



405-235-0882

## **ASME B30.9**

### **★ SLING INSPECTION & REMOVAL CRITERIA**

#### **★ WIRE ROPE SLINGS**

Wire Rope Slings shall be removed from service if any of the following conditions are present:

1. Missing or illegible sling identification.
2. Broken Wires:
  - \*For strand-laid and single-part slings, 10 randomly distributed broken wires in one rope lay, or 5 broken wires in one strand in one rope lay.
  - \*For cable-laid slings, 20 broken wires per lay.
  - \*For less than eight-part braided slings, 20 broken wires per braid.
  - \*For eight-part or more than eight 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 as stated in ASME B30.10.
9. For rigging hardware, removal criteria as stated in ASME B30.26
10. Other conditions, including visible damage, that cause doubt as to the continued use of the sling.

#### **★ SYNTHETIC FLAT WEB SLINGS**

Synthetic Web Slings shall be removed from service if any of the following conditions exist:

1. Missing or illegible sling identification.
2. Acid or caustic burns.
3. Melting or charring of any part of the sling.
4. Holes, tears, cuts, or snags.
5. Broken or worn stitching in load bearing splices.
6. Excessive abrasive wear.
7. Knots in any part of the sling.
8. Discoloration & brittle or stiff areas on any part of the sling, may mean chemical or ultraviolet/sunlight damage.
9. Fittings that are pitted, corroded, cracked, bent, twisted, gouged, or broken.
10. For hooks, removal criteria as stated in ASME B30.10.
11. For rigging hardware, removal criteria as stated in ASME B30.26
12. Other conditions, including visible damage, that cause doubt as to the continued use of the sling.



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## ★ **POLYESTER ROUNDSLINGS**

Roundslings shall be removed from service if any of the following conditions exist:

1. Missing or illegible sling identification.
2. Acid or caustic burns.
3. Evidence of heat damage.
4. Holes, tears, cuts, abrasive wear, or snags that expose the core yarns.
5. Broken or damaged core yarns.
6. Weld splatter that exposes core yarns.
7. Knots in the roundslings, except for termination points of core yarns inside the cover.
8. Fittings that are pitted, corroded, cracked, bent, twisted, gouged, or broken.
9. For hooks, removal criteria as stated in ASME B30.10.
10. For rigging hardware, removal criteria as stated in ASME B30.26.
11. Any other condition that may cause doubt as to the continued use of the sling.

## ★ **ALLOY STEEL CHAIN SLINGS**

Alloy Steel Chain Slings shall be removed from service if any of the following conditions are present:

1. Missing or illegible sling identification.
2. Cracks or breaks
3. Excessive wear, nicks, or gouges.
4. Stretched chain links or components
5. Bent, twisted, or deformed chain links or components.
6. Evidence of heat damage.
7. Excessive pitting or corrosion.
8. Lack of ability of chain or components to hinge (articulate) freely.
9. Weld splatter.
10. For hooks, removal criteria as stated in **ASME B30.10**
11. For rigging hardware, removal criteria as stated in **ASME B30.26**
12. Other conditions, including visible damage, that cause doubt as to the continued use of the sling.



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## ★ **WIRE MESH SLINGS**

Wire Mesh Slings shall be removed from service if any of the following conditions are present:

1. Missing or illegible sling identification.
2. Broken weld or a broken brazed joint along the sling edge
3. Broken wire in any part of the mesh.
4. Reduction in wire diameter of 25% due to abrasion or 15% due to corrosion.
5. Lack of flexibility due to distortion of the mesh.
6. Distortion of the choker fitting so the depth of the slot is increased by more than 10%
7. Distortion of either end fitting so the width of the eye opening is decreased by more than 10%
8. A 15% reduction of the original cross-sectional area of any point around the hook opening of the end fitting.
9. Visible distortion of either end fitting out of its plane.
10. Cracked end fitting.
11. Slings in which the spirals are locked or without free articulation shall not be used.
12. Fitting that are pitted, corroded, cracked, bent, twisted, gouged, or broken.
13. Other conditions, including visible damage, that cause doubt as to the continued use of the sling.