



STERLING

UTILITY

Rope Reference Guide



Our ropes keep your critical work moving forward.



About Sterling

Sterling has been making the highest quality, most innovative life-safety static and dynamic rope and cord for decades. Our expertise extends to manufacturing high-performance industrial lifting products, including specialized heavy-duty rigging solutions rated for critical industrial applications. These precision-engineered ropes are built and tested to meet specific requirements including (but not limited to) ASME, ASTM, NFPA, ANSI, CE and others.

Custom Rope Requests

We support requests for custom lengths, diameters, terminations, coatings, inspection/documentation software (Scannable) and more. Let us help you find the right rope for your upcoming projects in crane operations, utility line stringing, telecom, offshore drilling, renewable energy and general industrial lifting.

Technical Expertise

We don't just sell rope. We offer comprehensive technical consultations to ensure we are recommending the best solutions to fit your specific need. Let us help you solve your most complex industrial rigging challenges.

Precision Engineered Solutions

We manufacture with a wide variety of raw materials to build the rope to the exact specifications you require, including HMPE, Polyester, Nylon, Technora, Polypropylene and more. Whether you're looking for specific elongation, high strength-to-weight ratio, custom terminations, abrasion, chemical or UV resistance, all products undergo testing to ensure accurate strength and superior performance. We have extensive technical specifications for each of our products to ensure the best fit for the task at hand.

TuffX-12

A 12-strand HMPE rope with supreme break strengths and very low elongation.

The TuffX-12 has the same strength and stretch properties as steel wire, but at a fraction of the weight. Ideal for utility stringing lines or industrial lifting applications. Available in diameters ranging from 3/16" to 1 1/2" at the length you require.

- High Strength and very low stretch
- Optimised Twist and Braid angles to deliver ultimate strength
- Easy to splice
- Light weight and floats on water
- Abrasion Resistant Coating
- Flexible construction
- Zero Water Absorption
- Superior UV, chemical and abrasion resistance
- Unlimited Lengths available
- Industry standard label requirements can be implemented on request (i.e ASME B30.30, ANSI, ASTM etc)
- Ideal for Utility Line Stringing, winch lines and Industrial lifting slings
- Scannable Compatibility – Unique product serialization to allow for track/trace and equipment inspections on the Scannable platform at the tap of a phone (minimums apply)



CoreX-12

A double-braid rope built to replace steel wire.

The durable polyester sheath protects the high-strength, low-elongation HMPE core. With the same strength and low stretch characteristics as steel wire but at a fraction of the weight, the CoreX-12 is ideal for use as a winch line but can be used for any lifting applications where high strength and low stretch is required. Available in diameters ranging from 3/8" up to 1 1/4" at the length you require.

- 24-Strand Double Braid
- Polyester sheath with an HMPE Core
- High strength and very low stretch comparable to steel wire at a fraction of the weight
- Excellent UV and abrasion resistance
- Optimized twist and braid angles to deliver ultimate strength
- Easy to splice
- Can be coated with Sterling's abrasion-resistant coating for increased durability
- Industry standard label requirements can be implemented on request (i.e ASME B30.30, ANSI, ASTM etc)
- Ideal for Winch lines, lifting slings and rigging lines
- Scannable Compatibility – Unique product serialization to allow for track/trace and equipment inspections on the Scannable platform at the tap of a phone (minimums apply)



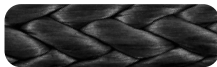
Static-12

A 12-strand polyester work horse used for line stringing, pulling lines and general rigging.

Constructed with high-tenacity Polyester, the Static-12 offers high strength, low stretch and is abrasion resistant. It's easy to splice and comes standard with Sterling's abrasion-resistant coating. Available diameters range from 5/16" to 7/8" in any length you require.

- 12-strand 100% polyester construction
- Built with high-tenacity polyester fibers
- Easy to splice
- Purpose-built for strength and durability
- Abrasion Resistant Coating included
- Industry standard label requirements can be implemented on request (i.e ASME B30.30, ANSI, ASTM etc)
- Ideal for Utility Line Stringing and general rigging
- Scannable Compatibility – Unique product serialization to allow for track/trace and equipment inspections on the Scannable platform at the tap of a phone (minimums apply)

Available colors:



Black



Green



Red



Yellow

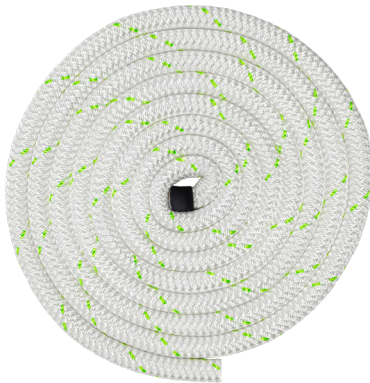


DBP Double Braid Polyester

Durable 100% polyester double braid rigging rope for general rigging and light-duty winch operations.

A versatile and durable double braid polyester (DBP) rigging rope. Perfect for general rigging and light-duty winch operations. With a snag-resistant polyester sheath, the DBP is very easy to knot and handle. Available diameters range from 3/16" up to 2" in any length you require.

- 100% Polyester double braid construction
- Durable and snag-resistant polyester sheath
- Easy to handle with good knotability
- Easy to splice
- Excellent UV and abrasion resistance
- Increase durability with Sterling's Abrasion Resistant Coating (optional)
- Industry standard label requirements can be implemented on request (i.e ASME B30.30, ANSI, ASTM etc)
- Ideal for rigging lines, winch lines and hand lines
- Scannable Compatibility – Unique product serialization to allow for track/trace and equipment inspections on the Scannable platform at the tap of a phone (minimums apply)



Kraken

A coated double-braid rigging line.

Kraken is a monster of a rigging line, ready to take on your biggest, toughest rigging jobs. At the heart of the 24-strand Kraken is a polyester core, giving it it's high strength and robust feel. The jacket is a tight braided polyester that gives Kraken amazing durability, without making it feel brittle. In fact, Kraken is quite flexible, and resists kinking, twisting and hockling. Kraken's construction makes it easy to splice, and it functions very well in standard rigging setups as well as knotless rigging setups.

- Durable yet easy to handle
- Low stretch
- 1.3% elongation at 10% WLL
- Polyurethane coated for greater abrasion resistance
- High strength-to-weight ratio
- Resists twisting and hockling
- UV & heat resistant
- Available with standard or tight eye splice
- Great for winch lines, tow lines and rigging lines

Available diameters:



1/2" Blue



9/16" Red



5/8" Yellow



3/4" Green



7/8" Orange



VerGo2

Tough rope built for smooth performance.

A 100% polyester double-braid utility rope designed for efficient hauling. The sheath construction resists snagging and runs smoothly with capstans and blocks. Comes standard with a spliced eye on each end with a protective wear pad.

- 100% Polyester Double Braid Construction
- Construction resists snagging and runs smoothly with capstans and blocks
- Available in 3 diameters – 3/8", 1/2" and 5/8"
- Available in lengths from 300' to 1200' (2400' available in 1/2" only)
- Each diameter has a different color tracer for easy identification
- Spliced Eyes at both ends with a protective wear pad
- Labeled in accordance with ASME B30.30, with product serialization
- Product is Scannable compatible – Data matrix on the label allows you to track and inspect gear
- MBS of the rope is based on the spliced termination strength – Determined in accordance with CI 1500B

Available diameters:



3/8" Orange Tracer



1/2" Blue Tracer



5/8" Yellow Tracer



Sync™

The Sync is a high strength premier static rescue rope in a 11 mm lightweight package.

The Sync offers a balanced construction in the core and sheath for increased strength and a smooth feel, ideal for raising and lowering systems. UL Certified to NFPA 2500 General Use gives rescue technicians the opportunitie to lighten their rescue systems while staying G-rated compliant.

- UL certified to NFPA 1983 General Use
- Balanced construction for high strength
- Hydrophobic high tenacity polyester sheath over a low elongation nylon core
- Available in green, blue, orange & red colors
- Made in the USA

Available colors:



Blue



Green



Orange



Red

HTP™

Ultra-low stretch that is strong and durable in all conditions.

HTP is the most sought-after static rope available. Great for rope access, industrial, tower, rescue and tactical applications. The balanced polyester construction is a solid performer and is resistant to water, chemicals, UV and abrasion.

- Ultra-low stretch
- Hydrophobic
- Durable in all conditions
- Diameters available: 9 mm, 3/8", 7/16", 1/2", 5/8"
- Lengths available: 150', 200', 300', 600', 660'
- Assorted colors available in each diameter
- 3/8" and 7/16" diameters are UL Certified to NFPA 2500 Technical
- 1/2" and 5/8" diameters are UL Certified to NFPA 2500 General
- Made in the USA

WorkPro™

These kernmantle ropes are CE certified, ultra strong and durable enough for rescue applications.

A thermodynamic-treated nylon core surrounded by a 32-carrier polyester sheath makes for balanced elongation and high strength. By sharing the load evenly, WorkPro makes a name for itself as the strongest (and hardest working) ropes in its class.

- Polyester sheath with a Nylon core
- Available diameters: 3/8", 7/16", 1/2"
- Lengths available: 150', 200', 300', 600', 660'
- All diameters are CE Certified to NE 1891 Type A
- 3/8" and 7/16" are UL Certified to NFPA 2500 Technical
- 1/2" is UL Certified to NFPA 2500 General
- Assorted colors available in each diameter
- Made in the USA

SafetyPro™

An ideal balance of strength, elongation and handling.

The SafetyPro static ropes are specifically designed to meet the needs of rope access personnel. These 100% nylon static ropes hit the sweet spot for durability, elongation and knot-tying ability: essential characteristics for work-at-height. The SafetyPro series is among the most popular tools for professional rope access technicians, tower, wind turbine, and industrial workers.

- 100% Nylon kernmantle construction
- Available diameters: 9 mm, 10 mm, 10.5 mm, 11 mm
- Available lengths: 150", 200", 300', 600', 660' (9 mm available in 165' instead of 150')
- All diameters are CE Certified to EN 1891. 9mm is certified to Type A, 10, 10.5 and 11 mm are certified to Type B.
- Assorted colors available in each diameter
- Made in the USA





Specialty Ropes for the Toughest Environments

Sterling static ropes are known for their quality, reliability, ease-of-use, and most of all, their durability. Despite the inherent ruggedness of all of our static ropes, some work environments are so challenging that they require something extra.

Our Tech Series line of Static ropes incorporates Technora, an aramid fiber that is highly heat and abrasion-resistant. We were the first to use Technora for life-safety applications like fire ropes. Our extensive experience working with Technora means our Sterling Tech series ropes are easy to handle and can go where other ropes simply cannot.

Learn more about our Tech Series Ropes and other specialty ropes at SterlingRope.com



Tech11™

An 11 mm multi-purpose rope with a Technora sheath and Nylon core for rigging, rope access and rescue purposes.

Tech 11 is a go-to for hazardous rope access situations as well as general rescue use. The Technora sheath is highly resistant to heat and cutting while the Nylon core makes the rope easy to handle and knot.

- Diameter: 11 mm or 7/16"
- Kernmantle construction with a 100% Technora sheath and Nylon core
- UL Certified to NFPA 2500
- CE Certified to EN 1891 Type A
- Available Lengths: 200', 600'
- Made in the USA
- Available with 2 tracer options

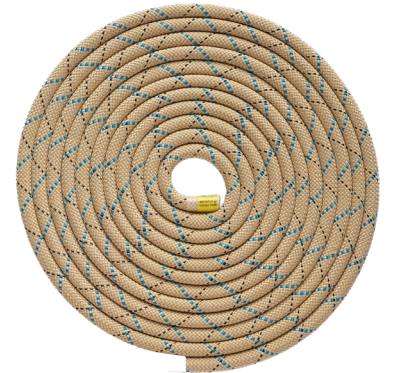
Available colors:



Blue/Black



Neon Green/Orange



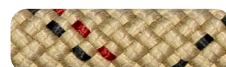
Tech HTP™

The Tech HTP's innovative use of Technora® material allows it to survive high heat and hazardous environments.

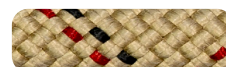
A low-elongation rope suited for the harshest conditions where heat and abrasion resistance are critical. The Technora sheath's 900+ degree high melting point protects against accidental heat exposure, as well as cutting and abrasion, while the low-elongation polyester core offers a smooth feel to minimize bounce and stretch.

- Heat-resistant Technora® sheath
- A multiuse rescue and rappel rope perfect for rope rescue, rope access and efficient ascending/descending
- Firm, smooth sheath increases durability and protects core from debris
- Available in two patterns
- Kernmantle construction with a Technora sheath and polyester core
- UL Certified to NFPA 2500 and ANSI Z359.15
- Available lengths: 150', 200', 300', 600', 660'
- Made in the USA

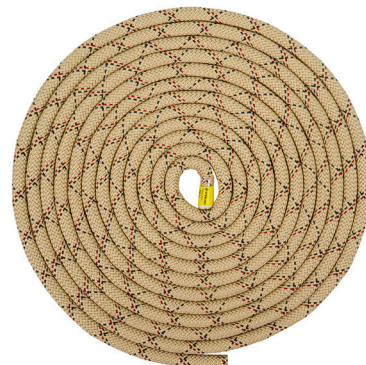
Available colors:



Black Tracer



Red Tracer



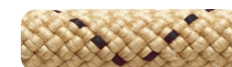
H3 Tech11™

A 100% Technora rope built for high heat and abrasion resistance.

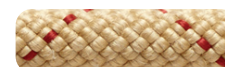
The H3 Tech11 boasts an innovative 100% Technora double braid construction. With both extreme heat and cut-resistance, the 11 mm H3 Tech11 was built to perform flawlessly under some of the most dangerous conditions most workers will ever face. Designed to be used in pairs, the ropes come with either black or red tracers for easy visual differentiation.

- 100% Technora double-braid construction
- 11 mm or 7/16" diameter
- Tested to meet NFPA 2500 Elevated Temperature test by UL
- Meets ANSI Z359.15 and ASTM F 2621-2012
- Meets standard requirements with AVG burn through times of 6 min 30 sec @ 400c and 1 min 48 @ 600c
- Residual strength after ArcFlash exposure: 45.34 kN
- Available lengths: 200', 600' rmination strength – Determined in accordance with CI 1500B

Available colors:



Black Tracer



Red Tracer



Application Comparison Charts

Utility, Industrial, Rigging Applications

Application	TuffX-12	CoreX-12	Static-12	DBP*	Kraken	VerGo2
Lifting	X	X				
Stringing Lines	X	X	X			
Winch Lines	X	X	X	X		
Hand lines		X	X	X	X	X
General Rigging		X	X	X	X	X
Pilot Lines + Underground Pulling	X		X			

* DBP- Double Braid Polyester

Static/Rescue/Vertical Lifeline Ropes

Application + Cert	SYNC (11 mm)	WorkPro (1/2")	HTP (1/2")	SafetyPro (11 mm)	TechHTP (11 mm)	Tech11 (11 mm)	H3 Tech11 (11 mm)
Specialized Rigging	X	X	X	X	X	X	X
Raising and Lowering Systems	X	X	X	X	X	X	X
Heat Resistant					X	X	X
NFPA Certified	X	X	X		X	X	X
CE Certified		X		X		X	
ANSI Z359.15		X	X		X		X
ASTM F2621-2012							X

Custom Slings

We have the ability customize to your specific project needs. We can manufacture slings to your exact specifications, or add a custom termination or snaphook.

Email us for more info: OEM@SterlingRope.com





INSPECT YOUR ROPE

Climbing and technical rope work expose ropes to abrasion, fatigue, sunlight and constant loading. Severe falls, lack of protection over an edge, exposure to excessive temperatures, chemicals or improper use will shorten the life span of any rope.

These scenarios point to the importance of inspecting your rope and knowing when to retire it.

REVIEW

Inspect your rope to be battle-ready every day. Run the entire length of rope through your hands after every use to feel for changes in the rope's diameter or texture. Visually inspect for changes in color or for excessive fraying and core exposure.

You're looking for signs of the following:

- Fraying
- Softness or stiffness
- Exposed cores
- Glazing or hard spots
- Lack of uniformity in diameter, color or texture
- Termination damage (sewn/ spliced eye)

RETIRE

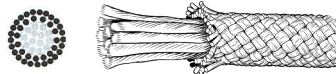
Know when to retire your rope. A good rule of thumb is that at any time if you are unsure about your rope and its condition and feel the need to ask for someone else's advice about it, go ahead and retire it.

- Extensive Use:
Up to 1 year
- Regular to occasional use:
Up to 5 years
- Rarely used or new:
Up to 10 years

Also, never store your rope next to chemicals, as even the fumes can damage the rope's filaments. If you've found exposed cores, excessive fraying, soft or hard spots, lack of uniformity in the diameter or texture, or termination damage, likely this warrants immediate retirement.

Rope Construction Types

Kernmantle Climbing



The mantle (cover) of this rope is woven tight to provide protection for the load-bearing core (up to 70%) strands, which are not braided (parallel). Core strands can also be twisted like a slinky to add elasticity, providing manufacturers a lot of flexibility to manipulate the finished product based on intended use. **Popular for ascent in SRS climbing.** Arborist ascent lines of this construction are considered “core-dependent kernmantles.”

Double Braid Climbing / rigging



This braid inside a braid remains round under tension and provides a high strength-to-diameter ratio. Generally, core and cover share loading equally, making for significantly stronger ropes even in smaller diameters, Useful for climbing and rigging. Double braids are useful for low-elongation climbing and rigging. Sherrilltree offers a tight rigging version (Super Braid) for greater dirt resistance when natural crotch rigging, and a loose rigging version (Stable Braid) that is spliceable and best for block and tackle use. Many climbing lines these days are double-braid construction, often with urethane coatings and similar wear resistance. Because of how they are constructed, double braids are likely to milk.

16-Strand Climbing



This abrasion resistant rope construction presents a thick mantle (cover) around a small interior core bundle that helps keep the rope round under tension and makes it easy to tie. The thick mantle provides all of this **popular climbing line's strength** while the core keeps it round. Because the cover bears the bulk of the load, inspecting these lines is easier and more consistent than with other lines.

Solid Braid Rigging & Pull lines



Made up of 12 large strands, arborist-grade solid braid lines are woven tight to keep a round shape under tension, a process that's made eye-splicing nearly impossible... that is, until Grizzly Splicing® came along. Solid braids tend to be bulky for their strength but have less tendency to twist than other braided lines. **Generally used for rigging or pull lines.**

3-Strand Moderate Load Rigging



Twisted constructions are abrasion resistant but a poor choice for climbing due to their bumpy surface and tendency to rotate (ravel) under tension. Relatively less expensive than other lines, they can serve as **natural crotch rigging lines with moderate loads where high elongation is not a worry.**

Hollow Braid Slings & Fixed Lines



Another 12-strand construction but woven with considerably less tension, leaving the center loose. These lines can easily accommodate a hand splice. Their loose weave allows these ropes to “flatten” under load. **Good for slings and line stringing.** because they tend to snag or pick when run over a rough surface and flatten without a core.

Rope Materials

Polyester – A synthetic polymer with lower elongation, lower water absorption and a higher resistance to chemicals and UV than nylon. Melting point 255°C (491°F).

Nylon – A synthetic polymer offering more elongation and a higher abrasion resistance than polyester, however, it is less resistant to chemicals, UV light, and water absorption. Melting point 218°C (424°F).

Polyolefin – A synthetic polymer made from olefins. The most common of these being polyethylene (PE) or polypropylene (PP). Polypropylene is sometimes used to bring the weight of a rope down, or if used exclusively, multi or mono filament polypropylene can be used to create floating ropes for water safety/rescue. Melting point 130-170°C (266-338°F).

Aramid – A class of synthetic fibers derived from aromatic polyamides, including Technora, Kevlar, and Nomex that pound for pound are five times stronger than steel* (*comparing strength on a weight-to-weight basis). Slightly reduced ultraviolet (UV) radiation resistance compared to polyester and nylon, and it can be self-abrasive. Melting point 500°C (932°F).

Ultra-High Molecular Weight Polyethylene (HMPE) – Includes Spectra and Dyneema fiber. This lightweight fiber has super-high strength and abrasion resistance but at a lower melting point. Good for use where heat from friction is not involved. Melting point 148°C (297°F).

Spliced Terminations

Splicing ensures higher strength retention, improves safety by eliminating bulky knots, and extends the lifespan of climbing and rigging ropes under heavy loads.

- Tight Eye Splice**
Hand spliced, large enough to accomodate a carabiner
- Standard Eye Splice**
Hand spliced, can be used with carabiner or girth hitched onto a fixed eye snap
- Grizzly Splice®**
Machine termination large enough to accomodate a carabiner



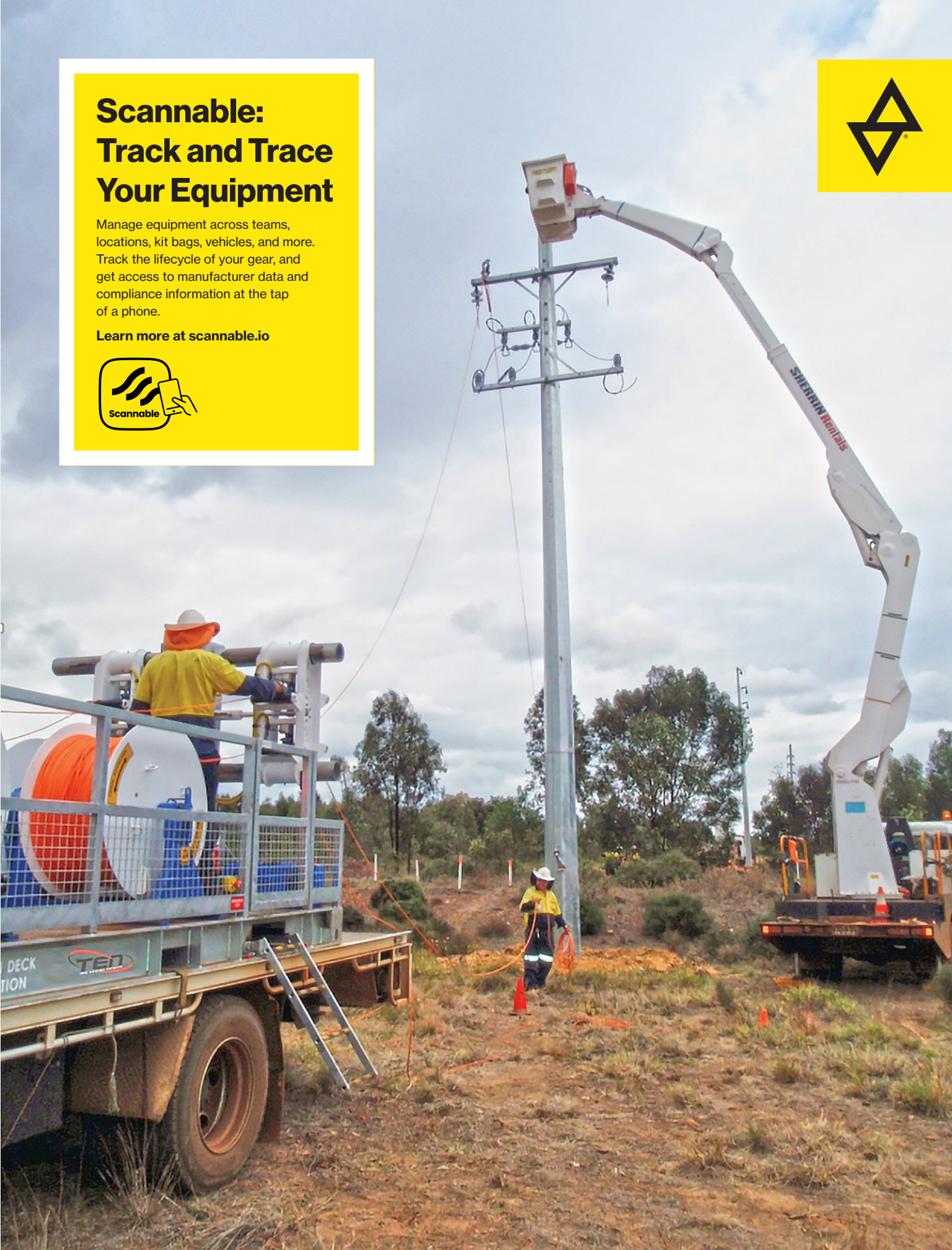
Available Diameters

Utility Rope Sizes Range From 3/16” (4.8 mm) In Diameter Up To 2 1/2” (63.5 mm), Depending On Rope Construction. Please contact us for specific diameter requests.

Scannable: Track and Trace Your Equipment

Manage equipment across teams, locations, kit bags, vehicles, and more. Track the lifecycle of your gear, and get access to manufacturer data and compliance information at the tap of a phone.

Learn more at scannable.io





Sterling is proud to be part of Vertical Supply Group, dedicated to delivering best-in-class equipment and solutions for professionals working at height. With a shared commitment to safety, performance, and innovation, Sterling continues to lead in rope technology and manufacturing for the utility and industrial industries.

For Technical Consultations | Custom Project Requests | Performance Data Inquiries
Email: OEM@SterlingRope.com

Sterling Rope Company
26 Morin Street, Biddeford, ME
04005 USA

Vertical Supply Group
496 Gallimore Dairy Road, Suite D,
Greensboro, NC, 27409 USA

Vertical Supply Group Canada
15 Concession Rd 1, Chute-à-Blondeau,
ON K0B 1B0 CANADA