Gaining ground

The trend for larger projects with complex demands is driving innovation in the foundations sector. Helen Wright reports on the latest products and applications.

Ambitious new projects are shaping the latest equipment launches in the foundations sector and pushing the limits of existing current machinery and construction techniques.

Rising energy costs, for example, are driving architects to improve environmental designs for buildings, and contractors are increasingly specialising in challenging projects including installing geothermal piles and wind turbine foundations.

Meanwhile, foundation equipment manufacturers report that an increasing number of large infrastructure projects around the world are fuelling demand from contractors for heavy, multipurpose piling machines with large capacities. (…)

Pile Dynamic's handheld pile installation recorder viewer.
The main module of Pile Dynamic's installation recorder in the operator's cabin.

Meanwhile, Pile Dynamics has developed a new viewer for its pile installation recorder (PIR). The PIR is an automated monitoring equipment designed to aid in the installation and quality control procedures of augered cast-in-place and continuous flight auger piles.

The PIR viewer is a hand-held wireless device that allows an inspector or piling foreman to view what the main unit of the PIR in the crane cabin is displaying — the progress of the drilling and grouting operation is seen in real time on both the main unit and on the PIR Viewer.

The development of technology to check and record the quality of foundations has clear benefits for contractors, and demonstrates that equipment manufacturers not only have increased productivity at the forefront of their latest designs, but are also adapting to the increasingly complex demands of the industry.