

Regarding Slings:

The Working Load Limit of a sling or assembly must not exceed the lowest Working Load Limit of the components in the sling or assembly. Use only Peerless Industrial Group approved parts as replacements when servicing or repairing original Peerless Industrial Group slings or assemblies.

USE ONLY GRADE 80 OR GRADE 100 ALLOY CHAIN AND ATTACHMENTS FOR OVERHEAD LIFTING

Please refer to the Overhead Lifting section for more information regarding alloy chain Working Load Limits in relation to the angle of lift.

For more comprehensive use and safety information regarding Chain Slings, please see the Peerless Chain Sling User's Manual publication 10.20.

Sling Angle Factor Chart	
Sling (Horizontal) Angle	Load Angle Factor
90	1.000
85	1.004
80	1.015
75	1.035
70	1.064
65	1.104
60	1.155
55	1.211
50	1.305
45	1.414
40	1.555
35	1.742
30	2.000
25	2.364
20	2.924
15	3.861
10	5.747
5	11.490

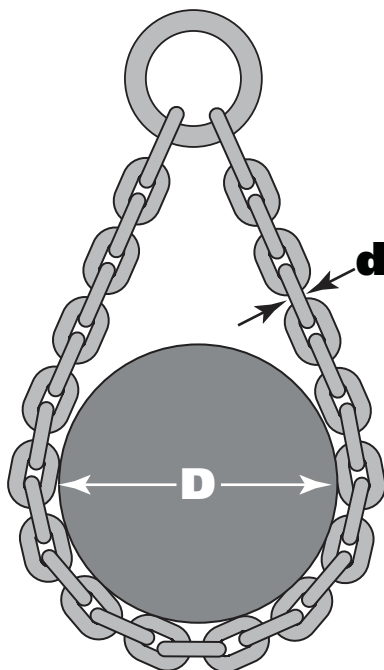
Sling Angles

60° provides excellent load control with minimal mechanical force applied to sling. Use caution over 60° as the load can become unstable with multiple slings depending on load and hitch.

Most desirable Angles are **90°, 60°, 45°** and **30°**. Use caution with all other angles.

AVOID RIGGING TO ANGLES LESS THAN 30°

- Determine sling angle
- Locate angle on chart
- Use corresponding Angle Factor
- Multiply Angle Factor by weight carried in leg
- Never go below 30° angle



D/d De-rating Recommendations of Basket Hitch according to NACM

Slings & D/d Ratio – Alloy Chain Slings

D/d ratio is the diameter of curvature around which a sling is bent affecting its capacity. The upper case 'D' refers to the diameter of the object to which the sling hitch is applied, and the lower case 'd' represents the diameter of the chain link of the sling. **MUST BE EQUAL TO 6 OR GREATER TO MAINTAIN 100% EFFICIENCY.**

Alloy Chain D/d Ratio Efficiency	
D/d Ratio	% of Rated Capacity
6:1 and Greater	100%
5:1	90%
4:1	80%
3:1	70%
2:1	60%
LESS THAN 2:1	NOT RECOMMENDED

Per NACM & OSHA 1910.184 Recommendations

Chain & Sling Guidelines

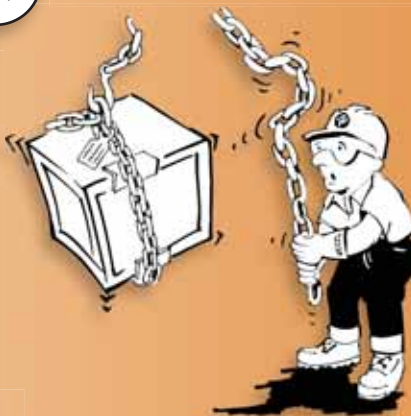
Check #1 Inspections

Visually examine chain slings daily and before each use. Inspect for removal criteria such as missing or illegible ID Tag, stretched, bent, or worn links, gouges, weld splatter, corrosion, or other damage. All sling attachments including master links, connecting links, and hooks must also be examined for open throats, twists, cracks or distortion, or other damage.



Check #2 Balance

Know the load — determine the weight, center of gravity, angle of lift and select the proper size of sling.



Check #6 Abrupt Movement

Lift and lower loads smoothly. Do not jerk. Shock loading is prohibited!



Check #3 Overload

Never overload the sling — check the working load limit on the identification tag. Always consider the effect of Angle of Lift — the tension on each leg of the sling is increased as the angle of lift, from horizontal, decreases. Use the chart in this catalog or in the Peerless Chain Sling User's Manual for this purpose.

Check #4 Knots, Twists & Kinks

Make sure chain is not twisted, knotted or kinked before lifting load. Slings shall not be shortened with knots, bolts or other make-shift devices.



Check #7 Temperature Effects

Use alloy chain slings within a temperature range of -40°F (-40°C) and 400°F (204°C). Do not expose slings to temperatures that exceed this range.



Check #8 Chain Care

Store chain slings properly off the floor to protect from corrosion during storage. Do not drag chain slings across the floor. Peerless recommends applying a lubricant or light oil to protect chains from environmental corrosion.

