



A Name You Can **Build On**



HELICAL PILING

Ideal for almost any application, helical piles can be quickly installed with little impact on immediate surroundings. Upgrades to live facilities can be made safely and in a timely manner. As with driven piles, helical piles can be cut, capped, and used without delay, and without a nearby source of concrete. If the time comes, helical piles can be easily removed for re-use or recycling, assisting customers with addressing environmental concerns, and drastically reducing remediation costs.

With the experience of over 1,000,000 helical piles manufactured - our industry leading helical pile is complemented with one of the largest, and most diverse fleet of installation equipment in North America - with electronic torque monitoring. All engineering, manufacturing, and installation of this product is completed in house.

Contact Roterra Piling today for all of your foundation needs. Our experts can help you with pile feasibility, design, budgets, execution plans, load testing, pile analysis, fabrication, and installation. Roterra's team is dedicated to assisting you in a timely manner.

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HELICAL PILE ADVANTAGES

- ➔ Economical alternative compared to traditional deep foundation techniques
- ➔ Quickest method of piling installation when properly designed and installed
- ➔ Load can be applied immediately after installation
- ➔ Minimal environmental impact
- ➔ Minimal noise and vibration
- ➔ Removable and reusable
- ➔ Versatile foundation system: pile groupings and/or battered install offers limitless possibilities
- ➔ Year round installation
- ➔ Soil strength feedback and confirmation during installation
- ➔ No drill spoils and no requirement for concrete
- ➔ Extensions can be applied to increase length and capacity
- ➔ Easily adapts to unexpected soil conditions

DISADVANTAGES

- ➔ Difficulty penetrating very hard bearing layers
- ➔ Installation through strata that may damage helices can cause issues (i.e. rocky soil layers)
- ➔ Lowest pile capacity for single piles of major piling types
- ➔ Manufacturing lead time is required for projects

APPLICATIONS

Recent innovation of large hydraulic drive heads over the past 20 years has enabled helical piles consideration as a viable deep foundation solution. Helical piles are installed by pinning the top of the pile to a hydraulically powered drive head and rotating the pile into the ground until the helical plate(s) are installed to a desired depth and a satisfactory installation torque is achieved. Initially embraced in Oil & Gas and Transmission Line projects due to their speed and low cost, they are now commonly used in substations, commercial and industrial buildings, modular structures, communication towers and for pipeline and compressor supports.

