

# NEW CONSTRUCTION

## HELICAL PILE FOUNDATION SYSTEM



Helical pile foundations have advantages over driven piles, drilled shafts, grouted tendons, auger-cast piles, belled piers and other deep foundation systems, for the following reasons:

- Fast installation
- Immediate loading - no concrete to cure
- Engineered foundation solution
- Instant torque-to-capacity feedback for production control
- Load capacity based upon torque correlation
- Easy field modification
- Made in the U.S.A.
- Easy to use in limited access sites, high water tables and weak surface soils
- No spoil removal
- No casing required for flow-able sands, soft clays or organic soils
- Minimizes soil disturbance during installation.
- All weather installation
- No vibration
- Environmentally friendly
- Hot dipped galvanized to ASTM A153 and A123
- ISO 9001 Certified
- ICC-ES, ESR-2794

The CHANCE® Helical Pile Foundation System gives you the performance of concrete without the drawbacks and liabilities of driven piles and drilled shafts.

Helical Piles are designed to resist loads for most foundation applications. They install fast and with lightweight, standard equipment. There's no concrete to cure so you can load immediately keeping you in control and on schedule.

CHANCE Brand SS5 and SS175 products, manufactured by Hubbell Power Systems, Inc., received a comprehensive evaluation report ESR-2794 from ICC Evaluation Service (ICC-ES), providing evidence that SS5 and SS175 helical systems and devices are in compliance with code requirements. Building officials, architects, contractors, specifiers, designers and others utilize the ICC-ES Evaluation Reports to provide a basis for using or approving helical anchors and piles in construction projects.

### HOW IT WORKS:

The Chance Helical Pile is a segmented deep foundation system with helical bearing plates welded to a central shaft. Load is primarily transferred from the shaft to the soil through these bearing plates.

They install with a hydraulically powered torque motor mounted to virtually any machine such as a rubber tired backhoe, digger-derrick truck, track-hoe excavator, or front end skid-steer loader.

As a result of their true helical shape, the helices do not auger into the soil but rather screw into it with minimal disturbance. The first section is called the lead or starter section and contains the helical plates. Extensions are added to the helical pile system until load bearing strata or necessary torque capacity is achieved.

# SOLID ADVANTAGES FOR NEW CONSTRUCTION AND BEYOND



The CHANCE Helical Pile Foundation System is perfect for a wide range of commercial, industrial, institutional and residential applications — from new homes and high-rise structures to sound walls, communication towers and bridges.

## APPLICATIONS:

- New construction supporting foundation grade beams, column bases, compression, tension and concrete slabs.
- Repairing failed or old foundations using time-tested engineered solutions.
- Retrofit foundations in existing structures where new loads are being added or under existing concrete slab.
- Permanent battered piles to take lateral loads, including wind and seismic.
- Machinery and/or equipment foundations for immediate loading with increased capacity.
- Wind and seismic loading applications such as sound walls, billboards, communication towers including permanent tension hold downs.
- Foundation support in tight access or inaccessible areas, primarily vertical axial compression loading.
- Permanent or temporary structural shoring and earth retention.
- Foundations in noise-sensitive areas where vibration is a concern.

Contact Hubbell to find your local Distributor and receive a copy of our detailed Technical Design Manual or our exclusive HeliCAP® v2.0 Helical Capacity Design Software.

573-682-8414 | [civilconstruction@hubbell.com](mailto:civilconstruction@hubbell.com)

## RELIABLE HARDWARE:

- SS (Square Shaft) Piles and Anchors. Includes 1 1/4", 1 1/2", 1 3/4", 2", and 2 1/4" square shafts.
- Extension shafts with forged upset couplings to lengthen piles and anchors.
- RS (Round Shaft) Piles. Uses 2 7/8", 3 1/2", 4 1/2", 6" and 8" pipe shafts for a wide array of foundation applications.
- SS & RS Combo Piles. Adapters take all square shaft products and couple them with the 2 7/8", 3 1/2" or 4 1/2" pipe shaft extensions.
- Helical extensions provide additional helix plates for more capacity in competent load-bearing soil.

## THE SHAPE OF STABILITY:

The true helix geometry of each steel bearing plate minimizes soil disturbance during installation.

