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It's called the Check-Fast® inspection system. The following is a brief explanation of how it works.

Every roundsling is made up of multiple wraps of the same strand of fiber. For ease of math, let's say a sling rated for 1,000 lbs. would require 10 wraps. A sling of the same core yarn rated for 10,000 lbs. would have at least 100 wraps, and so on. A roundsling made with the Check-Fast® inspection system adds an extra wrap called a "sacrificial strand." The ends of this independent strand are equally tensioned among the other load bearing core yarns via a "weak link." The weak link material has a calculated lower breaking strength than the core yarn material. Also, it degrades faster when exposed to ultraviolet light. Therefore, when the sling is exposed to severe overload or in this case, severe UV damage, the weak link breaks first, well before the remaining strands reach their failure point. Finally, a colored External Warning Indicator (EWI) strand is attached to the weak link and will disappear inside the sling cover when the weak link fails. This is what the rigger looks for upon each inspection. If you see this indicator yarn and there is no other cover damage, it



Pictured above is yellow 9800GN nylon web sling material protected by Slingmax® Covermax® roundsling tubing. The exposed webbing faded to white after 334 hours of UV exposure. When the nylon web was pulled out of the protective Slingmax® cover, you can see the original yellow color remains. It shows no UV degradation to the protected webbing.

is a GO! If the roundsling is subjected to severe overload when tensioned, or in this case, severe UV deterioration, the weak link breaks and whips the indicator strand inside the cover so fast it makes an audible POP sound.

The inspector who is charged with validating the safety of rigging gear should be trained to identify hidden damage to wire rope and synthetics

alike. Broken wires, cuts, weld splatter, corrosion and other forms of visual indicators of strength loss may lead an inspector to assume that there is also some form of hidden damage that cannot be easily identified by the naked eye. Wire rope strands can be opened by a trained individual to inspect the interior and the core. Now with the Check-Fast® inspection system, there is an objective way to determine if a roundsling is fit for use. A final benefit is eliminating the subjectivity of the hand over hand inspection method commonly used for roundslings.

Knowledge of hidden damage is paramount for any safety inspection program. Length of service, exposure to the elements, and any other potential cause of concealed damage should be primary concerns no matter the sling material. Inspectors need the training and education necessary to realize the potential for hidden damage and, when necessary, to take the appropriate action to remove damaged slings from service. **WEN**

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