

INSPECTION REQUIREMENTS AND OSHA REMOVAL FROM SERVICE CRITERIA

Polyester Round Slings (ASME B30.9) - A synthetic round sling shall be removed from service if conditions such as the following are present:

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. Round slings that are knotted.
8. Discoloration and brittle or stiff areas on any part of the slings, which may mean chemical or ultraviolet/sunlight damage.
9. Fitting that are pitted, corroded, cracked, bent twisted, gouged, or broken.
10. For hooks, removal criteria as stated in **ASME B30.10**
11. Other conditions, including visible damage, that cause doubt as to the continued use of the sling.

OSHA 1910.184

Synthetic web slings --

1910.184(i)(1)

Sling identification. Each sling shall be marked or coded to show the rated capacities for each type of hitch and type of synthetic web material.

1910.184(i)(2)

Webbing. Synthetic webbing shall be of uniform thickness and width and selvage edges shall not be split from the webbing's width.

1910.184(i)(3)

Fittings. Fittings shall be:

1910.184(i)(3)(i)

Of a minimum breaking strength equal to that of the sling; and

1910.184(i)(3)(ii)

Free of all sharp edges that could in any way damage the webbing.

1910.184(i)(4)

Attachment of end fittings to webbing and formation of eyes. Stitching shall be the only method used to attach end fittings to webbing and to form eyes. The thread shall be in an even pattern and contain a sufficient number of stitches to develop the full breaking strength of the sling.

1910.184(i)(5)

[Reserved]

1910.184(i)(6)

Environmental conditions. When synthetic web slings are used, the following precautions shall be taken:

1910.184(i)(6)(i)

Nylon web slings shall not be used where fumes, vapors, sprays, mists or liquids of acids or phenolics are present.

1910.184(i)(6)(ii)

Polyester and polypropylene web slings shall not be used where fumes, vapors, sprays, mists or liquids of caustics are present.

1910.184(i)(6)(iii)

Web slings with aluminum fittings shall not be used where fumes, vapors, sprays, mists or liquids of caustics are present.

FIGURE N-184-6 Basic Synthetic Web Sling Constructions (For Figure N-184-6, [Click Here](#))

1910.184(i)(7)

Safe operating temperatures. Synthetic web slings of polyester and nylon shall not be used at temperatures in excess of 180 deg. F. Polypropylene web slings shall not be used at temperatures in excess of 200 deg. F.

1910.184(i)(8)

Repairs.

1910.184(i)(8)(i)

Synthetic web slings which are repaired shall not be used unless repaired by a sling manufacturer or an equivalent entity.

1910.184(i)(8)(ii)

Each repaired sling shall be proof tested by the manufacturer or equivalent entity to twice the rated capacity prior to its return to service. The employer shall retain a certificate of the proof test and make it available for examination.

1910.184(i)(8)(iii)

Slings, including webbing and fittings, which have been repaired in a temporary manner shall not be used.

1910.184(i)(9)

Removal from service. Synthetic web slings shall be immediately removed from service if any of the following conditions are present:

1910.184(i)(9)(i)

Acid or caustic burns;

1910.184(i)(9)(ii)

Melting or charring of any part of the sling surface;

1910.184(i)(9)(iii)

Snags, punctures, tears or cuts;

1910.184(i)(9)(iv)

Broken or worn stitches; or

1910.184(i)(9)(v)

Distortion of fittings.

[40 FR 27369, June 27, 1975, as amended at 40 FR 31598, July 28, 1975; 41 FR 13353, Mar. 30, 1976; 58 FR 35309, June 30, 1993; 61 FR 9227, March 7, 1996; 76 FR 36607, June

8, 2011]

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