REMOVAL CRITERIA & WARNINGS

ALLOY CHAIN MESH SLINGS -A sling shall be removed from service if any of the following are visible on chain, components, fittings or attachments:

1. Missing or illegible sling identification.
2. Cracks or breaks.
3. Excessive wear, nicks, or gouges.
4. 10 broken wires in one rope lay.
5. Stretched chain links or components.
6. Bent, twisted, of deformed chain links or components.
7. Evidence or heat damage. (Max temperature of 400° F)
8. Excessive pitting or corrosion.
9. Lack of ability of chain or components to hinge (articulate) freely.
10. Weld splatter.
11. Missing parts of chain or components
12. For rigging hardware, removal criteria as stated in ASME B30.26
13. Other conditions, including visible damage, that may cause doubt as to the continued use of the sling.

ENVIRONMENTAL EFFECTS

• Excessive high or low temperatures or exposure to chemically active environments such as acid or corrosive liquids or fumes can reduce the performance of the chain and components.

• Extreme temperature will reduce the performance of alloy chain mesh slings.

• Temperature range of chain, components, end fittings and wire rope is –20°F to 400°F (-20°C to 204°C).

• Wear on chain, components and fittings not to exceed 10% reduction of original cross-sectional area of metal at any point of either.

• Chemically active environments can have detrimental affects on the performance of chain and wire rope. The effects can be both visible loss of material and undetectable material degradation causing significant loss of strength.

OPERATING PRACTICES

- **When using alloy chain mesh slings in choker applications, the Working Load Limit is based on a choke angle greater than 120 degrees (see Figure 1). Consult the manufacturer when planning to use an angle of choke less than 120 degrees. The sling end fittings should not be pinned between the sling and the load.**

- **When using chain slings in basket applications where the D/d (see figure 2) is less than 6, the rated load must be reduced by the values given in Table 1.**

- **Chain Mesh working load limit shall be reduced in accordance with TABLE 5 when chain mesh is rigged over an edge (R) less than two (2) x the chain rod diameter (d)**

- **The load must be evenly distributed across all parts of chain. Failure to do so may cause individual parts of chain to overload resulting in failure of the sling.**

REMOVAL CRITERIA & WARNINGS

WARNING: The reductions below and contained in this document does not eliminate the need to protect slings against damage caused by contact with edges, corners, or protrusions.

Figure 1

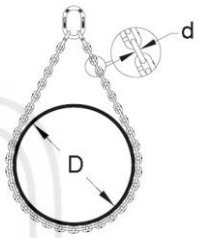
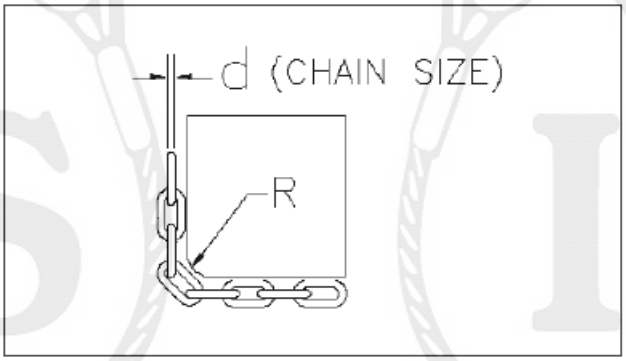


Figure 2

Table 1 Use of Chain with Diameter of Curvature Less Than 6	
D/d	Reduction of Basket Hitch Rated Load
2	40%
3	30%
4	20%
5	10%
6 and above	none

WARNING: Do no use a chain mesh sling with a D/d that is less than two.

TABLE 5 GR80 AND GR100



Edge Radius	R > 2 x Chain d	R > Chain d	R < Chain d
Reduction Factor	1.0	0.7	0.5

For additional information, please refer to the OSHA and ASME standards as they may apply. It is not intended, nor should it be construed, that the information contained herein takes precedence over any regulations and requirements, local, state, federal, OEM or any other ruling body.

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