

# CHANGE Helical ROCK-IT<sup>™</sup> Pile



**⚠ WARNING**

Read and understand this instruction sheet completely before installing a helical pile. These instructions are intended to illustrate the installation of the CHANCE Helical ROCK-IT™ Pile. Information covered in this instruction sheet must be used by competent personnel familiar with following good work and safety practices. Should additional information and details be required, or if specific situations arise which are not covered adequately herein, the user should contact to Hubbell Power Systems directly. In some cases, Hubbell Power Systems may make specific recommendations concerning installation torque, depth, and instructions for a specific application.

Helical piles are typically installed using portable or machine-mounted rotary hydraulic motors capable of exerting a torsional moment at least 10 percent higher than the rated installation torque of the helical pile type being installed: as well as apply an axial force (crowd) sufficient to penetrate the soil at a rate of approximately 3 inches per revolution. In addition, equipment capable of measuring installation torque must be used for installation quality control. The foundation piles must be aligned both vertically and horizontally as specified in the approved plans.

The helical piles must be installed in a continuous manner with the pile advancing at a rate of at least 2.5 inches per revolution at the time of final torque measurements. Installation speeds should be limited to less than 15 revolutions per minute (rpm). Torque correlation-to-capacity may not be valid if a helical pile is advancing at a rate less than 2.5 inches per revolution. If the helical pile is advancing through hard/dense soil or weathered rock: such that its rate of advancement is less than 2.5 inches per revolution, a load test is recommended to verify capacity.

*The helical piles must be installed in a continuous manner with the pile advancing at a rate equal to at least 2.5 inches per revolution at the time of final torque measurements.*

**⚠ WARNING**

Failure to monitor the condition of all parts and take corrective action as necessary may lead to failure during use resulting in personal injury or property damage.

Check all bolts regularly to ensure they remain tight. Loose or damaged bolts may fail at or below the bolt circles torque rating or contribute to damage elsewhere in the tooling string. Check all parts regularly for wear or damage and replace as necessary with original equipment. Replacement bolts must be the same grade and length as the originals.

Refusal is when the pile stops penetrating (advancing). If this is encountered without achieving minimum depth it may be necessary to retract the CHANCE Helical ROCK-IT™ Pile it may be 2-3 revolutions and begin reinstallation with a reduced crowd. The reduced crowd may decrease penetration below the recommended rate but will allow the ROCK-IT™ Pile tip to wear away hard/dense soils for minimum depth achievement.

The Helical piles must be installed to the minimum tip embedment specified in the approved construction documents. For tension applications, as a minimum, the helical pile must be installed such that the minimum depth from the ground surface to the uppermost helix is 5D; where D is the diameter of the largest helix.

*These instructions do not claim to cover all details or variations in equipment, nor to provide for all possible conditions to be met concerning installation. The presence of energized overhead lines in particular, may necessitate alternate methods to prevent accidental contact with the lines. If further information is required or if specific problems are encountered (which are not sufficiently covered in this guide) contact Hubbell Power Systems.*

*NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.*

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