Foundation Testing Just Got a Lot Smarter

Dynamic Pile Testing from Pile Dynamics has been around for more than 30 years as an economical and fast alter-
native to static load testing of deep foundations. The dynamic test consists of installing gages (accelerometers and strain
transducers) on a foundation, and connecting them to a Pile Driving Analyzer (PDA).

The gages acquire the necessary measurements while the pile is being driven (or while a non-driven pile is impacted by an ade-
quate drop weight). Test results include an estimate of the capacity of the foundation, integrity evaluation
and, for driven piles, driving stresses and hammer efficiency.

Up to now, it was necessary to keep track of the serial number and calibration factor of each gage in order to enter this
information into the PDA. This step has been eliminated with Pile Dynamics' recent launch of the Smart Gages®. Just
connect these new accelerometers and strain transducers to the PDA, and the PDA automatically knows to which
channel each Smart Gage is connected (there are 4 or 8 channels of data acquisition on the PDA), the gage number, its
calibration and date of last calibration. The date of last calibration serves as a reminder of the need to recalibrate the
gages every two years in order to main-
tain data accuracy.

The use of Smart Gages instead of conventional ones eliminates the need to bring calibration sheets to the job site,
and may save precious minutes of testing
time. Most importantly, the possibility of human error when entering the calibration
factors is completely eliminated.