

Helical Foundations for

Solar & Wind Applications

Supporting Renewable Energy from the Ground Up



photo courtesy of Parafold



Overview

What started in 1912 as an entrepreneurial venture to anchor telephone poles evolved into the creation of the world's leading manufacturer of helical piling, anchoring, and earth retention systems. As a business unit of Hubbell Power Systems, CHANCE® is recognized around the globe as the preeminent producer of helical foundation products engineered for multiple applications, including the construction of solar and wind energy systems.

We take pride in our unsurpassed ability to custom-engineer helical solutions to satisfy the unique requirements of each individual project. Our site-specific, modular component systems are designed to perform in most soil conditions, in any locale. They can be installed quickly and easily and they're environmentally conscious, as well. CHANCE is listed with all major building codes, including the UBC, BOCA, SBCCI and CCMC (Canadian). The company is ISO9001 Certified, which ensures that each and every product we ship meets the highest quality standards.

Helicals versus Concrete and Driven Piles

Because helical piles work well in both compression and tension, they are ideally suited for conditions inherent to energy-related construction sites, particularly those associated with solar projects. One example would be the uplift created by wind and/or adfreeze when frozen ground causes negative skin friction along the pile shaft.

Another advantage of using helical piles is the lack of spoils from contaminated soils and the ability to avoid grading and other ground disturbances. As developers of alternative energy projects will attest, it is important to maintain the sites as naturally as possible. For large installations considering the use of concrete, using a CHANCE piling system, instead, eliminates the need to build a batch facility. Unlike concrete,

helicals do not require the use of water, a critical and threatened resource.

The sustainable design of helical "screw" piles means that they can be re-used or easily recycled. CHANCE piles can be removed from the soil unlike treated timber or concrete piles, which are generally abandoned. Another major issue when comparing foundation design is soil composition. Driven piles — whether timber or steel — often have to be longer than helical piles in unstable soils.



Facts You Should Know

In manufacturing its CHANCE helical pile system, the company processes more than 100 million pounds of domestic steel annually at its Centralia, Missouri-based facility. We're proud to be able to say "Made in the USA."

CHANCE helical foundation products are backed by a 30-year "Peace of Mind" warranty (when installed by a CHANCE Certified Installer).

CHANCE is listed with all major building codes, including the Uniform Building Code (UBC), BOCA, SBCI and CCMC (Canadian).

CHANCE has submitted an application package to ICC-ES and is pending approval for an evaluation report per AC358.

CHANCE is ISO9001 Certified, ensuring that each and every anchor and foundation shipped meets the highest quality standards.

The CHANCE Alliance Network includes 18 exclusive distributors and more than 1,400 certified installers at over 400 contractor locations throughout North America.

CHANCE employees represent over 11,000 years combined experience in engineering and manufacturing.

CHANCE manufactures using low-impact recycled materials, avoiding those which damage human health, ecological health, and those which deplete resources.

CHANCE is the only helical manufacturer with an ICC-ES accredited laboratory. The lab is fully equipped to conduct torsion, tension, compression and lateral load tests on helical pile products.

Engineering Excellence

At CHANCE, "engineering excellence" isn't just a phrase, it's a way of doing business. For example, a key consideration in the use of helical piles for solar applications is the customized nature of the base plate connection between the pile and the panel. That's where CHANCE engineers excel. We have a reputation for close collaboration between our engineers and our customers to design customized connections and pile configurations to solve the challenges created by varying soils and weather conditions. Our priority is to engineer a foundation sufficient to resist all applied loads while still allowing for quick and easy installation. For one recent project, our engineers went so far as to develop a new drive tool to work specifically with the final design.



Ease and Speed

An advantage credited to helical piles is the inherent ease and speed of installation. CHANCE helical piles are the answer for reducing project construction time and saving on energy, consumption of resources, and reduction of the contractor's carbon footprint.

Although a function of installation and not manufacturing, the fact is that helical piles allow for installation rates as high as 500 piles per day. Helical piles can often be shorter, and therefore cost less, than comparable driven piles or drilled shafts.

