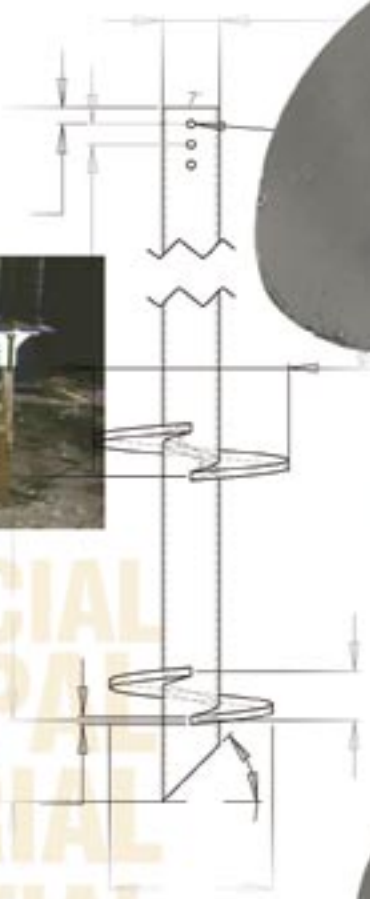
IDEAL™

FOUNDATION SYSTEMS™



COMMERCIAL
MUNICIPAL
INDUSTRIAL
RESIDENTIAL

The Leading Edge℠

At IDEAL, we try not to complicate things. We discover needs and problems, then work out solutions. It takes real teamwork to accomplish truly great things. That's you and us, working together, with all the up-to-date knowledge and experience we can employ to put a project together.

Now That's IDEAL.

We specialize in manufacturing state-of-the-art products for use in the industrial, commercial, municipal, and residential industries. We make it a priority to design and produce the very best in products and equipment for applications including underpinning, tie-back anchors, and piles for new construction. We are committed to unparalleled customer service and support to ensure excellence in the design and performance of projects relating to foundation remediation, helical piling, and other foundation systems.

LISTEN. RESEARCH. DESIGN. DELIVER.

The Leading Edge℠

New Construction LTD

Extension

Bolted Coupling

Lead Section

Helix

Early screwpiles applications – lighthouse foundations

First generation screwpile

Tension anchor LTD (Load transfer device)

CounterForce™ Underpinning Bracket (patent pending)

APPLICATION AND USES OF HELICAL PIERS AND ANCHORS

A helical pier is a deep foundation. Its purpose is to transfer a structural load to deeper, stronger, and less compressible materials bypassing any weaker and more compressible materials that would be unsuitable for the support of a conventional shallow foundation. As a deep foundation, a helical pier should be considered for most applications that would call for a driven pile, drilled pier, or mini pile.

Gridwork for towers

New foundations 40-100 ton capacity

Breakwall reinforcement

Underpinning commercial building

Boardwalk

Uses of helical piers include the support of new structures and the underpinning of existing structures that have settled excessively.

Helical anchors are used for resisting upward forces, lateral forces, and overturning moments. Applications include communications towers, advertising signs, silos, below-grade tanks subjected to hydrostatic uplift, and tie-back anchors for both permanent and temporary earth-retaining structures.

Light pole base

Towers

Train bridge underpinning

New homes

Retaining wall

Installation 80 kip tie-back anchors wall stabilization

Airport weather station

It is important to note that the uses of the helical unit continue to expand with product developments and engineering experience.

FOR MANY APPLICATIONS HELICAL UNITS MAY OFFER SIGNIFICANT ADVANTAGES OVER OTHER SYSTEMS. SOME OF THESE INCLUDE:

- Wide range of allowable loads
- Adaptability to a variety of installation angles
- Lower cost than driven or drilled piles – do not go as deep to reach the same capacity
- Ease and speed of installation
- Minimal support equipment
- Suitability for low-headroom and other limited-access areas
- Easy cutoffs
- No concrete-related delays
- Little or no dependence on weather
- Little or no earthwork and spoil material (a particular advantage at contaminated sites)
- Minimal vibration and noise
- Easily removed and reused in temporary applications

Eco-Sensitive installation

300 Ton capacities

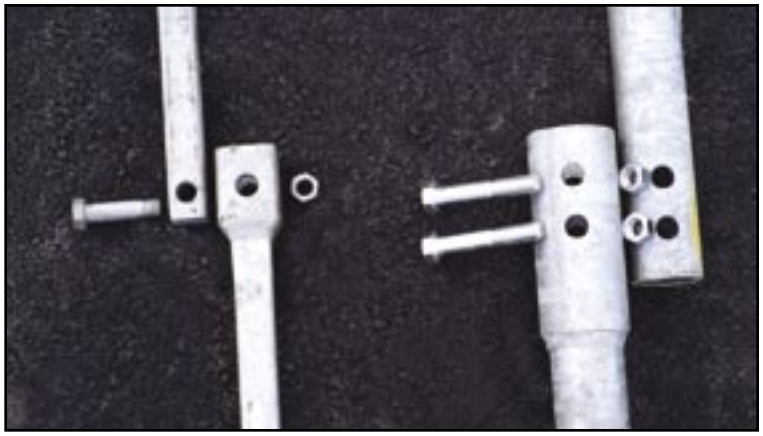
Tie-back anchor installation with difficult access

Difficult-to-access and low clearance pharmaceutical structures

PIPE SHAFTS HAVE THE FOLLOWING ADVANTAGES OVER SQUARE SHAFTS:

- Greater section modulus – increased lateral stability
- Greater ultimate and allowable loads – 7-inch standard material – 300-ton ultimate capacity
- Less eccentricity (straighter)
- Greater resistance to buckling
- Higher torque capacity
- Inspectability – post installation depth and plumb
- Can be filled with grout or concrete for increased capacity

Allows for post-installation depth and plumbness inspection



1-1/2" Square: Max 5500 ft lbs. torque
2-7/8" Round: Max 8000 ft lbs. torque

Round and square visual comparison of lead sections on a marine breakwall project – tie-back anchors

Round and square lateral stability

Round shaft

Square shaft

IDEAL™

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Our Mission

To provide our clients and associates with “Leading Edge” technology, products, equipment and support to ensure excellence in the design and performance of projects relating to foundation remediation, helical piling, tension anchors and other foundation systems.

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