



CHANGE

HELICAL SOLUTIONS
DEEP FOUNDATION PRODUCTS

COMMERCIAL GRADE

Chance helical pile foundations are segmented deep foundation systems with helical bearing plates welded to a central shaft. The dead and live load of a structure is transferred from the shaft to the soil through these bearing plates. The concept is founded on the principle of turning a screw into stable subsoil strata, until the torque applied indicates that the necessary load capacity has been achieved.



HELICAL PILE ADVANTAGES

Many engineers specify helical piles because they are a pre-engineered solution that provides a quick, turnkey solution with torque-to-capacity correlation and immediate loading. Small installation equipment equals low mobilization costs. Easy field modification, year-round installation, and environmentally friendly materials and methods make helical piles an easy choice. Helical piles offer no vibration, no spoils to remove, access to limited sites and no restrictions related to high water tables for a preferred deep foundation solution.

CHANCE® BRAND ADVANTAGES

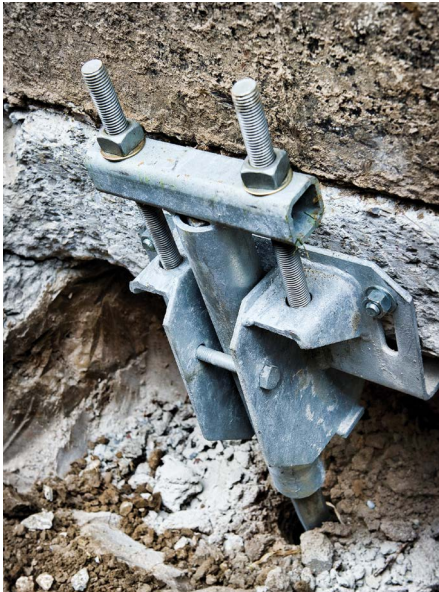
Chance brand helical piles deliver building code evaluations, premium quality, innovation, manufacturing excellence, and engineering expertise. Proudly manufactured in the USA, Hubbell Power Systems, Inc. (HPS) products are ICC-ES and CCMC evaluated to instill confidence to engineers and architects that our systems comply with codes and standards nationwide. Our evaluation report, ESR-2794, provides IBC Code compliance for several products, and offers a competitive advantage for Chance helical piles to be used in a wide variety of construction projects.

Chance products that are hot dip galvanized, meet ASTM A153/A123 standards for optimum corrosion protection. HPS ensures that all of their welders are certified to meet American Welding Society (AWS) Standards (D1.1) and hosts a structured yet flexible framework quality control ensures products meet ratings and ISO:9001 Certification. Design details from our in-house application engineers ensure the success of each project.



HELICAL PILE APPLICATIONS

FOUNDATION REPAIR SYSTEMS

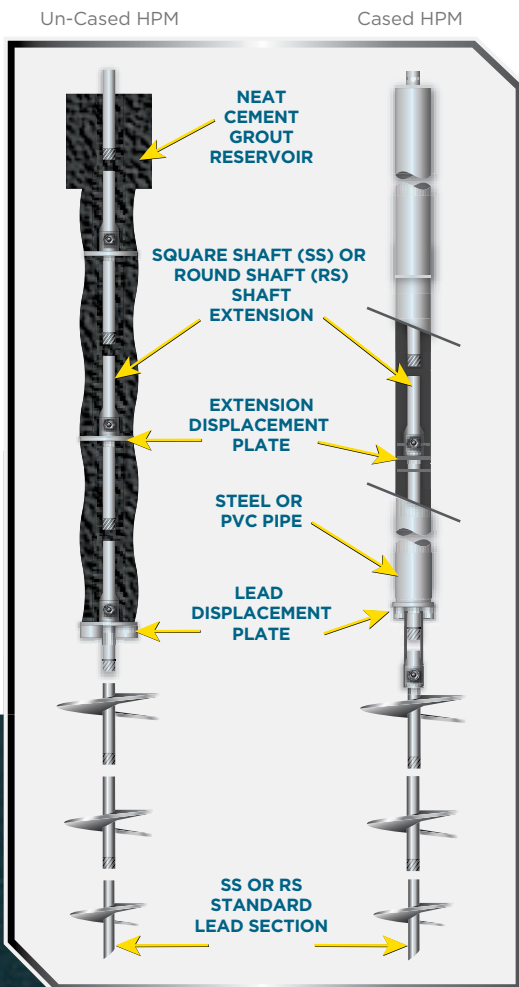


Chance helical piles are ideal for stabilizing/lifting foundations or retrofitting to increase load capacity. They are installed at intervals around the perimeter at affected locations. Independent of the structure, the piles are extended to bearing depth and installing torque correlated to the required load bearing capacity in a variety of soils. Special foundation brackets are secured around the perimeter and then, a steel helical pile is screwed into the earth and connected to each bracket.

Chance brand products were the first helical pile system developed for remedial repair.

DISASTER RECOVERY

Elevating a home and installing Chance helical piles provides structural support and cost-saving benefits. Because helical piles are segmented, there is no need to move a home out of the way eliminating associated costs with moving it. A common solution is the Chance Helical Pulldown® micropile (HPM) which combines a grouted shaft with a helical pile to provide maximum load capacity and corrosion resistance. Other methods such as timber piles create a considerable amount of vibration so the risk of damaging neighboring homes is significant and the home must be moved. The HPM solution is the preferred solution for coastal areas providing superior lateral capacity and securing homes in flood zones.





With over 100 years of design and application experience, the Chance Alliance Network is ready to assist and support your next project.

[Find your local distributor](#)



NEW CONSTRUCTION

For new deep foundations, Chance helical piles are installed at intervals between the footing forms and tie into a rebar grid, prior to pouring concrete. The piles are extended to determined depths attaining the installing torque correlated to the capacity requirements and the site-specific soil conditions.

With no need for structural facings and reduced equipment needs, Soil Screw® anchors allow for a faster built retention wall system.



SOIL SCREW RETENTION WALLS

The Chance Soil Screw retention wall system is composed of a gravity composite soil structure in which an excavated slope or vertical cut is internally reinforced through placement of closely spaced soil screw reinforcing elements. Helical soil nails are installed by placing them into the existing soil slope or new excavation. Construction is performed in vertical steps, with construction starting at the top of the excavation and proceeding down (top down construction). Once an excavated level is reinforced with soil nails, a permanent or temporary facing such as shotcrete veneer is applied to retain the soil. The grid spacing and sizing of bearing plates are determined by soil conditions and load requirements.

HISTORY AND INNOVATION SINCE 1912

The Chance helical pile was the first foundation stabilization system created for remedial repair. Today, Chance products continue to lead the industry with innovative solutions that are widely accepted for quality and performance within the deep foundation industry. HPS proudly manufactures the American made Chance brand family for residential, commercial, industrial, electric utility, oil and gas, pipeline, mooring, railroad, and renewable energy markets. Backed by over 100 years of engineering experience, Chance helical pile systems offer a technologically advanced and cost effective alternative to concrete and other foundation systems. Chance helical piles comply with the 2021, 2018, 2015, 2012, and 2009 International Building Code (IBC) and International Residential Code (IRC), are ICC-ES Approved, and ISO:9001 Certified.



Power installs, no site preparation, and full installation in less than one hour.

POLE BASE FOUNDATIONS

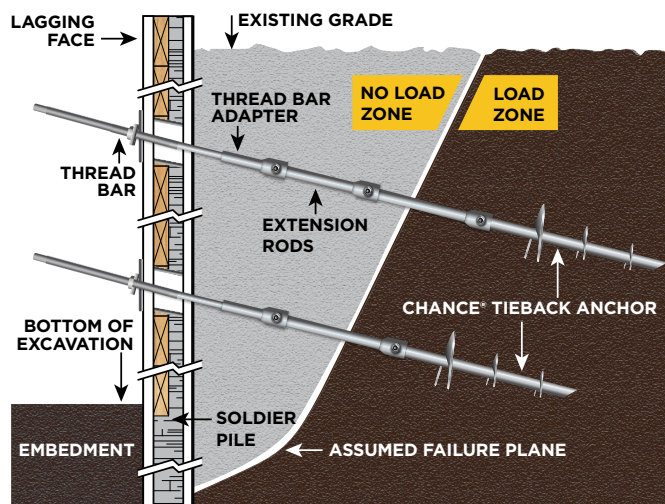
Chance Instant Foundation® Systems provide an economical and quick solution to setting foundations that require wiring. Compared to other foundation types, steel helical piles offer:

- Lower installation costs
- Clean, no excavation
- Immediate pole attachment
- High overturning moment resistance
- All weather installation
- Power installs, no site preparation

Power conduit feeds into the side cableway, up and out the top and the variable bolt-circle baseplate bolts direct without alignment problems. Job ready, Chance Instant Foundation systems are pre-engineered for lighting applications, EV charging infrastructure, rail, solar and wind power foundations, 5G/6G poles, signage, and more.

HELICAL TIEBACK ANCHORS

Chance tieback anchors are commonly used for soldier-pile/lagging walls and are manufactured with a variety of shaft sizes, single or multi-helix plates, and several diameters for job specific requirements. Anchor sizes are determined by soil conditions and load requirements. They can be load tested immediately following installation by conventional rotary drilling equipment. Comparatively, helical tieback anchors remove performance uncertainties and associated costs of grouted tendons in soils with limited or no subsurface information.



LEARN MORE ABOUT AVAILABLE PRODUCTS, APPLICATIONS, AND RESOURCES ON OUR WEBSITE.

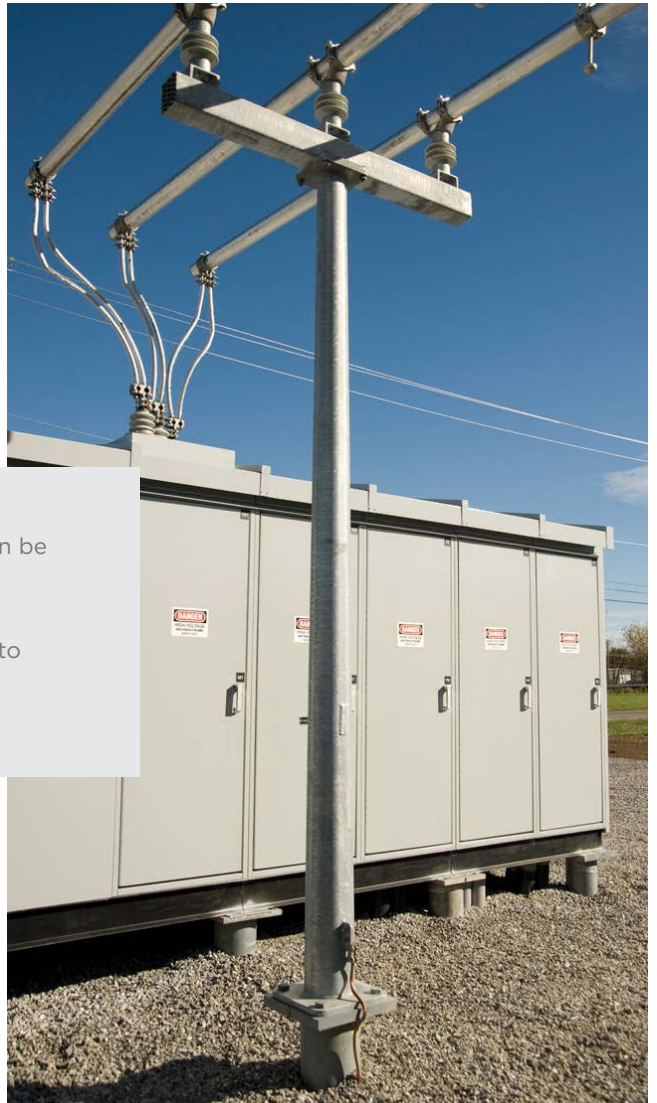
www.ChanceFoundationSolutions.com



TELECOM AND TRANSMISSION TOWER FOUNDATIONS

Because helical piles can go places concrete piers cannot, utilizing them for self-support towers, monopole towers, direct buried pole supports and guyed towers is a simple solution for sites with poor soil conditions, rough terrain, flood plains, glacial till, sand, swamps and bogs. Limited access site? No problem. Helical piles are ideal for areas inaccessible for conventional drilled shaft construction due to high mobilization and construction costs.

No matter the structure type or site condition, Chance Foundation Solutions has a product for any load, anywhere.



OTHER KEY BENEFITS:

- **WEATHER VARIATIONS:** unlike concrete, Chance helical piles can be scheduled throughout the year. They install in wet and freezing conditions with no waiting for concrete to cure.
- **FROST HEAVE REGIONS:** by placing load-bearing helix plates into competent bearing strata well below active expansive clays or frost zones, Chance Helical Piles designs can be far shorter than concrete piers or driven piles for equivalent capacities.



APPLICATION EXPERTISE

We have identified nearly 100 unique applications for helical piles. Our local experts comprise the largest network of helical pile distributors in North America. Their installation and engineering expertise comes from thousands of real installations in a myriad of soil conditions. Scan the code to read more about some of the projects we have been a part of or visit blog.chancefoundationsolutions.com/tag/case-studies



[Explore our Case Studies](#)



ENVIRONMENTAL TIEDOWN AND SUPPORT SYSTEMS

MOORING Chance helical anchors for mooring applications are designed for simple installation and to maximize load capacity. They install from the surface and allow shorter scoping to reduce space between boats. This also allows for minimal sea floor disturbance protecting the ocean floor ecosystem.

WALKWAYS/BOARDWALKS Ideal for walkways and boardwalks, helical foundations utilize portable installing equipment to access sensitive wetland areas with minimal disturbance. Installing quickly to load bearing strata without soil excavation, Chance helical piles offer immediate loading capabilities.

PIPELINE Offering buoyancy control and tension/compression load support to pipeline systems across the country, Chance helical piles installs easily with standard equipment, any time of year and in most weather conditions.

[Scan to learn more about applications for helical piles](#)



Chance brand helical piles and anchors are the oldest, most trusted, and most experienced earth anchoring products in the world.

DEFY DENSE SOILS

ROCK-IT® helical pile lead section is an innovative solution that penetrates rocky, high blow count, or even permafrost soils without pre-drilling or field modification. The single carbide tip combined with a square shaft helical pile provides a proven solution to reach loadbearing depths in high blow count material.



[Get the ROCK-IT brochure](#)



FIND A LOCAL DISTRIBUTOR



VIDEO LIBRARY



BLOG ARTICLES



TECHNICAL DESIGN MANUAL

HELICAL SOLUTIONS DEEP FOUNDATION PRODUCTS

FOUNDATION REPAIR

DISASTER RECOVERY

NEW CONSTRUCTION

TELECOM & TRANSMISSION

TIEBACK ANCHORS

OUTDOOR LIGHTING

SOIL SCREW

ENVIRONMENTAL TIEDOWNS

Never Compromise™



CHANCE Civil Construction | 210 North Allen Street | Centralia, MO 65240 | United States of America

©Copyright 2023 Hubbell Incorporated. Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

Printed in the U.S.A. | BR04146E 0323

