

# Cable System Technology

For light weight structures

# We are Teufelberger



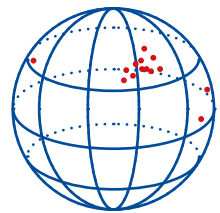
Teufelberger Group CEO:  
Florian Teufelberger

Family-owned for 7 generations



1,400

employees



14

locations around the globe

## One Company – Infinite Possibilities

What started back in 1790 as a simple shop making hemp ropes has since evolved into a globally successful group of enterprises developing custom-tailored solutions for fiber ropes, steel wire ropes, and strapping. The continuity and stability of our family-owned group make us a reliable partner. We support you in tackling your day-to-day challenges and cooperate with you in the spirit of mutual respect and equality.

### Global network and market proximity

Our global network includes 14 locations, with production sites in Austria, Italy, Poland, Thailand, the Czech Republic and the USA enable us to cooperate closely with our customers and to cater to the specific needs of the various markets in which the Teufelberger Group is present.

It's our joint success

that counts



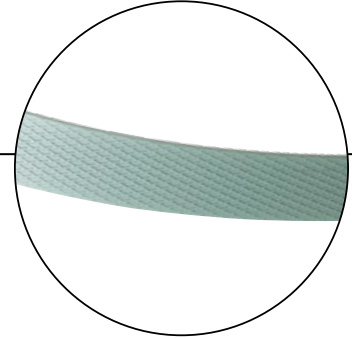
## Fiber Rope

Safety & Rescue Ropes  
Treecare & Forestry Ropes  
Yachting Ropes & Kite Lines  
Industrial Fiber Ropes  
Climbing Ropes



## Wire Rope

Cableway Ropes  
Crane & Industrial Ropes  
Offshore Ropes  
Mining Ropes  
S&S / TECI  
Tensostructures



## Strapping Solutions

PET Strapping  
PP Strapping  
better.collect

## Solutions that fit your needs

Teufelberger-Redaelli, formerly known in the market as Redaelli, provides its clients with unique expertise for high performance steel wire ropes and world leading technical support with its global presence. Its comprehensive range

of structural cable systems have been developed and optimized over many years to meet the challenging and increasingly sophisticated demands of the tensile structure construction industry.



All Teufelberger-Redaelli structural cable systems are supplied in accordance with current **Euro Codes** also they are compliant with international standards including **ASTM** and **American Society of Civil Engineer (ASCE)**. In addition Redaelli cables also carry the assurance of **CIT** and **European Technical Approvals ETA-18/1122**.

Scan the QR code for the annual updated list of certifications!



# Range of applications

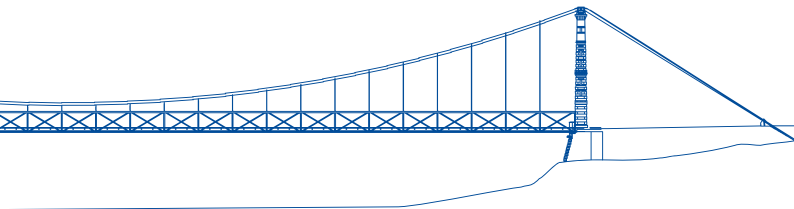
Teufelberger-Redaelli provides a comprehensive range of structural cable systems to meet the challenging and increasingly demands of the tensile structure construction industry.

Our products are designed to guarantee long-term structural integrity, minimize elongation, and withstand cyclic stresses over the bridge's service life.

Sky Bridge 721  
Czech Republic, Dolni Morava



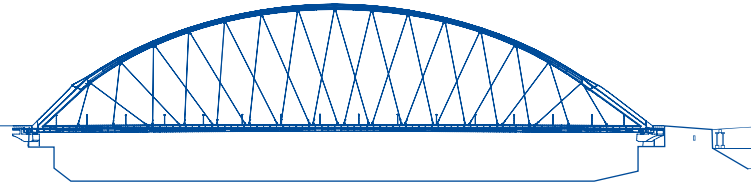
Cittadella road and pedestrian arch bridge  
Italy, Alessandria



## 1. Suspension bridges

- Full Locked Coil cables for main catenary cables and hangers.
- Open Spiral Strand cables as hangers and catwalk cables.

Suspension bridges rely on high-strength steel cables as their primary load-bearing system. We provide the main catenary cables and hanger ropes that ensure the safe transfer of loads from the deck to the towers and anchorages.



## 2. Tied arch bridges

- Full Locked Coil cables as hanger cables.
- Open Spiral Strand cables as hanger cables.

In tied-arch bridges, steel cables act as critical tension elements connecting the arch to the deck. We supply hanger cables that stabilize the structure and distribute loads efficiently.

Crati Bridge,  
Italy, Cosenza



Las Vegas high roller wheel  
USA, Las Vegas

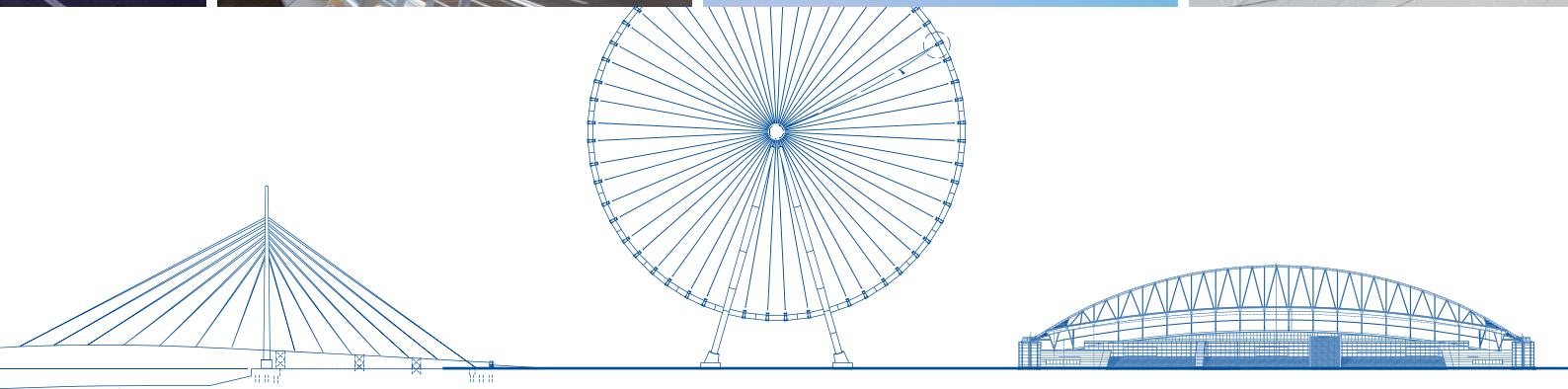


© Caesars Entertainment

Estadio Ciudad de Valencia  
Spain, Valencia



Courtesy of Levante UD | © Taiyō Europe



### 3. Cable-stayed bridges

- Full Locked Coil cables as stay cables.
- Open Spiral Strand cables as stay cables.

Cable-stayed bridges depend on high-performance stay cables directly linking the deck to the pylons. We manufacture open spiral strand cables and full locked coil cables with a range of corrosion protection systems, ensuring optimal strength, flexibility, and aerodynamic stability.

### 4. Observation wheels

- Full Locked Coil cables as spoke cables, stay cables, rotational spoke cables and tieback cables.
- Open Spiral Strand cables as hangers, catwalk cables.

Observation wheels require steel cables for structural stability, support systems, and passenger safety. Our range of cables are used in tensioning systems, spoke structures, and drive mechanisms.

### 5. Roof structures

- Full Locked Coil cables as tension ring and radial cables, edge cables, valley cables, hangers and stay cables.
- Open Spiral Strand cables as radial cables, edge cables, valley cables, hangers and stay cables.

Large-span roof structures utilize steel cables for support, tensioning, and architectural expression. We provide customized solutions that enable lightweight, elegant, and innovative designs.

Khan shatyr entertainment centre  
Kazakhstan, Astana



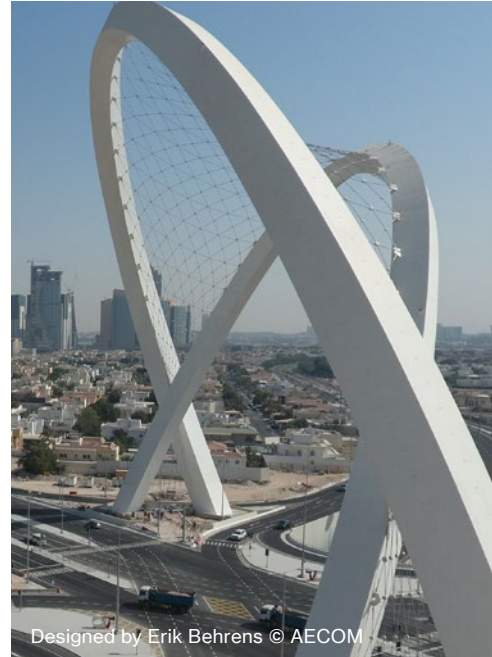
Photo by © Contrasto

The Shed cultural center  
USA, New York

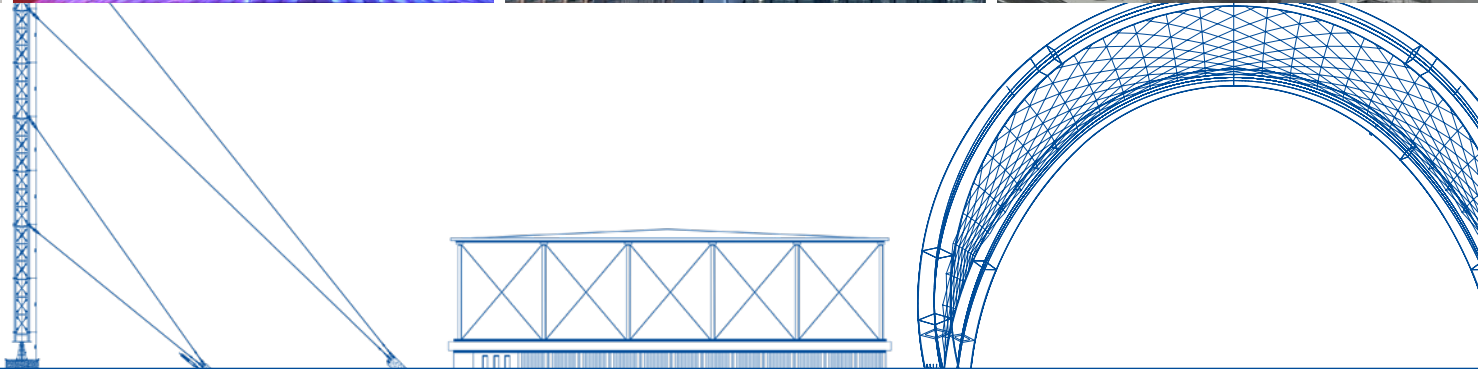


Designed by Thornton Tomasetti

Al Wahda 5/6 Arches,  
Doha, Qatar



Designed by Erik Behrens © AECOM



## 6. Guyed masts and towers

- Full Locked Coil cables as stay cables.
- Open Spiral Strand cables as stay cables.

Stayed masts and towers rely on steel cables for stability and load distribution. High-strength, fatigue-resistant stay cables ensure structural safety and geometric stability under wind and dynamic loads.

## 7. Facades

- Full Locked Coil cables as supports to facade elements.
- Open Spiral Strand cables as supports to facade elements.

Our stainless-steel solutions empower architects to create lightweight, attractive building facades that seamlessly integrate with any wall shape or size. With outstanding durability and the ability to withstand challenging environmental conditions, our custom made stainless steel cables are the perfect choice for enhancing facades and elevating architectural aesthetics.

## 8. Cable net

- Full Locked Coil cables as links or supports.
- Open Spiral Strand cables as links or supports.

Cable net structures are made up of an assembly of cables and clamps that opens a world of architectural innovation and design creativity. Whether you're seeking to provide a structural support or create captivating symbolic structures, cable net structures are a choice for coverings and roof.

Cable net structures are engineered and customized to deliver exceptional strength and durability. The combination of high-quality materials and precision manufacturing ensures that projects can withstand the test of time, weather, and usage.

# Sophisticated cable system elements

Our range of high performance steel cables can be either supplied using Full Locked Coil (FLC) cables or Open Spiral Strand cables (OSS). Both solutions are available with spelter or swaged sockets depending on the cable diameter, the project requirements and specifications. Galvanic protected carbon steels with optional HDPE coating as well as stainless steel options are also available for both solutions.

Each socket is made using high strength steels and can be chosen from a wide range of socket shape options, the majority of which are available in either a fixed or length adjustable configuration to meet the design and architectural requirements. In case of special requirements, our system can be also customized.

Our specialist Production Department pre-stretch and assemble the components to supply a prefabricated cable system ready to be installed on site with no additional manufacturing operations.



## Full range of services

- ✓ Standard and bespoke cable system development
- ✓ Project planning
- ✓ Manufacture & production control
- ✓ Quality check, transport & logistics
- ✓ Installation & tensioning
- ✓ Service & support, maintenance & repair

**Each cable is specifically designed, detailed and produced in accordance with the project requirements and specifications and the appropriate international standards and regulations.**

# Cable installation and tensioning, inspection and maintenance services

With decades of experience in structural cable engineering, Teufelberger-Redaelli goes beyond design and manufacturing. Our specialist team ensures safe and well-planned cable installation and tensioning. Equipped with leading-edge tools and supported by construction engineering expertise, we handle new builds, renovations, and replacements.

Our dedicated site engineering team offers tailored installation and tensioning solutions to fit site conditions. After construction, regular inspection and maintenance are crucial for optimal performance. Our site technicians are available 365 days a year to inspect and maintain your cable system, an integral part of your overall structure.



**Redaelli Tecna S.p.A.**

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