

# Digging deep

(Excerpts)



**GRL Engineers, a US-based specialist in deep foundations testing, has equipped all its offices with Pile Dynamics' new Pile Driving Analyser (PDA), the PAL-R, which transmits pile testing data via a cell phone to the engineer's office where it can be monitored in real time**

## Dynamic pile testing gets smart

Dynamic Pile Testing consists of installing gauges - accelerometers and strain transducers - on a foundation and connecting them to a Pile Driving Analyser (PDA). The gauges acquire the necessary measurements while the pile is being driven, or while a non-driven pile is impacted by an adequate drop weight. Test results include an estimate of the capacity of the foundation, integrity evaluation and, for driven piles, driving stresses and hammer efficiency.

Previously it was necessary to keep track of the serial number and calibration factor of each gauge in order to enter this information into the PDA. This has been eliminated with Pile Dynamics' new Smart Gauges, says the company. Connecting the accelerometers and strain transducers to the PDA means it automatically knows which channel each Smart Gauge is connected to, the gauge number, its calibration and date of last calibration. The date of last calibration serves as a reminder of the need to recalibrate the gauges every two years in order to maintain data accuracy. The use of Smart Gauges also eliminates the need to bring calibration sheets to the job site, saving time, reducing the risk of human error and boosting productivity, says the company.

