
GRIPPLE
Change the game
Game Changing Solutions
for Solar Ground Anchoring

Product Led, People Powered

Established in 1989, we are the original innovators and manufacturers of wire joining and tensioning devices, as well as anchoring, bracing and suspension systems that have changed the game for many industries.

With our innovative, engineered solutions, we're helping customers in industries including solar, civil, utilities, and construction to overcome their toughest daily challenges, achieving their goals faster and easier.

We are no ordinary business. We do almost everything differently.

100% owned by our employees, we're also committed to changing the game by making a positive impact in our communities around the world. We're a force for good, as certified by B Corp.

Change the Game

1 - 100% employee owned

Our empowering employee ownership model means everyone has skin in the game. Success for our global customers means success for us. We are all shareholders, inspired to design, manufacture, and deliver better solutions.

2 - Game changing innovators

Our vision is to engineer game changing products and systems that make a difference for more global customers. To keep us on track, we hold ourselves accountable to deliver a fifth of all sales from new innovations.

3 - Helping customers do more with less

We solve customers' real-world problems with simplified engineered solutions. Whatever the application, our innovations deliver efficient, sustainable solutions that have a positive impact on global customers' routine tasks.

4 - Vertically integrated

As an award-winning global manufacturer, we create finished Gripple solutions from components we produce in-house, on machinery we design and build ourselves. We're a trusted partner for our customers, able to deliver quality, reliability, and value.

5 - A force for good

It's the Gripple way to do business differently. Not just to deliver profit, but to share the benefits of global sustainable growth with our customers, communities, and employee-owners. As a certified B Corp, we meet the highest standards of social and environmental performance.

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Vertically Integrated Manufacturing

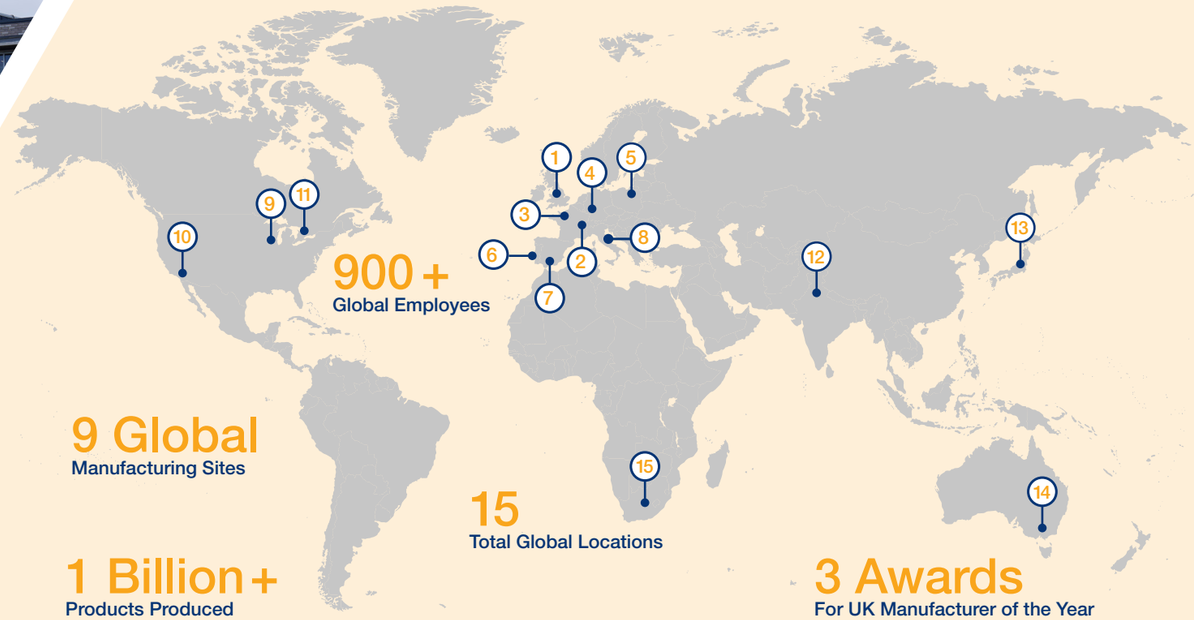
An award-winning manufacturer, we create finished Gripple solutions from components we also produce in-house. Our vertically integrated operations produce our own die castings, injection moulded components, steel pressings and wire accessories. We even design and build our own automated manufacturing machinery!

Through ways of working including lean manufacturing and just-in-time inventory management we ensure streamlined processes and maximum value delivery. Our employee-owners are empowered to identify opportunities for continuous improvement, which result in greater efficiencies, better quality and improved customer satisfaction.

Continual investment in our manufacturing and supply chain means we're a trusted partner for our customers, able to consistently deliver quality, reliability, and value.

3.5 Billion ft
Cable Supplied Globally

Over 4 GW
Supported World Wide



900 +
Global Employees

9 Global
Manufacturing Sites

15
Total Global Locations

1 Billion +
Products Produced

3 Awards
For UK Manufacturer of the Year

Changing the Game in 85 Countries Worldwide

Our global manufacturing and distribution footprint has been designed to deliver our innovative Gripple solutions, on-time, to over **8,000 customers**, at more than **16,000 drop points** in **85 countries** worldwide. Over **900 employee-owners** around the globe, in every one of our sites is united by this commitment to our customers. Some of our original customers have become partners in Europe, Asia, and Oceania, to strengthen our global supply chain and deliver value for our customers.

Gripple United Kingdom
1 Global Head Office – Sheffield, UK

Gripple Europe:
2 Gripple Europe Head Office – Obernai, France
3 Paris, France
4 Aßlar, Germany
5 Warszawa, Poland

Europe Partners:
6 Gripple, Portugal
7 Gripple, Spain
8 Gripple, Italia

Gripple INC:
9 Gripple INC Head Office – Aurora, Illinois
10 Los Angeles, California

Gripple Rest of the World:
11 Toronto, Canada
12 New Delhi, India
13 Kobe, Japan

Rest of the World Partners:
14 Gripple Australia – Victoria
15 Gripple South Africa

Changing the Game in Solar Ground Anchoring

Our game-changing ground anchoring products overcome real world on-site challenges and are ideal for supporting existing foundations, rectifying misaligned structures, and securing bi-facial matting.

Fast and easy to install using just hand tools, our solar ground anchoring solutions are strong and lightweight, delivering impressive performance up to 2,750 kg | 6,060 lbs. Our products are easy to handle, delivering savings, both in terms of on-site logistics and off-site haulage.

Our Gripple engineers have developed our solar ground anchoring range based on proven Gripple technology used in demanding global applications such as civil engineering, slope stabilisation, and erosion control.

By using our solar ground anchoring solutions you can speed up your project, reduce haulage costs and make your whole project better for the environment.

High performance - Up to 2,750 kg | 6,060 lbs anchor performance (depending on anchor and soil type)

Fast and easy - Install in minutes using just hand tools with minimal training

Versatile - Acts as both primary foundation or as a support to existing piles or ballasts

Strong and dependable - Developed using corrosion resistant materials to last over 30 years

Undisruptive - Minimal ground and soil disturbance during and after installation

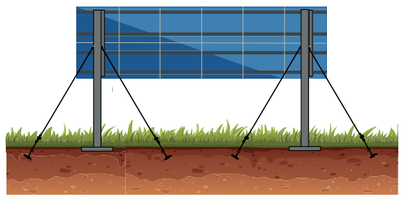
Reduced materials - Our products can have a positive impact on your bill of materials vs traditional solar foundations

Lower CO_2 - Thanks to fewer materials, less haulage, and no need for heavy plant

Our Ground Anchoring Solutions:

Primary Foundations

Where required our lightweight yet incredibly strong Solar Anchoring Kits can act as the primary foundations for solar ground mount frames.

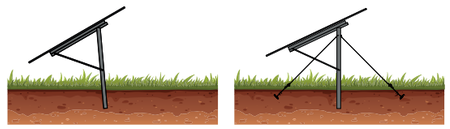


Specialist Mounting Structures

The versatile and adaptable nature of our solar anchoring solutions makes them ideal for use with specialist mounting structures such as folding, modular or rapid deployment structures where they can quickly create a reliable and stable foundation.

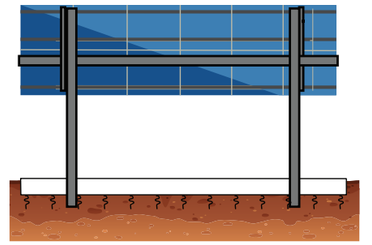
Remedial

Our range of easy to install, lightweight and robust solar anchoring solutions are ideal for overcoming foundational issues developed over time on utility solar sites.



Bifacial Matting Anchoring

Anchor bifacial materials with our simple, fast and strong pinning solutions designed for high load solar applications and compatible with all bifacial reflective materials.



Images shown are for illustrative purposes only and do not depit actual install

Our Solar Anchoring Kits

Overcome pile refusals, support existing foundations and correct misalignment using our lightweight and high performance solar ground anchors.

- **Developed based on tried and tested technology used in demanding slope stabilisation, civil and seismic applications around the world**
- **Lightweight and compact, our Solar Anchoring Kits are easy to handle on site and can be installed in just minutes using only hand tools**
- **A perfect contingency for contractors when foundation issues arise**
- **Open up previously unusable land like brown field or landfill to solar development. Their low profile ensures minimal disturbance to the ground around the structure**

High performance
Up to 2750 kg | 6060 lbs depending on soil type

Fast to install
Install in minutes using just hand tools

Versatile
Use as the primary foundation, or as a support for existing piles or ballasts

Easy to handle
Lightweight kits are easy to transport and can be carried by hand on site

Efficient
Reduce material costs by supporting shallower foundations with ground anchors

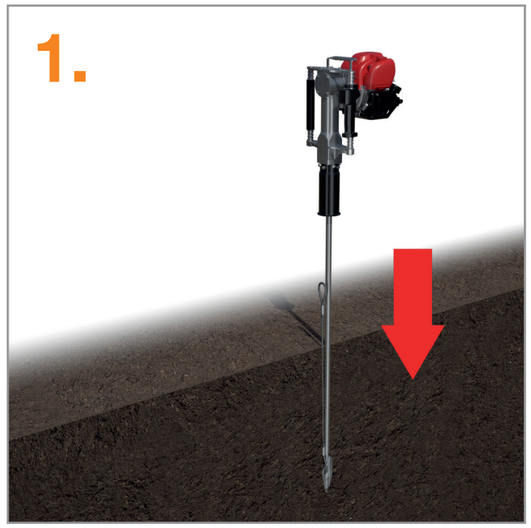
Undisruptive
Install with minimal soil disturbance allowing landfill or brownfield to be developed

Easy to use
Minimal training required to install

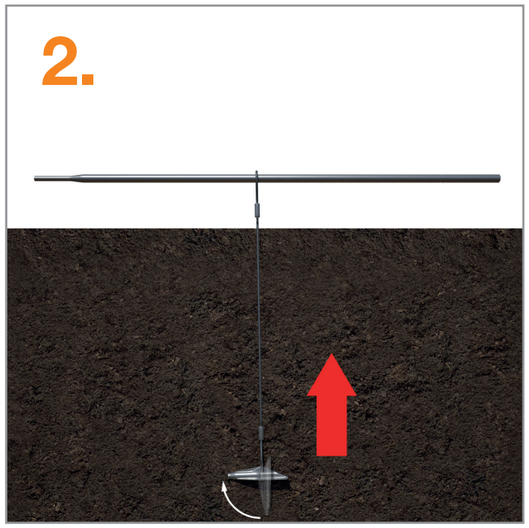
Green
Reduce project emissions thanks to no heavy plant, and reduced embodied CO_2

Solar Ground Anchoring Kits - How It Works

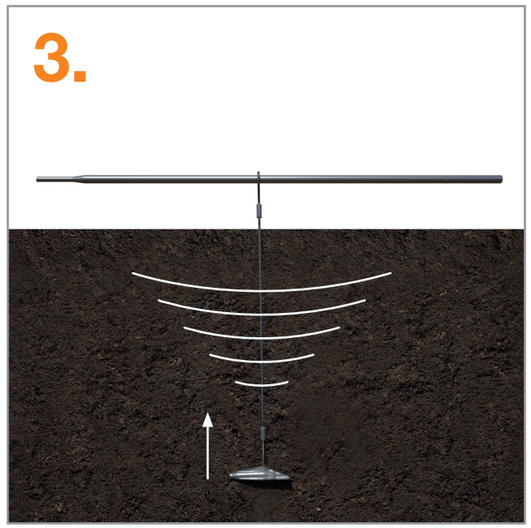
Anchors are driven to a depth of up to 5.0 meters | 16.4 feet and activated by flipping the anchor head to a horizontal position allowing the anchor to achieve high anchoring loads.



Drive the anchor to the desired depth.



After driving to the correct depth, the wire is tightened; this rotates the anchor so that the load bearing surface is parallel to the ground surface.



The wire is further tightened to compress the soil above the anchor's bearing surface. The compression transfers towards the surface to form a cone of soil which prevents further anchor movement.

Anchor Performance

Our ground anchors can provide impressive performance up to 2,750 kg | 6,060 lbs in ideal conditions. Real world on site performance will vary based on both soil density and install depth, the data below offers a guide to typical performance seen in different scenarios.

Maximum Anchor Performance	1250 Anchor	1750 Anchor	2750 Anchor
Install Depth 0.9 m | 3 ft			
Very Loose	105 kg | 230 lbs	197 kg | 430 lbs	612 kg | 1,340 lbs
Loose	173 kg | 380 lbs	315 kg | 690 lbs	963 kg | 2,100 lbs
Medium Dense	487 kg | 1070 lbs	796 kg | 1750 lbs	2,503 kg | 5,500 lbs
Dense	1,184 kg | 2,605 lbs	1,548 kg | 3,405 lbs	2,750 kg | 6,060 lbs
Very Dense	1,250 kg | 2,755 lbs	1,750 kg | 3,860 lbs	2,750 kg | 6,060 lbs
*Estimated			
Install Depth 1.5 m | 5 ft			
Very Loose	152 kg | 335 lbs	323 kg | 710 lbs	918 kg | 2,000 lbs
Loose	279 kg | 615 lbs	534 kg | 1,175 lbs	1,444 kg | 3,185 lbs
Medium Dense	845 kg | 1,860 lbs	1,525 kg | 3,350 lbs	2,750 kg | 6,060 lbs
Dense	1,250 kg | 2,755 lbs	1,750 kg | 3,860 lbs	2,750 kg | 6,060 lbs
Very Dense	1,250 kg | 2,755 lbs	1,750 kg | 3,860 lbs	2,750 kg | 6,060 lbs
Install Depth 2.0 m | 6.5 ft			
Very Loose			1,224 kg | 1,760 lbs
Loose			1,926 kg | 3,500 lbs
Medium Dense			2,750 kg | 6,060 lbs
Dense			2,750 kg | 6,060 lbs
Very Dense			2,750 kg | 6,060 lbs

*Table above shows performance of anchors based on Soil Penetration Test (SPT)

SPT Count & Gripple Anchor Performance

General information

The standard penetration test (SPT) is widely used to determine the strength and deformation properties of the course soil. Approximate correlation of properties of drained granular soil are:

Very Loose	SPT 0-4
Loose	SPT 4-10
Medium Dense	SPT 10-30
Dense	SPT 30-50
Very Dense	> 50

These figures can then be used to obtain typical shear strength and bulk unit weight for each soil. This information is then used to predict Gripple Anchor Performance in relation to the conditions described.

Above data is derived from idealised theoretical calculations and should be used as a guide only. The variability of soil types should always be taken into account and on-site testing should always be carried out in order to obtain more accurate results.

Anchoring Consultations

Looking for clarity on anchor performance for your site?

Our solar technical engineering team are available for on-site consultations and installation trials, giving you the confidence you have specified the right solution for the right location.

What is involved:

+ **Initial consultation to understand project scope and requirements**
+ **On site trial to assess ground conditions and suitability in various locations**
+ **Installation of pilot anchors to provide proof of performance**
+ **Recommendations made as to most efficient anchoring solution based on site specific requirements**

Solar Bifacial Pins

A simple, fast and strong method of anchoring solar bifacial materials, our high load solar bifacial anchoring pins have been developed to be compatible with all bifacial reflective materials.

They can be installed up to three times faster than traditional methods using just hand tools, whilst maximising the efficiency of the bifacial reflective materials due to their small surface area.

Made to last, and easy to install right the first time, they are a cost-efficient solution, avoiding labour costs associated with reworking failing anchor points.

Compatible
Suitable for all types of bifacial reflective material

Fast and Simple
Quicker to install using lightweight installation tool

Minimise Damage
Designed to minimise the risk of any damage to the bifacial reflective material

Small Surface Area
Ensures close ground contact and maximises the efficiency of the bifacial reflective material

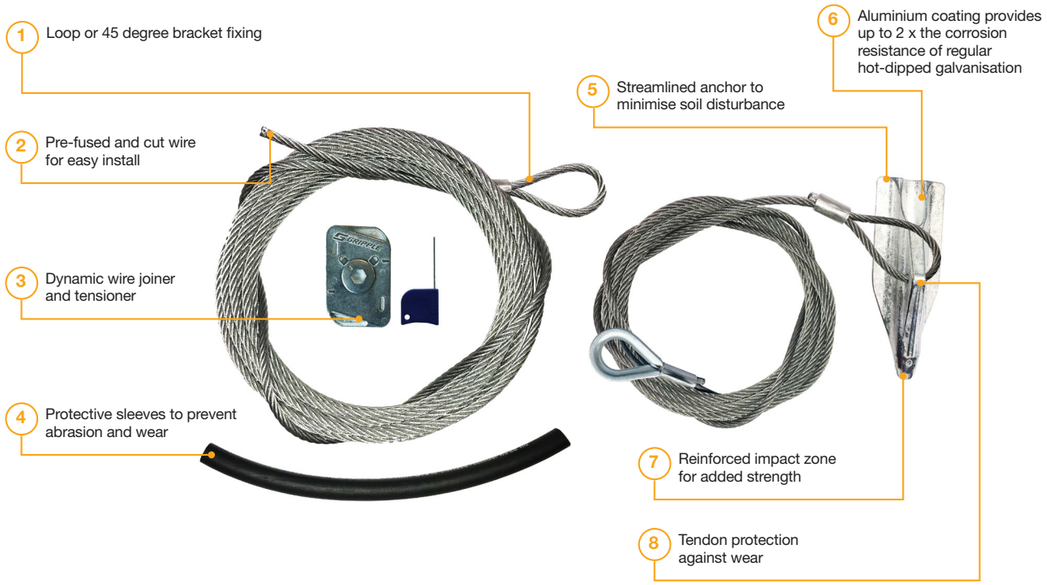
Cost Efficient
Avoids wasted labour costs associated with reworking failing anchor points

Our Products

Solar Anchoring Kits

Our Solar Anchoring Kits provide up to 2,750 kg | 6,060 lbs pull out performance by locking into the soil. They have been developed based on our tried and tested technology use in demanding slope stabilisation, civil and seismic applications around the world.

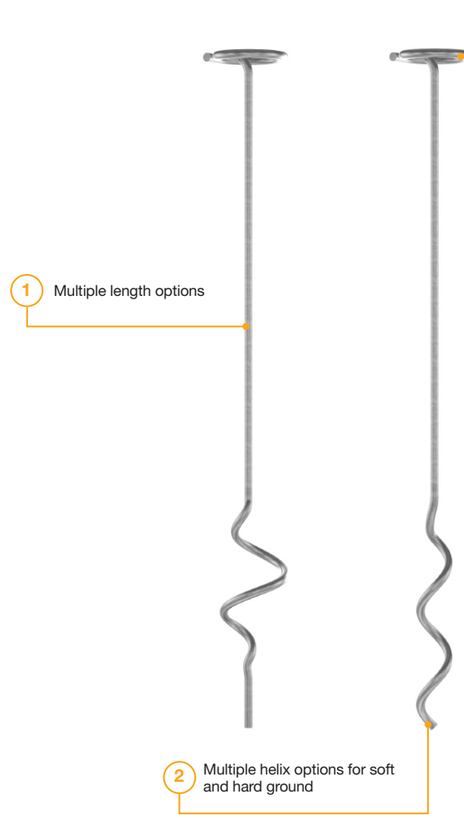
+ **Max Anchor Performance (Very Dense Soil): 2,750 kg | 6,060 lbs**
+ **Max Anchor Surface Area: 191.3 cm² | 29.6 in²**
+ **Wire Tensile Strength: 1,770 N/mm² | 1305 lb-ft²**



Bifacial Pins

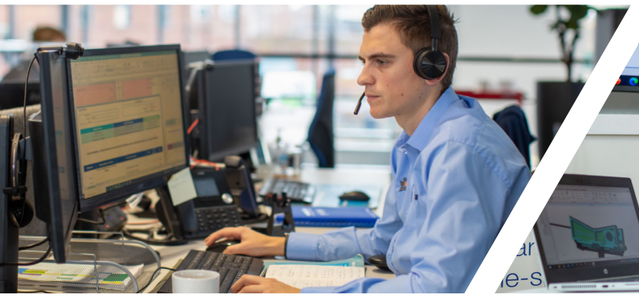
Our Bifacial Anchoring Pin's are a high load performance method of securing bifacial reflective materials to the ground.

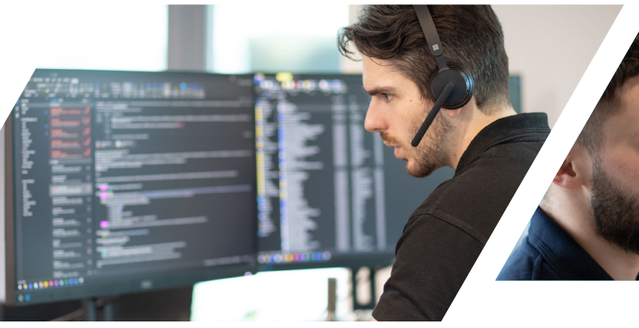
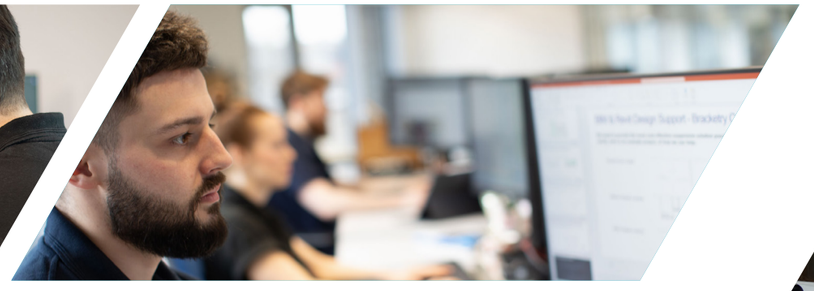
+ **Design Life: 30 Years +**
+ **Length Options: 200 mm and 300 mm | 7.9 in and 11.8 in**
+ **Variants: Hard Ground Pin, Soft Ground Pin**



Accessories:

+ Chuck (90 mm I 3.5 in)
+ Extended Chuck (490 mm I 19.3 in)





Technical Support

Project Installation & Design Support

Here at Gripple, we pride ourselves on more than just game changing products; our dedicated team of solar experts are on hand to deliver highly customised technical support from initial concept to final delivery.

We can provide comprehensive services including project design drawings, engineering calculations, and product modeling to help you achieve optimal results.

To maximise project efficiencies, involve our team as early as possible. During the proposal phase, we can provide multiple options for consideration, enabling you to maximize savings on both labour and materials by selecting the most efficient solution.

Engineering Calculations

Comprehensive structural and capacity calculations to support project requirements and product integration, including, catenary design load and sag analysis, foundation calculations, structural modeling analysis and geomembrane securement analysis.

Design Drawings

Developing detailed structural and site design drawings to support your specific project requirements, ensuring procurement efficiencies, best practice design layout and installation arrangements.

3D Library

We can provide a comprehensive library of 2D and 3D product CAD resources.

1-1 Project Engineering Support

Our Gripple technical team will be on hand at every stage of your project to provide one on one engineering support and advice.

On-Site Support

Our dedicated solar technical team are on hand to provide personalised on-site support from inception to completion of your project.

We can provide a range of on-site support services including installation training, product performance tests, and thorough site condition inspections, ensuring optimal performance and efficiency for your solar projects.

Site Product Tests

Where our product performance can differ based on the soil properties of your site, our engineering team are available to provide on-site real-world testing to validate performance for your specific project.

Installation Training & Support

Are you or your team new to our systems? The good news is they are designed for safe, simple and easy installation. However, if you still need support our dedicated solar technical team are available to provide on-site training and best practice guidance as and when needed.

Site Inspection and Planning

There is sometimes no alternative to actually being on site. Our solar technical team are available to attend site at every stage of your project if needed helping to aid product selection and provide best practice guidance and support.

The *fastest* & easiest way to **join&*tension*** wire since1989

Our wire tensioning innovations have changed the game in applications from electrical suspension to vineyard trellising.

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Solar Anchoring Management – Application Guide 2024 V1
SOL-BROC-PVAK-6339