



*The Strongest Anchors in the World*

**INNOVATION, QUALITY & DESIGN**

With over 30 years of experience in the soil stabilization and foundation industry, we are bringing new solutions that apply state of the art technology and expertise to change the way foundation piles and anchors are installed.

Helical Anchors, Inc.  
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[www.helicalanchorsinc.com](http://www.helicalanchorsinc.com)

## Introduction to Helical Anchors

Helical anchors are most commonly used when the upper soil is not suitable for the load required. Helical anchors transfer load from the top down to a suitable soil. It can be as short as 15' or as deep as 130' and beyond.

Helical anchors are commonly used in the following applications:

- Foundation remediation
- Tower support
- Tieback retaining walls
- Slope stabilization
- Wind farm foundation
- Commercial and residential buildings

Helical Anchors are popular as a foundation solution due to easy and fast installation in various weather conditions with minimal vibration and no cure time. They are also more environmental friendly, with virtually no spoils or waste.

Helical anchors can consist of many components. The most common are leads, extensions, top caps, and/or brackets. Once the lead section is installed, extensions are added to reach the desired depth. In addition to helical anchors, this form of deep foundation is also known as helical piles, helical screws, screw piles, or earth anchors.





## Helical Anchors, Inc. Product Specification

Component Properties	Specification
Outer Diameter*	2 3/8", 2 7/8", 3 1/2", 4 1/2", 5", 5 1/2", 6 5/8", 7", 10 3/4", 12 3/4"
Capacity	50,000 lbs to 800,000 lbs
Length	5', 7', 10'
Helix Plate Diameter	8", 10", 12", 14", 16"
Helix Plate Thickness**	3/8", 1/2"
Bracket Types	Standard, Light, and Heavy Duty
New Construction Caps	Custom designed
Push Piers	Custom designed
Corrosion Protection	Hot Dip Galvanized

\* Custom designed diameter and wall thickness is available based on request. Inertia welding is done for shafts up to 7 5/8" diameter.

\*\* Different cutting flight profiles for easier installation is available based on request.

**With a combination of superior steel  
and inertia welding process,  
Helical Anchors, Inc. manufactures the  
strongest anchors in the world.**

It comes down to the connection. Our competitors' weak points are typically the connections. We designed our piles to make the connections the strength. We use a high strength steel for our pin and box connections. The only way to do that and have it be effective is to join the connections to the mid-body with a process called inertia welding. Inertia welding originated in the oil industry many years ago.

The basis of inertial welding is to create enough friction to conjoin the pipe and the tool joint together as one. To do this we lock the pipe to a welder and rotate the tool joint to roughly 1,500RPM (depending on the size and wall thickness of the pipe). Pressing them together with a high amount of force creates an inertia weld.



## Benefits of using Helical Anchors, Inc. Shafts

- **CNC Machined Male and Female Connections** – Makes for a superior fit and finish and decreases installation time.
- **Manufacturing Flexibility** – Custom length, bracket, new construction cap, etc., are available for fabrication and manufacturing.
- **Engineered Products** – Accurate field results are achieved through tested capacity to torque ratios.
- **Ease of Installation** – 2-3 man crew with one piece of installation equipment can install up to 100 anchors per day. Small maneuverable equipment allows for installation in confined areas.
- **Certified Installer Training** – Training and testing for installers is provided.



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