



NEW 5 X 26 GALVANIZED **POWERED** SCAFFOLDING ROPE





5 x 26

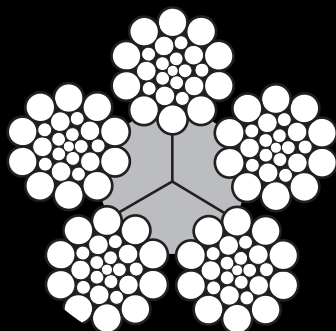
NEW 5 X 26 GALVANIZED **POWERED** SCAFFOLDING ROPE

THE ROPE FOR THE TRACTION HOIST INDUSTRY

Traction hoists are virtually everywhere, performing an array of functions – from raising and positioning scaffolding, to conveying work cages and setting rigging devices. Yet, more and more of the industry is turning to a single wire rope construction:

5 x 26WS Galvanized Powered Scaffolding Rope.

Leveraging our global reach for local applications, we have concentrated our engineering and manufacturing expertise to



create the best rope constructed for the traction hoist industry.

WRCA's in-house metallurgists, designers and engineers have developed a one-rope solution to most traction hoist applications. Our world-renown rigorous testing, tracking – and expert service – sets our **5x26 Galvanized Powered Scaffolding Rope** apart.

With its efficient construction, this rope provides the optimum combination of characteristics for delivering smooth, long-lasting, low maintenance operation on traction hoist equipment. **WRCA's** powered scaffolding ropes have more resistance to abrasion and crushing, stability and surprising fatigue resistance.

SCAFFOLD HOIST ROPE USAGE

NEVER USE A SWIVEL THAT ALLOWS THE ROPE TO ROTATE UNDER LOAD

The wire ropes used on powered scaffold hoists are not designed to be used with a swivel. A swivel that allows a rope to rotate can cause a reduction in rope breaking strength, unbalance in the rope, and unpredictable service life.

A rope that is properly handled and installed will have no torque in it before the rope is loaded. As a load is applied, the wires and strands try to align themselves with the axis of the wire rope, creating torque in the rope. This load-created torque is normal and the rope is designed to operate in this condition.

If a rope is attached to a swivel and allowed to rotate to relieve this load-created torque, the rope will not operate as designed. The rotation while under load will be

in the direction to unlay the strands from the rope lengthening the lay. Since wires and strands are at different distances from the rope axis, when a rope is allowed to rotate, the wires and strands change length at different rates. When this occurs, individual wires and strands no longer carry their designated share of the load, but more or less depending on their position in the rope. This causes the wires and strands that carry more load to wear out more rapidly and may result in loading them to the point where they fail. Wires and strands that carry less load can become loose and create an unbalanced condition. A rope in this condition is susceptible to “milking” of the strands leading to a “birdcage” when operated through a traction drive hoist.

TAKE NOTE

AS THE HOIST CLIMBS, THE PARTIALLY UNLAYED ROPE SECTION IS PASSED THROUGH THE TRACTION DRIVE SYSTEM, ACCUMULATING SOME OF THE LOOSENESS ABOVE THE HOIST. PERMANENT DEFORMATION CAN OCCUR TO THE PARTIALLY UNLAYED ROPE FROM THE FORCES EXERTED BY THE TRACTION DRIVE SYSTEM AS THE ROPE PASSES THROUGH IT. ONCE THIS HAPPENS, THE POTENTIAL FOR “MILKING” AND “BIRDCAGING” OF THE ROPE EXISTS ABOVE AND BELOW THE POWERED SCAFFOLD HOIST.

“BULLET” END TREATMENTS FOR TRACTION DRIVE SCAFFOLD HOIST ROPES

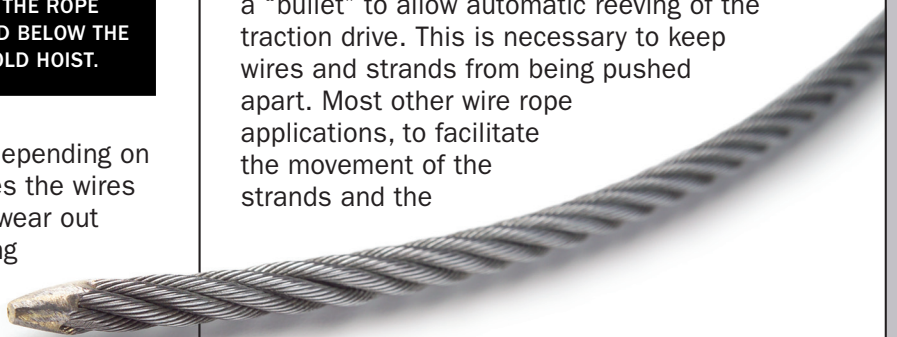
The primary purpose of the core of a wire rope, whether Independent Wire Rope Core (IWRC) or Fiber Core (FC), is to provide support for the outer strands of the rope. Without this support, the rope becomes susceptible to distortion from strand displacement which can cause a reduction in rope breaking strength, an unbalance in the rope, and unpredictable service life.

Wire ropes used in traction hoists often have their ends brazed or welded into a “bullet” to allow automatic reeving of the traction drive. This is necessary to keep wires and strands from being pushed apart. Most other wire rope applications, to facilitate the movement of the strands and the

core, do not have brazed or welded ends at the time a rope termination is made or the rope is operated. Because of the need to have the rope ends brazed or welded for traction hoists, special preparation of the end is required.

TAKE NOTE

WHEN PREPARING THE ROPE FOR BRAZING OR WELDING, THE CORE SHOULD BE CUT BACK ABOUT 1/2” SO THAT ONLY THE ROPE’S OUTER STRANDS ARE BRAZED OR WELDED TOGETHER (THE END OF THE CORE SHOULD BE CLOSE TO THE “BULLET” BUT NOT ATTACHED). THIS ACCOMPLISHES TWO IMPORTANT THINGS: 1) THE ROPE STRANDS ARE SUPPORTED BY THE CORE EFFECTIVELY TO THE ROPE END; 2) THE ROPE STRANDS ARE ALLOWED TO SLIDE AND ADJUST AROUND THE CORE. BECAUSE MOST TRACTION HOISTS GRIP THE ROPE BY APPLYING RADIAL PRESSURE TO THE ROPE, CUTTING OUT TOO MUCH CORE CAN CAUSE THE STRANDS TO BE PUSHED OUT OF POSITION FROM THE RADIAL PRESSURE AS THE END IS INSERTED INTO THE MACHINE. THIS CAN BEGIN THE “MILKING” ACTION OF THE STRANDS WHICH CAN EVENTUALLY LEAD TO A “BIRDCAGE.” THE PRESENCE OF THE CORE IN ALL BUT THE LAST 1/2” OF THE ROPE GREATLY REDUCES THE POSSIBILITY OF BIRDCAGING.



Traction hoist ropes that last.

When it comes to providing wire rope for traction hoist systems, **WRCA** leads the way again. This 5/16" diameter rope delivers exceptional abrasion, fatigue and crushing resistance with a Minimum Breaking Force (MBF) greater than 6x31 XIP® FC wire ropes in similar operations.

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Plus, unlike many manufacturers, **WRCA** fabricates all of our powered scaffolding ropes in North America where we maintain a standing inventory available for immediate shipment.

Technical support is available before and after a sale on our web site www.wrca.com or by calling your wire rope distributor.

5x26 GALVANIZED POWERED SCAFFOLDING ROPE

Diameter	Approximate wt./ft. (lbs.)	Minimum Breaking Force (Tons of 2,000 lbs.)
5/16"	.161	5.16



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