

WIRE ROPE SLING REMOVAL FROM SERVICE CRITERIA

GENERAL REQUIREMENTS AND INSPECTION CRITERIA FOR SLINGS

Safe operating practices (OSHA 1910.184) - Whenever any sling is used the following practices shall be observed:

1. Slings that are damaged or defective shall not be used.
2. Slings shall not be shortened with knots or bolts or other makeshift devices.
3. Sling legs shall not be kinked.
4. Slings shall not be loaded in excess of their rated capacities.
5. Slings used in a basket hitch shall have the loads balanced to prevent slippage.
6. Slings shall be securely attached to their loads.
7. Slings shall be padded or protected from the sharp edges of their loads.
8. Suspended loads shall be kept clear of all obstructions.
9. All employees shall be kept clear of loads about to be lifted and of suspended loads.
10. Hands or fingers shall not be placed between the sling and its load while the sling is being tightened around the load.
11. Shock loading is prohibited.
12. A sling shall not be pulled from under a load when the load is resting on the sling.

Inspections - Each day before being used, the sling and all fastenings and attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections shall be performed during sling use where service conditions warrant. Damaged or defective slings shall be immediately removed from service.

REMOVAL CRITERIA

Wire Rope Slings (ASME B30.9) - A wire rope sling shall be removed from service if conditions such as the following are present:

1. Missing or illegible sling identification.
2. Broken Wires:
 - *For strand-laid and single-part slings, ten randomly distributed broken wires in one rope lay, or
 - five broken wires in one stand in one rope lay.
 - *For cable-laid slings, 20 broken wires per lay.
 - *For six-part braided slings, 20 broken wires per braid
 - *For eight-part braided slings, 40 broken wires per braid.
3. Severe localized abrasion or scraping.
4. Kinking, crushing, bird caging, or any other damage resulting in damage to the rope structure.
5. Evidence of heat damage
6. End attachments that are cracked, deformed, or worn to the extent that the strength of the sling is substantially affected.
7. Severe corrosion of the rope, end attachments, or fittings.
8. For hooks, removal criteria at stated in ASME B30.10.
9. Other conditions, including visible damage, that cause doubt as to the continued use of the sling.