

## **PROUDLY USA-MADE & OWNED**

### **OUR WIRE STRAND PRODUCTS:**

ACSR, Galvanized, Galfan<sup>®</sup> Coated, Guard Rail Cable, Stainless-Steel Strand, & Structural Bridge Strand



## WE ARE NATIONAL STRAND

### 40+ YEARS BUILDING UNQUESTIONABLE TRUST

Since 1984, National Strand has delivered best-in-class American-made stranded wire products with unquestionable trust, unwavering commitment, and superior service, and serve an array of infrastructure markets worldwide.

Today, National Strand continues to be the USowned and operated pioneer in superior stranded wire products for numerous applications and industries, including electric utility, telecom/ CATV, tower, traffic signals, metal building, DOT/ safety, arbor/trellis, security, military, and custom applications. Whether our strand is used to support a sky-scraping cell phone tower, reinforce our power or telecom grid, or keep cars, trucks, and property safe, only the best quality strand deserves your trust and that is what we deliver.

### OFTEN IMITATED, NEVER DUPLICATED.

We're proud to offer you superior service and expertise when you choose our stranded wire products. Our commitment to you is reinforced by our industry-leading innovation. We are the pioneers of easy-to-spot color-coded grade end caps and paperboard tubes for guy coils, setting the standard for enhanced usability and safety.



# Strand **D**<sup>™</sup>

UTILITIES	SIEMENS-MARTIN	EXTRA HIGH STRENGTH	GALFAN
СОММОМ	HIGH STRENGTH	BRIDGE STRAND	

## WHERE TRUST MEETS EXCELLENCE

We are backed by The Heico Companies, a privately-owned American holding company known for its buy-and-hold strategy.

With support from our top-tier affiliated metal processing companies and the financial backing of our American-owned parent company, we offer customers the chance to drive domestic economic growth.



#### WE PROUDLY MEET THE "BUY AMERICA" GUIDELINES

National Strand proudly manufactures USA-Made & Melt steel strand, and our messenger and guy wires meet the guidelines set forth by the Build America Buy America initiative as established by the National Telecommunications and Information Administration (NTIA).



#### WE ARE A WBENC-CERTIFIED BUSINESS

National Strand is proud to have received national certification as a Women's Business Enterprise by the Women's Business Development Center in Chicago (WBDC-Chicago), a regional certifying partner of the Women's Business Enterprise National Council (WBENC). National Strand was awarded certification based on the ownership, control, and operation under our parent company, The Heico Companies, which is owned by Emily Heisley Stoeckel.



# **OUR CAPABILITIES**

Since 1984, National Strand has been pioneering excellence and delivering best-in-class American-made stranded wire with Unquestionable Trust, Unwavering Commitment, & Superior Service throughout the world, serving an array of infrastructure markets.

Today, National Strand continues to be the US-owned and operated pioneer in superior stranded wire products for numerous applications and industries, including electric utility, telecom/CATV, tower, traffic signals, metal building, DOT/safety, arbor/trellis, security, military, and custom applications. Whether our strand is used to support a sky-scraping cell phone tower, reinforce our power or telecom grid, or keep cars, trucks, and property safe, only the best quality strand deserves your trust and that is what we deliver.

#### DIFFERENTIATORS

- Widest size and configuration range
- Widest selections of coatings and metals
- Proudly manufactured in the USA
- · Global backing as part of The Heico Companies
- Certified diversity manufacturer (WBENC)

#### **CORE COMPETENCIES**

- Guy Strand, Static & Grounding Strand
- Messenger & Span Wire Strand
- Highway Median Barrier Cable
- Perimeter Crash Barrier Cable
- 3, 7, or 19 wire configurations
- Galvanized Class A, B, or C
- Galfan® Coated
- Stainless Steel
- ASTM/CSA/MIL and custom specifications

NAICS: 332618 | CAGE: 0RZV4 | SIC: 3496 | DUNS: 122076441



## OUR USA-MADE WIRE STRAND PRODUCTS



Our top-quality ACSR steel strand is used for powering connections and infrastructure with durability and reliability. Exceeding "Buy America" and other industry standards, our strand ensures uninterrupted power supply, enduring harsh conditions and difficult environments. With increased power capacity, unbeatable conductivity, and enhanced corrosion resistance, our USA-Made products support high-voltage transmission lines in residential, commercial, and industrial areas.

Rigorously tested and inspected, our ACSR singlestrand and 7X/19X strand, with Class A or Galfan<sup>®</sup> finish, guarantee exceptional performance and longevity. This type of strand is the best choice for situations that call for the high-quality standard of our galvanized steel ACSR single-strands or require the corrosion resistance and high heat resistant benefits of our Galfan<sup>®</sup> coated ACSR 7X/19X strands.

### GALVANIZED STEEL STRAND

Our galvanized steel wire encapsulates unwavering durability and advanced corrosion resistance, serving as a versatile solution for various applications. With a robust galvanized coating mainly composed of zinc, our wire ensures longevity and resilience in harsh environments. Its exceptional strength makes it crucial in guying utility and communication towers and other essential support structures, ensuring stability and reinforcement, even under challenging conditions like high winds or seismic activity.

As an overhead ground wire, it meets the requirements of ASTM A363 and A925. As these specifications demand, there are no joints or strand splices in any lengths of the completed strand, so lightning strikes travel safely to the ground without resistance or interruption. As a messenger cable supporting communication cables and electrical conductors, our galvanized strand offers a secure platform for cable suspension and connection along utility poles or tower structures.

### GALFAN<sup>®</sup> COATED STEEL STRAND

The Galfan<sup>®</sup> coated steel strand offers unmatched durability and corrosion resistance. Engineered with a 95% zinc/5% aluminum alloy per ASTM B750, our strand surpasses pure zinc coatings, ensuring longevity and resilience in diverse applications. Whether as guy, static, or messenger strand, our Galfan<sup>®</sup> coating heals exposed steel, offering superior protection and flexibility.

With exceptional strength, it anchors utility towers, shields conductors from lightning, and supports communication equipment. Our USA-Made strand is customizable and is available in various configurations and sizes, meeting the highest industry standards, including ASTM A855/A855M and A925 standards.

### GUARD RAIL CABLE

Our guard rail cable meets stringent safety standards for roadways to help reduce cross-median vehicle crashes. These cables offer unparalleled flexibility, adaptability, and durability, ensuring efficient installation and long-term reliability. Engineered to absorb impact energy effectively, our high-tension cables minimize vehicle damage and enhance safety for motorists and pedestrians.

Trusted by transportation authorities, our cables comply with ASTM A741 and FHWA guidelines, safeguarding highways and infrastructure. Their high flexibility and adaptivity means they can be easily installed in variable terrains and conditions, including curved or uneven roadways. With decades of industry expertise, National Strand is committed to delivering top-quality highway median barriers and perimeter crash barriers to help keep our roads safe.

### STAINLESS-STEEL STRAND

The stainless-steel strands offer unparalleled corrosion protection and longevity, ideal for diverse applications. With high tensile strength and extreme temperature resistance, our strands ensure reliability in challenging environments. Whether anchoring seawalls, guying poles, or supporting broadband infrastructure, our USA-Made products meet the highest industry standards including "Build America Buy America".

Available in Type 302 and Type 316 variants, they provide exceptional corrosion resistance and breaking strengths. They are highly resistant to rust, chemicals, high temperatures, stains, and other harsh elements, so these stainless-steel strands are tailored to specific environmental demands. Offering improved versatility, these strands adapt to many applications, from infrastructure projects to electrical utilities applications.

### STRUCTURAL BRIDGE STRAND

National Strand's structural bridge strands, engineered to ASTM A586 Grade 1 or 2 standards, offer unparalleled support and stability for bridges, towers, buildings, stadiums, elevated walkways, and other structures. Crafted from high-strength steel, these strands ensure durability and resilience in harsh environments. With customizable options, including diameters and configurations, they provide versatile solutions for diverse projects.

Our strands meet stringent quality standards, guaranteeing reliability and performance. These structural bridge strands undergo rigorous testing and quality assurance processes so that they effectively meet or exceed industry standards for strength, durability, and safety. From pedestrian bridges to large towers, our strands offer unbeatable strength and flexibility and are backed by our commitment to excellence and customer satisfaction.



## **INDUSTRIES WE SERVE**



#### ELECTRICAL INFRASTRUCTURE

National Strand is the largest US-Made and owned producer of guy and static stranded wire products for the electrical infrastructure industry. With our extensive experience and dedication to quality, we've produced top-tier galvanized, Galfan<sup>®</sup>, stainless-steel, and ACSR strands that both power and support this type of infrastructure that keeps our nation and the world powered and connected.

When it comes to power transmission and distribution, we offer the widest range of sizes, coatings, and configurations in the industry. Similarly, we make strands used for applications like messenger wire that have the right strength and coating properties that are essential for the broadband market and telecom applications for cell phone, radio, and TV towers.



#### **BROADBAND/TELECOM**

Our USA-Made messenger and guy strands for the broadband and telecom industries are strong and cost-effective solutions that perform at top-quality for decades after installation. Additionally, our ACSR strands offer efficient power transmission and distribution to the overhead power lines that form the backbone of these industries.

Customers rely on our top-tier Galfan®, galvanized, stainless, and ACSR strands for providing remarkable structural and power support for the towers and structures that connect power lines, broadband internet and CATV cables, and telephone lines throughout our nation and to the world beyond.



#### TRANSPORTATION

We are trusted producers of stranded wire used for hanging traffic lights, supporting suspension bridges, safely dividing roadways, reinforcing light rail power systems, and other applications approved by both the Department of Transportation (DOT) and international roadway authorities.

Our US-Made span wire and guy strands are used for supporting traffic signals and signage and other important DOT applications and meet strict multinational standards set by roadway authorities around the world. National Strand can also produce wire to meet custom criteria from specific lengths or heavier coatings for corrosive environments, and even low tensile/break away tether strands.



#### CONSTRUCTION

For 40+ years, National Strand continues to be the largest world-class US-Made and owned producer of guy and static stranded wire used in construction infrastructure applications. Our strands are engineered to exceed industry standards for the strength and durability that's required to form the world's backbone.

Customers, regulatory bodies, and citizens all rely on our top-tier, strong, and durable guy strands, messenger wires, bridge cables, guard rail strands, and more to help construct and protect the world's most innovative infrastructure solutions. Governments and roadway authorities like the DOT trust our wire to provide structural support for new constructions, buildings, bridges, roadways, and towers that connect power lines, broadband internet and CATV cables, and telephone lines.



#### GOVERNMENT

We are trusted producers of strands used for state and local government's critical infrastructure projects in the US and countries throughout the world. Our top-tier stranded wire products are US-Made and USA-Certified for multiple applications in the transportation, broadband, energy, and construction industries.

Whether the application is hanging traffic lights, installing safe highway guard rails or structural bridge supports, or building the telecom towers that connect our world, our stranded wire is used and trusted by millions of citizens worldwide every day. Our strands meet strict multinational standards set by government and regulatory authorities around the world. National Strand can also produce wire to meet custom criteria from specific lengths or heavier coatings for corrosive environments, as well as low tensile/ break away tether strand customizations.



#### **MILITARY**

At National Strand, we are the trusted pioneers supplying stranded wire for military infrastructure projects, delivering customized solutions that cater to the unique demands of various US military projects, with custom solutions for tower and structure construction. Our products are US-Made and USA-Certified.

Our wire meets and exceeds the specifications needed for these projects, and we offer customizations for specific lengths, heavier coatings for corrosion resistance, and low tensile/break-away tether strands.

### **NATIONAL STRAND: PIONEERS OF UNQUESTIONABLE TRUST SINCE 1984.**

## COMMON APPLICATIONS FOR OUR PRODUCTS



## TRANSPORTATION & TRAFFIC SIGNALS

Our US-Made span wire and guy strands are used for supporting traffic signals and signage and other important DOT applications and meet strict multinational standards set by roadway authorities around the world.

National Strand can also produce wire to meet custom criteria from specific lengths or heavier coatings for corrosive environments, and even low tensile and break-away tether strand.



## STRUCTURAL BRIDGE CONSTRUCTION

Our structural bridge strands are vigorously tested for a wide range of bridge components, including main cables, suspender cables, and stay cables, offering versatility in design and construction. They can also be utilized to support various types of structures beyond bridges, including buildings, stadiums, and elevated walkways.

Our bridge strand wire is engineered to withstand high tensile forces, corrosion, and environmental conditions. It is crafted with galvanized steel or highstrength steel alloys to provide the necessary strength and durability required for long-term performance.



## POWER TRANSMISSION & DISTRIBUTION

Our Aluminum Conductor Steel Reinforced (ACSR) stranded wires are often used in the transmission and distribution of electricity over long distances. ACSR strand features a central core of steel surrounded by aluminum conductors, combining the strength of steel with the conductivity of aluminum, making it ideal for long-distance power transmission.

By utilizing other strand materials (like galvanized steel messenger wire), it can be installed between towers and poles and through various terrains and can withstand the stress of being pulled through conduits or across long spans without breaking. Both types of strands play crucial roles in ensuring efficient and reliable electricity distribution in industrial settings.



#### **BROADBAND/TELECOM TOWERS & STRUCTURES**

We produce USA-Made guy and messenger wire with high tensile strength, versatility, and corrosion tolerance used for broadband and telecom applications like cell phone, radio, and TV towers. Our wire is also built for stabilizing other critical structures and grounding wire applications used to help connect telecommunications services to homes, businesses, and mobile devices.

Our wire is used in a variety of applications within this industry. We produce USA-Made messenger wire to meet the appropriate ASTM and CSA standards for strength and corrosion resistance for telecom applications in the broadband market. Our wire is the only reliable source for the backbone of your communications infrastructure.



#### **MESSENGER WIRE**

When strand is used as a messenger cable to support communication cables and electrical conductors, it must have a high elastic limit, excellent tensile strength, durable resistance to corrosion, and good fatigue properties. National Strand's products meet these requirements.

The design loadings for messenger cables are specified by the National Electric Safety Code. When using this rule, please remember that the unloaded weight is now the sum of the messenger weight plus the weight of the supported cable, and that the wind blows against both the ice-coated messenger and the ice-covered cable. Under these full-load conditions, the tension in the messenger must not exceed 60 percent of its ultimate breaking strength. National Strand will gladly furnish sag and tension data to assist with your project.



#### **GUARD RAIL SAFETY**

Our guard rail cables play a crucial role in highway safety, forming a barrier between traffic lanes and potential hazards. These important strands are critical for safety barriers and display high strength and durability for reliable installation on highways to effectively safeguard motorists on divided highways and interstates to help minimize the risk of head-on collisions.

These cables are tensioned to specific standards to effectively absorb and dissipate the energy of impacting vehicles, reducing the risk of severe accidents and injuries. They are also designed to withstand various weather conditions and impacts, ensuring long-term durability and effectiveness.



#### **GUY, GROUND, OR STATIC WIRE**

Engineered for strength and versatility, our USA-Made galvanized and Galfan® guy wire strands structurally support the integrity of power, cell, and radio towers and other landmarks, stabilize antennas and poles, and excel in grounding wire applications. Galvanized strands that are used as overhead ground wire or static wire on transmission towers act as a shield to prevent lightning strikes from reaching the conductors. The static wires must be large enough in diameter so that the lightning cannot burn through. In most cases, the static wire should be at least 3/8" in diameter.

National Strand's overhead ground wire is manufactured to meet the requirements of ASTM A363 and A925. As these specifications demand, there are no joints or strand splices in any lengths of the completed strand; the lightning travels safely to the ground without resistance or interruption. When strand is used for guying high performance utility and communications towers and other support structures, strength is critical. Our strand is sized from 3/16" up to 1" in various grades including Extra High Strength (A475 or A855) and CSA (and others as required) as well as the extra demanding structural (bridge) grade (A586).

# WHY CHOOSE US?

At National Strand, quality is more than just a goal or a program; it's inherent in every step of our process. We are ready to meet your distribution and construction material requirements by offering customized solutions tailored to your specifications.

#### WHY CHOOSE NATIONAL STRAND

When you choose National Strand, you are choosing to use premium USA-made stranded wire products that are meticulously crafted by a USA-owned and operated company. Our strands not only meet the requirements of ASTM, CSA, DOT, and other international roadway authorities, but also adhere to the guidelines set forth by the Build America Buy America Act.

As the largest producer of guy, static, and messenger strands used in a variety of industries and applications, we are the best choice for the widest range of product sizes, lengths and coatings for wire products that build the critical infrastructure of our nation.

We offer a multitude of packaging options and quantities to match your project specifications. This includes custom pre-cut-to-length reels and quantities that can save your project valuable time and minimize wasted resources.



#### **CONTACT US TODAY**

Sales and support 800-455-2475 info@nationalstrand.com

3959 Oscar Nelson Jr. Dr. Baytown, TX 77523







