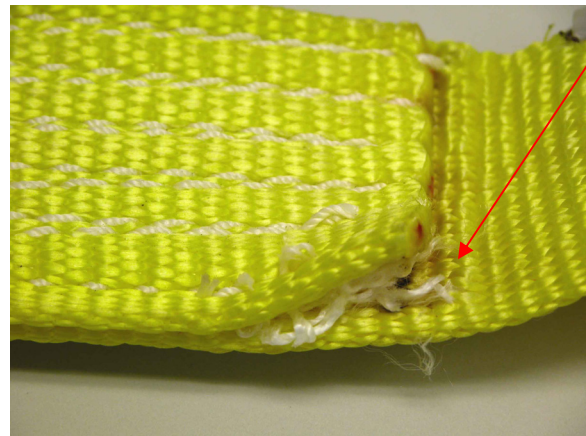
TO PREVENT: Never tie knots in slings and never use slings that are knotted.



THE DAMAGE: **Broken/Worn Stitching** in the main stitch patterns of web slings has a direct adverse effect on the strength of a sling. The stitch patterns in web slings have been engineered to produce the most strength out of the webbing. If the stitching is not fully intact, the strength of the sling may be affected.

WHAT TO LOOK FOR: **Loose or broken threads** in the main stitch patterns.

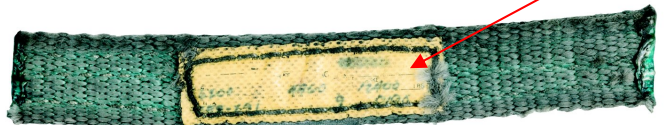
TO PREVENT: Never pull slings from beneath loads where stitch patterns can get hung up or snagged. Never overload the slings or allow the load edge to directly contact the stitch pattern while lifting. Never place a sling eye over a hook or other attachment whose width/diameter exceeds 1/3 the eye length.



THE DAMAGE: **Illegible or Missing Tags** – The information provided by the sling tag is important for knowing what sling to use and how it will function.

WHAT TO LOOK FOR: If you cannot find or read all of the information on a sling tag, OSHA requires that the sling shall be taken out of service.

TO PREVENT: Never set loads down on top of slings or pull slings from beneath loads if there is any resistance. Load edges should never contact sling tags during the lift. Avoid paint or chemical contact with tags.



Red Core Yarns – are an **additional** warning of dangerous sling damage. All standard Lift-All Web Slings have this warning feature. When red yarns are visible, the sling should be removed from service immediately. The red core yarns become exposed when the sling surface is cut or worn through the woven face yarns.