

New Rigs Provide Higher Performance And Versatility

Contractors face demanding jobsites and a highly competitive market every day. Tested all over the world for quality and safety, Soilmec's innovative technologies give customers the competitive edge with an expanded repertoire of services.

Soilmec's versatile, new multifunctional drill rigs can be used for traditional drilled pile construction (cased or uncased), as well as fit with advanced "kits" of various combinations of ancillary components.

In addition to increased power and transportability, the Tier 4 engine in the latest Soilmec SR-75 and SR-95 rigs decreases fuel consumption. The new Drilling Mate System provides superb rig control and remote monitoring. The integrated redesign of the mast, rotary, Kelly and parallelogram enhances stability and provides greater crowd and extraction force, enabling greater depth capability.



Condon-Johnson & Associates, Inc. installs drilled shaft foundations for a 6-level parking structure using the new Soilmec SR-95.

And the newly redesigned cab with improved ergonomic controls provides better operator comfort and control.

Like all Soilmec rigs, the SR-75 and SR-95 are self-assembling, versatile and easily transportable. They can be used to perform continuous flight auger (CFA) piling by means of a longer auger string, cased auger piling (CAP) with a double independent rotary system, deep displacement piling (DDP) with the new traction compacting tool (TCT) and turbojet (TJ) soil consolidation. They can also be fit with a short mast for large-diameter piling under low-headroom conditions. ■

Why Sonic Drilling Is Ideal For Underground Applications

If it were certain what conditions existed underground, there would be less need for geotechnical or investigative drilling. If it were understood with certainty the underground contaminant plume geometry and type, then the location, quantity and depth of the injection/monitoring wells would be well defined and waste would be minimized.

Despite the uncertainty, efficient use of resources while minimizing environmental impact is essential.

Sonic drilling reaches depths exceeding 800 ft with less than 1% deviation while drilling 2 to 4 times faster and generating < 20% of the investigative derived waste compared to conventional drilling. Sonic drilling involves vibrating the drill string such that the formation near the string is essentially liquefied and



TSi 150CC sonic drill rig

friction is minimized. As obstacles are encountered, the resonating drill string has enough energy to overcome these obstacles without changing drill bits, the drilling method or deviating from the intended drill path.

Compared to conventional drilling, sonic drilling is well suited to work in populated/congested areas due to the low impact on surrounding structures, traffic and commercial activities. Underground sonic drilling is localized to the immediate area of the bore hole with far fewer concerns with respect to damaging or contaminating the surrounding formation while ensuring the developed well will perform as expected. ■

Powering the Grid With Reliable Subsurface Techniques

The demand for overhead to underground electric conversions is on the rise as a way to foster a higher degree of reliability in the power grid or, in some cases, as part of "downtown beautification" efforts. As well, broadband/telecom customers continue to develop fiber-to-the-home (FTTH) and cellular backhaul projects to meet end users' ever-increasing need for more bandwidth.

Michels Communications partners with utility customers to convert overhead electrical distribution lines and to build FTTH and cellular networks. The company uses a variety of methods, including horizontal directional drilling (HDD) and plowing, for installations in all terrains, soil conditions in urban and rural locations. The trenchless HDD method is often used in residential neighborhoods and urban areas because it is minimally intrusive and disruptive, and requires less post-construction restoration.

Michels Communications is a full-service leader at planning, designing, installing, upgrading and delivering aerial and underground communication networks of all lengths as well as at completing overhead to underground electric conversion projects.

Michels' extensive equipment fleet is specially modified to complete projects of all lengths and complexities, and can be deployed throughout the U.S. and beyond. Michels can easily handle several large-scale, multi-year projects simultaneously and works efficiently to keep service outages to a minimum. ■



Michels Communications crew uses horizontal directional drilling while converting an overhead electrical system to an underground one.