Twin-Path® Sling Safety Information





WARNING To The Users of Twin-Path® Slings



The AWARNING Icon, used in our product information is done to alert sling users to potentially hazardous conditions and situations.

AWARNING It is your explicit responsibility to consider all risk factors prior to using any rigging device or product. Read and understand the information contained in this bulletin, in our catalog, on our website www.lift-it.com and follow OSHA and ASME guidelines. Use by untrained persons is hazardous.

The American Society of Mechanical Engineers, in the ASME B30.9 Sling Safety Standard, clearly establishes the requirement for training. Section 9-6.1-Training states, "Roundsling users shall be trained in the selection, inspection, cautions to personnel, effects of the environment and rigging practices, covered by this chapter."

AWARNING All Products provided by Lift-It® Manufacturing Co. Inc. are sold with the express understanding that the purchaser and user are thoroughly familiar with the safe and proper use and application of the product. The user has the responsibility for proper use and application as outlined in all applicable standards and regulations. Use by untrained persons is hazardous. It is important that all sling and rigging users be thoroughly familiar with the manufacturer's recommendations and safety information that accompany the products. The user must have sufficient training and knowledge of all applicable standards to responsibly use our products. If you are unsure whether you are properly trained and knowledgeable or if you are unsure of what the standards and regulations require of you, ask your employer for information and/or training. DO NOT use any sling or rigging device until you are absolutely sure of what you are doing. Remember, when it comes to using slings and rigging devices, lack of skill, knowledge and care can result in severe INJURY or DEATH to you and others.

AWARNING Failure to follow proper use, care and inspection criteria could result in severe personal injury or death. Slings and rigging products will fail if damaged, abused, misused, overused or improperly maintained.

Any hazardous condition disclosed by an inspection shall require sling replacement. Temporary repairs are not permitted.

Damage and wear seriously reduce sling Work Load Limits.

Always know the load weight and select the appropriate sling for the load, configuration of lift necessary to ensure load control and any chemical exposure. Always take into account sling angles to calculate changes in the sling Work Load Limits, when used in choker and non-perpendicular vertical, basket or bridle configurations.

Ensure that the load will not cut the sling during the lift by padding corners, edges, protrusions or abrasive surfaces with suitable materials of sufficient strength, thickness and construction.

The strength of Twin-Path® can be affected by chemically active environments. Sling materials may be susceptible to damage from caustic or acid substances or fumes. Strong oxidizing environments attack all common sling materials and components. Consult the manufacturer prior to selection and use.

Slings can fail if damaged, misused, or overloaded. Inspect before use. Use only if trained. Observe rated load. Use adequate sling protection to avoid damage to sling. DEATH or INJURY can occur from improper use or care. Avoid exposure to acid, alkali, sunlight and temperatures over 180° F. Use adequate protection of sufficient strength, thickness and construction to prevent sling damage.

Twin-Path® Inspection



TATTLE TAILS: Twin-Path® Slings have been extensively used and tested in all possible hitch configurations. In normal use, tattle tails perform as expected. When slings are used as load manipulators, i.e., used to turn or rotate loads, tattle tales will malfunction. The malfunction results from the difference in the external friction between the sling cover material and the manipulated object and the internal friction between the Core Yarns and sling cover material. Simply stated, the sling cover renders to the load, while the load carrying yarns rotate within the sling cover.

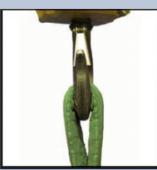
LOAD MANIPULATION: When Twin-Path® Slings are used to change the orientation of an object, from a vertical to horizontal attitude, or vice versa, the cross over point on the sling paths, becomes a "hinge" point. Even Covermax® covers will become damaged at the "hinge" point. If Core Yarns become visible, do not use the sling. Remove it from service for repair evaluation.

PATH ORIENTATION: Twin-Path® Slings feature two paths that must be kept side by side. Folding one path on top of the other produces differential path lengths. The top path will see more tension than the lower path. In this scenario, sling Work Load Limits are reduced by 50%. It is also extremely important to load both paths of Twin-Path® Slings equally. Do not side load or edge load Twin-Path® Slings.

AWARNING Never use Twin-Path® Adjustable Bridles when the horizontal angle is less than 45 degrees for the double leg. Always connect above the center of gravity. If connections are made below the center of gravity, the load may turn when lifted.



Keep folds and wrinkles off the hook, hardware and/or load.



Milk folds and wrinkles out of the cover.



Do NOT fold one path over the other path to make the sling "fit".



Squeeze both paths together to fit the sling into hooks and fittings.



When rigging a basket hitch, DO NOT pull slack out of the hitch with the crane.



Sling users must take the slack out, before use.



DO NOT allow the sling to rollover itself and twist at the bite of the choker hitch.



Squeeze both paths together to fit the sling into hooks and fittings.



DO NOT place the sling tag in the hook, shackle or connection hardware.



The sling tag should be placed 18-24 inches away from connection hardware.



When placing multiple Twin-Path slings in hardware, place slings directly on top of each other or side by side. Do not stair-step paths partially over each other.

Twin-Path® Inspection



AWARNING If any damage such as the following is visible, the sling shall be removed from service immediately. Photos depict examples of sling damage, but note they are extreme examples provided for illustration purposes only.



ACID OR CAUSTIC BURNS



CUT OR DAMAGED YARNS



BUNCHED OR WADDED YARNS



MELTING OR CHARRING



MISSING OR ILLEGIBLE TAG



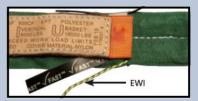
FIBER OPTIC
(Lack of light transfer—Sling Fails)



DISTORTED HARDWARE



KNOTS



EXTERNAL WARNING INDICATOR

✓ CHECK FAST® EWI PRESENT

(Sling passes ✓ Check Fast® Criteria)



YARN VISIBILITY



BROKEN STITCHES



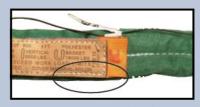
EWI MISSING (Sling fails ✓ Check Fast® Criteria)



EMBEDDED MATERIALS



SNAGS / PUNCTURES



TATTLE TAIL MISSING (Sling fails)

Twin-Path® Inspection



✓ CHECK-FAST® EWI PRESENT (Sling passes inspection)



✓ CHECK-FAST® EWI MISSING (Sling fails inspection)



TATTLE TAILS PRESENT (Sling passes inspection)



TATTLE TAIL MISSING (Sling fails inspection)



FIBER OPTIC-Transfers Light (Sling passes inspection)



FIBER OPTIC-No Light Transfer (Sling fails inspection)



Twin-Path® slings must be inspected thoroughly for damage. Visual, Tactile and patented inspection systems such as Check-Fast®, Fiber Optics and Tattle Tails will assist inspectors in determining sling condition. Twin-Path® slings shall be removed from service for an evaluation by the manufacturer if any of the following conditions are detected:

- 1. Check-Fast® External Warning Indicator (EWI) and Tattle Tail indicators shall extend past the sling tag area. If slings are equipped with Check-Fast® and the EWI is not visible or both Tattle Tails are not visible, remove the sling from service and return to the manufacturer for repair evaluation.
- 2. If slings are equipped with the Fiber-Optic Inspection option, inspect by allowing light to enter the fiber optics. If the fiber optic cable does not transmit light from end to end, remove the sling from service and return for repair evaluation.
- 3. If sling tags are missing or illegible, slings shall not be used and be returned for repair evaluation.
- 4. Inspect slings for evidence of heat damage, i.e., melting, charring or weld spatter. Twin-Path slings with K-Spec® and polyester core yarn shall not be exposed to temperatures above 180°F/82°C or below. Sparkeater® Slings shall not be exposed to temperatures over 300°F/149°C or below -40°F/-40°C. 5. If any part of the sling is stiff or brittle, indicating heat or chemical damage, remove the sling from service. Return the sling to the manufacturer for repair evaluation.
- 5. If any part of the sling is stiff or brittle, indicating heat or chemical damage, remove the sling from service. Return the sling to the manufacturer for repair evaluation.
- 6. Slings shall be examined throughout their length for damage such as: holes, tears, cuts, embedded materials, abrasive wear or snags that expose the core yarn. If damage is detected, slings shall be removed from service for repair evaluation.
- 7. Damage to the cover may indicate a loss of core yarn strength. Slings with serious cover damage shall not be used until evaluated by the manufacturer.
- 8. If core yarns are broken, cut or damaged, slings must be removed from service. If broken stitching in the cover exposes core yarn, slings must be removed from service for repair evaluation.
- Twin-Path® slings and attached fittings shall be regularly inspected. In addition to the initial inspection and periodic inspections done by designated, competent inspectors, slings shall be visually inspected before use.
- 10. Fittings determined to be elongated, damaged, corroded or not AMSE B30.10 and/or ASME B30.26 compliant shall be removed from service for repair evaluation.
- 11. Slings that are tied in knots or joined by knotting.
- 12. Inspections shall be performed as required by competent persons and inspection documentation shall be maintained. Inspections may be done more often based on: frequency of use, severity of conditions or experience gained on the service life of slings used in similar circumstances. Periodic inspection intervals must not exceed 1 Year.
- 13. Slings removed from service that are not repairable shall be destroyed and rendered completely unfit for any future use.

▲ WARNING To The Users of Twin-Path® Slings

Slings can fail if damaged, misused, or overloaded. Inspect before use. Damaged slings shall not be used. Do Not Exceed Rated Capacity. Protect sling from being cut by load edges, protrusions, corners and abrasive surfaces. Avoid exposure to damaging chemicals and temperatures over 180 degrees (F). DEATH or INJURY can occur from improper use or maintenance.