OSHA Training Toolbox Talk: Material Handling and Storage – Inspecting Wire Rope Slings

[Reference: 1910.184 / 1926.251]

Wire rope slings are a versatile and important piece of equipment used in many different industries for lifting, hoisting, and moving heavy loads. But it is crucial that wire rope slings be inspected regularly to ensure that they are remain in good condition and safe to use. Here is a general overview of 10 things you can look for when you conduct a pre-use inspection of a wire rope sling:

1. Begin by visually inspecting the sling before use for any obvious signs of damage, such as cuts, kinks, crushing, knots, bird-caging, or other deformities that could weaken the rope and make it more prone to breaking (*see handout for some examples*).
2. Examine the wire rope for any rust or corrosion, which can weaken the rope and make it more likely to break.
3. Inspect the fitting and end terminations to ensure that they are secure, and not loose or damaged.
4. Look for any frayed or broken strands of wire in the rope. These can be difficult to see, so you may need to use a magnifying glass to get a good look. Or, try running a cloth rag along the wire rope; the cloth will snag on any broken wires. Depending on the manufacturer's specification, a few broken wires interspersed throughout the sling MAY be permissible. If you find broken wires, show the sling to your company's designated competent person to determine if the broken wires do or do not warrant taking the sling out of service.
5. Check the wire rope for any evidence of elongation or stretch. Any significant variations in diameter may be an indication of damage or the sling being overloaded.
6. Check the wire rope sling to make sure the inner core is not exposed, as this can result in a significant loss of strength.
7. Inspect the sling carefully for any signs of melting, discoloration, or other damage caused by it being exposed to flames or high heat.
8. Ensure the manufacturer's tag is attached to the sling, and inspect it to ensure the serial number and rated capacities for various rigging methods are legible.
9. Also, make sure to follow any specific inspection guidelines provided by the manufacturer of the sling. These guidelines may include additional steps or procedures for evaluating the condition of the wire rope.
10. Finally, if you do find a damaged wire rope sling, immediately take it out of service and tag it out or locking it up so it cannot be used by anyone else

In conclusion, inspecting a wire rope sling requires a thorough visual inspection before each day's use, checking for any signs of wear, damage, or other issues that could affect its strength and safety. By following these steps, you can help ensure that your wire rope slings are in good condition.

Does anyone have anything to add to today's discussion on potential signs of danger to look for before using a wire rope sling? Please sign the training certification form to ensure you get credit for attending today's toolbox training session.

EXAMPLES OF DAMAGE TO WIRE ROPE SLINGS

OSHA SAFETY TRAINING CERTIFICATION FORM

Toolbox Topic Covered: Material Handling and Storage – Inspecting Wire Rope Slings

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Training led by: _____

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