
Foreword

Helical piles offer a versatile and efficient alternative to conventional deep foundations or anchors in a wide variety of applications. This technology has enjoyed an increased awareness and use by engineers in recent years, a trend which is due at least in part to the efforts of Howard Perko and the members Deep Foundation Institute Helical Foundations and Tie-Backs Committee.

With this greater implementation of helical piles comes an increased need for a comprehensive guide to the current state of knowledge regarding the appropriate methods of design and installation. Howard's book is a much needed resource to meet that need and will serve as the authoritative and comprehensive reference on helical piles.

The fundamental mechanisms by which helical piles develop resistance to load are described in a manner consistent with basic principles of soil mechanics. Along with the thorough description of installation methods and equipment that is provided, the concepts used for design and quality control/quality assurance follow logically. The section on corrosion and life expectancy is particularly important now as applications of helical piles expand into greater use with permanent structures with longer intended service periods. Applications for helical piles are described which may prove novel to many engineers and open opportunities for innovation and development of more cost-effective solutions.

In summary, this text provides a valuable reference on an emerging technology that should serve as an important resource for any practicing engineer or constructor involved in the design or construction of foundation or earth support systems.

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