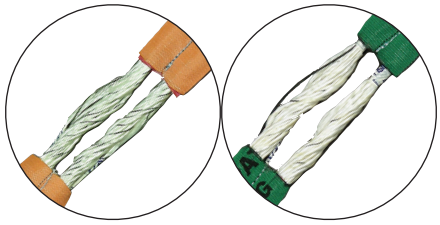
Twin-Path® Features

TWIN-PATH® STANDARD FEATURES

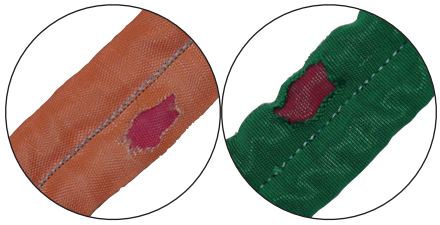
PATENTED BACK-UP PROTECTION

Twin-Path® Slings are actually two complete yet separate Slings in one. Each path accounts for 50% of the total Sling Work Load and makes its own separate connection between the hook and the load. Twin-Path® Slings provide Sling users and inspectors redundant, back up protection.



EASY INSPECTION

Twin-Path® Slings provide Sling users and inspectors with an early warning inspection system. The Core Yarn is encapsulated by Covermax® or Polyester Covers and does not contact the load. Cornermax® is made from a double layer industrial nylon material. If you see the inner, red cover, or the Roundsling Cover is damaged remove the Sling from service and return it to an approved manufacturer for repair evaluation.

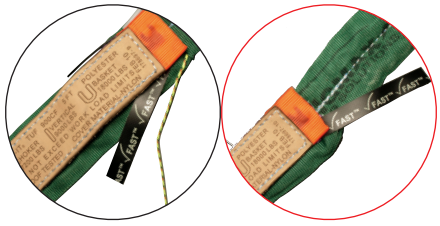


CHECK-FAST® INSPECTION SYSTEM

Check-Fast® Inspection may provide users and inspectors a pass/fail inspection system for evaluating Core Yarn condition. Damage to core yarn from fiber on fiber abrasion, UV degradation and severe overload may be detected. If a severe overload beyond proof test capacity occurs, the Check-Fast® External Warning Indicator (EWI) will disappear before the Sling fails. Slings with the Check-Fast® inspection system include an additional label identifying the Sling as being equipped with Check-Fast® EWI. Sling users and inspectors now have an objective pass/fail inspection system.

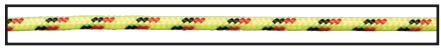
The Check-Fast® Inspection System combined with both a thorough visual and a hand over hand inspection provides improved job site safety. Specify Check-Fast® by adding CF to the stock number, i.e., TUFXKS 4000 CF.

US Patent No. 7,661,737



EWI PRESENT
PASS

EWI MISSING
FAIL



EWI External Warning Indicator

TWIN-PATH® OPTIONAL FEATURES

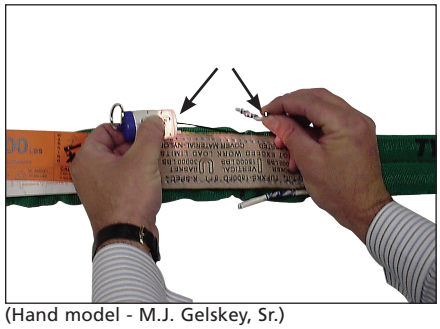
FIBER-OPTIC INSPECTION SYSTEM (Not standard)

When equipped, the Fiber Optic Inspection system may assist sling users and inspectors in evaluating the condition of the Core Yarns. If Core Yarn has suffered chemical, heat or crushing damage, fiber optic cables may lose the ability to transmit light from one end to the other.

Lack of light conductivity gives the inspector a reason to remove the Sling from service and return it for repair evaluation.

Fiber Optic cables will conduct light from overhead sources or flashlights. The inspector simply covers and removes a finger from one cable end and watches the other cable end for blinking, indicating conductivity.

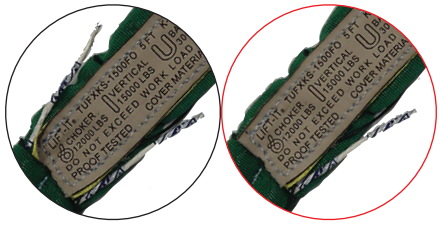
Fiber-Optic Cable



(Hand model - M.J. Gelskey, Sr.)

TATTLE TAILS
(Non Check-Fast® equipped Slings)

Before each use, inspect the entire Sling, including Tattle Tails. Tattle Tails are not a precision force measurement device. Tattle Tails are an extension of the Core Yarns. Tattle Tails will retract and eventually disappear as the Sling is severely overloaded. Tattle Tails must extend past the tag area of the Sling. Both Tattle Tails must be visible; if not, remove the Sling from service for repair evaluation. If Tattle Tails or any part of the Sling shows evidence of chemical degradation, remove it from service for repair evaluation.



TAILS PRESENT
PASS

TAIL MISSING
FAIL

Twin Path® Considerations

TREMENDOUS SAVINGS: Time is money and the ease of handling ultra-light, Twin-Path® Extra Slings adds up to substantial, cumulative savings. TUFXKS 7000 x 35 ft. weighs a mere 49 Lbs. and is rated at 140,000 Lbs. Basket WLL. A Wire Rope Sling of equal length and strength weighs 588 Lbs. Extra cranes, forklifts, transport vehicles and personnel are no longer required for Twin-Path® Extra Slings. They have documented savings and prove to be the least expensive Sling you will buy and use.

USER FRIENDLY: Twin-Path® Extra Slings are easy to handle and will not "choke lock", inhibiting Sling removal from the load. Lightweight, Twin-Path® Extra Slings help eliminate typical and prevalent back, hand, foot and head injuries when using heavy, awkward, cumbersome Wire Rope and Alloy Steel Chain Slings.

LOAD FRIENDLY: Twin-Path® Slings provide load protection and will not mar, scratch or deface the most delicate metallic surface. Twin-Path® Slings are equally gentle on non-metallic loads.

LOW ELONGATION: A Twin-Path® Extra Sling (TUFXKS 11000 x 328 in.), with High Performance, K-Spec® Core Yarn was vertically proof tested to 220,000 Lbs. After ten minutes, total elongation of 2 inches was recorded. Low elongation helps to extend Sling longevity as scraping over load surfaces is minimized.

PULLING AND TOWING: Destruction testing demonstrates that Twin-Path® Extra Slings, featuring K-Spec® Core Yarn recoil very little at break. High modulus, low stretch materials eliminate most of the devastating whiplash effects, characteristic of Alloy Steel Chain, Wire Rope, Nylon and Polyester Slings.

⚠ WARNING

NEVER STAND UNDER, ON, NEAR or IN LINE WITH A SLING or VEHICLE RECOVERY STRAP UNDER TENSION.
NEVER USE A SLING FOR LIFTING AFTER USE FOR A RECOVERY OPERATION.
NEVER USE A RECOVERY STRAP FOR LIFTING OR LOAD HANDLING.

ABRASION RESISTANCE: Twin-Path® Slings feature polyester or Covermax® Covers. Seamless, Covermax® Covers are specifically woven to provide abrasion resistance and are approximately four times more abrasion resistant than polyester covers.

MATCHED SLING LENGTHS: Twin-Path® Extra Slings are made to matched lengths on a consistent basis. The accuracy of Twin-Path® Extra Slings is unparalleled.

SPACE SAVER: Storage problems are easily resolved as Twin-Path® Extra Slings require substantially less space than bulky, cumbersome Wire Rope and Alloy Steel Chain Slings.

ENVIRONMENTALLY SENSITIVE: Twin-Path® Slings do not require lubrication and will not corrode, thereby eliminating the harmful release of chemical agents or by-products. Twin-Path® Slings with Covermax® Roundsling Covers are more resistant to UV degradation than unprotected Slings or Slings equipped with covers that are not genuine Covermax® Covers. Twin-Path® Slings do not lose strength when wet.

CYCLIC TESTING: Repeated, vertical, fatigue testing was performed on Twin-Path® Extra Slings with K-Spec® Core Yarn. After 50,000 cycles to 150% Work Load, the independent test facility confirmed an 85% retention of the original Sling strength. Twin-Path® Extra Slings with Covermax® Covers will outlast and outperform Wire Rope Slings.

REPAIRABILITY: The abrasion resistance of Covermax® Covers facilitates repair to Twin-Path® Slings, when Core Yarns are not damaged. Slings that appeared to be extremely distressed have been successfully repaired for a fraction of the original price. Trained, factory professionals carefully inspect every area of damage. If Core Yarns are undamaged, Roundsling covers are repaired and the Sling is proof tested to 200% of the Work Load Limit. When abrasion resistance and longevity are considerations and when only the best is good enough, choose Twin-Path® Extra Slings with Covermax® Covers.

EXPOSURE TEMPERATURES: Twin-Path® Slings should not be exposed to temperatures above 180˚F (82˚C) or below -40˚F (-40˚C). Twin-Path® Sparkeater® Slings should not be exposed to temperatures above 300˚F (149˚C) or below -40˚F (-40˚C).

COLD WEATHER EXPOSURE: Twin-Path® Extra Slings with K-Spec® Core Yarns have been used successfully in Northern Canada and Alaska for many years, without incident. The same yarn components used in K-Spec® Core Yarn are also used in deep space exploration applications with cryogenic temperatures. Twin-Path® Extra Slings with K-Spec® Core Yarn are a viable alternative for cold weather applications.

TATTLE TAILS: Twin-Path® Extra 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 Tails may 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 Yarn and Sling Cover material. Simply stated, the Sling Cover renders to the load, while the load carrying yarns rotate within the Roundsling Cover.

Twin-Path® Considerations

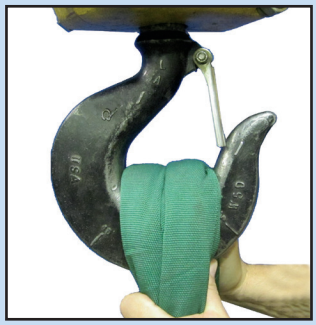
CHECK-FAST®: The Check-Fast® External Warning Indicator (EWI) must be properly placed by trained personnel. Position the EWI and the Sling Tag, away from direct contact with the Connection Points and/or load. DO NOT allow the Check-Fast® EWI to be pinched between the Sling and the Connection Points or any part of the load. DO NOT allow any object to cut, pinch, cause damage or be placed on the Check-Fast® EWI while the Twin-Path® Sling is used or in storage.

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 for both paths of Twin-Path® Slings to be loaded equally. DO NOT side load or edge load Twin-Path® Slings. When placing multiple slings into a lifting fixture, DO NOT "stair step" paths partially over each other. Place the paths directly on top of each other. Ensure the TAG PATCH portion of the sling is above the load and below the Connection Point.

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 the Connection Point.

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

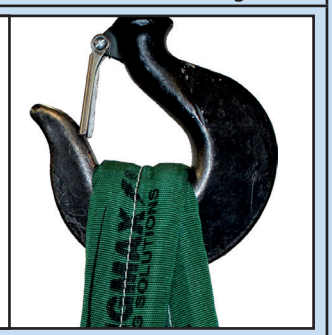
Sling users must take the slack out, before lifting and/or load handling.

DO NOT allow the Sling to roll over itself and twist at the bite of the choker hitch.

Make sure the paths of the Sling are smooth in the bite of the choker hitch without twisting.

DO NOT place the Sling Tag in the hook, shackle or Connection Point.

The Sling Tag should be placed 18-24 inches away from Connection Points.



When placing multiple Twin-Path® Slings in hardware, place the Slings directly on top of each other or side by side. DO NOT stair-step paths partially over each other.

COMPONENT HARDWARE: When synthetic Slings are used with a Shackle, it is recommended that the Slings be rigged in the bow of the Shackle and not on the pin. Shackle pins can damage synthetic Slings, resulting in Sling failure. Placing Slings on Shackle pins should be avoided, unless the Sling is protected. Component manufacturers are using stronger materials to produce smaller, stronger fittings. Twin-Path® Slings forced into a hook or improperly sized fitting may be damaged. The Sling/Fitting relationship must be proper to ensure that the Sling will seat properly for strength and longevity.

PROOF TESTING: All newly manufactured and repaired Twin-Path® Slings are proof tested. Slings are pulled to twice Work Load Limit and held for a minimum of 30 seconds. Our proof test machines are certified annually to meet or exceed ASTM-E4 or other equivalent standards.