

# WARNING

Failure to comply with this warning may result in sling failure and severe personal injury or death.

## Inspection, Care and Use of Synthetic Polyester Roundslings

### Removal From Service

A roundsling shall be removed from service if any of the following are visible.

1. Holes, tears, cuts, snags, embedded particles or abrasive wear that expose the core fibers.
2. If roundsling rated capacity tag is missing or not readable.
3. If roundsling has been tied into one or more knots.
4. Melting, charring or weld spatter of any part of the roundsling.
5. Acid or alkali burns of the roundsling.
6. Broken or worn stitching in the cover that exposes the core fibers.
7. Distortion, excessive pitting, corrosion or other damage to fitting(s).
8. Any conditions which cause doubt as to the strength of the roundsling.

### Operation Practices

1. ROUNDSLINGS SHALL ALWAYS BE PROTECTED FROM BEING CUT OR DAMAGED BY CORNERS, EDGES OR PROTRUSIONS.
2. Roundslings should be protected from abrasive surfaces.
3. Determine the weight of the load. Roundslings shall not be loaded in excess of the rated capacity. Consideration shall be given to the roundsling angle, which affects rated capacity. (See Sling Angle Chart).
4. Select roundslings having suitable characteristics for type of load, hitch and environment.
5. Roundslings with fittings which are used in a choker hitch shall be of sufficient length to assure that the choking action is on the roundsling and never on a fitting.
6. Roundslings used in a basket hitch shall have the load balanced to prevent slippage.
7. The opening in fittings shall be the proper shape and size to insure that the fitting will seat properly in the hook or other attachments.
8. Roundslings should not be dragged on the floor or over an abrasive surface.
9. Roundslings shall not be twisted, shortened, lengthened or tied into knots, or joined by knotting.
10. Roundslings should not be pulled from under loads if the load is resting on the roundsling.
11. Roundslings equipped with metal fittings should not be dropped.
12. Roundslings that appear to be damaged shall not be used unless inspected and accepted by a designated person.
13. Roundslings shall be hitched in a manner providing control of the load.
14. Personnel, including portions of the human body, shall be kept from between the roundsling and the load, and from between the roundsling and the crane hook or hoist hook.
15. Personnel shall not stand under and should stand clear of the suspended load.
16. Personnel shall not ride the roundsling.
17. Shock loading shall be avoided.
18. Twisting and kinking the legs shall be avoided.
19. Load applied to the hook shall be centered in the base (bowl) of hook to prevent point loading on the hook.
20. During lifting, with or without the load, personnel shall be alert for possible snagging of the roundsling.
21. The roundsling's legs shall contain or support the load from the sides above the center of gravity when using a basket hitch.
22. Roundslings shall be long enough so that the rated capacity of the roundsling is adequate when the angle of the legs is taken into consideration. (See Sling Angle Chart)

23. If applicable, place blocks under load prior to setting down the load to allow removal of the roundsling.
24. Roundslings shall not be used at temperatures above 194 degrees F (90 degrees C).
25. Roundslings shall not be constricted or bunched between the ears of a clevis, shackle, or in a hook.
26. When a roundsling is used with a shackle, it is recommended that it be used (rigged) in the bow of the shackle.
27. Store roundslings in a cool, dry and dark place when not in use.

## Inspection

### A. Initial Inspection

Before any new or repaired roundsling is placed in service, it shall be inspected by a designated person to ensure that the correct roundsling is being used, as well as to determine that the roundsling meets applicable specifications and has not been damaged in shipment.

### B. Frequent Inspection

This inspection shall be made by the user handling the roundsling each time it is used.

### C. Periodic Inspection

This inspection shall be conducted by designated personnel. Frequency of inspection should be based on:

1. Frequency of roundsling use
2. Severity of service conditions
3. Experience gained on the service life of roundslings used in similar applications
4. Periodic inspections should be conducted at least annually

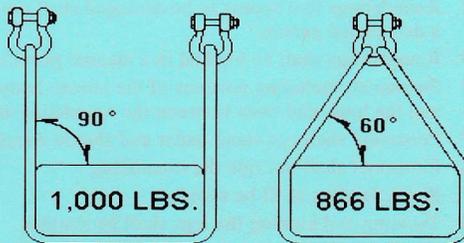
### Recommended Minimum Connecting Hardware Diameter

Sling Size Vertical Capacity Lbs.	Vertical Hitch		Basket Hitch		Sling Size Vertical Capacity Lbs.	Vertical Hitch		Basket Hitch	
	In.	mm	In.	mm		In.	mm	In.	mm
2,600	.50	13	.62	16	25,000	1.25	32	1.88	48
5,300	.62	16	.88	23	31,000	1.50	39	2.00	51
8,400	.75	19	1.00	26	40,000	1.62	42	2.38	61
10,600	.88	23	1.25	32	53,000	1.88	48	2.75	70
13,200	1.00	26	1.38	35	66,000	2.12	54	3.00	77
16,800	1.12	29	1.62	42	90,000	2.50	64	3.50	89
21,200	1.25	32	1.75	45					

### Sling Angle

When slings are used at an angle, sling capacity is reduced. Multiply the Sling Capacity by the Factor below (for the angle used) to determine the reduced rating.

Angle	Factor	Angle	Factor
90°	1.00	55°	.819
85°	.996	50°	.766
80°	.985	45°	.707
75°	.966	40°	.643
70°	.940	35°	.574
65°	.906	30°	.500
60°	.866		



Sling capacity decreases as the angle decreases. A sling capable of lifting 1,000 lbs. in a 90° vertical basket hitch can only lift 866 lbs. at a 60° angle lift.

Additional requirements and safe operating practices may be outlined in the WSTDA-RS-1 Polyester Roundsling Standard, OSHA and ANSI/ASME B30.9, and/or other regulations as applicable.

