

Wireless PDA Sensors

Dynamic foundation testing has been the test of choice for evaluating load-bearing capacity of all types of deep foundations. Recent technological breakthroughs include real-time data transmission from the test site to an office and, most recently, wireless sensors. Wireless sensors replace the cables that connect the sensors to the PDA with a dedicated radio transmitter. The wireless option is available with the PDA model PAX by **Pile Dynamics, Inc.**

Aksan Kawanda, an engineer with Geotech Engineering in Jakarta, describes the use of the wireless sensors on a nearshore jetty, part of a coal-fired power plant in Indramayu, West Java-Indonesia. Several of the jetty-supporting piles were dynamically tested with a PDA model PAX using wireless sensors. The accelerometers and strain transducers on the nearshore pile transmitted data to the PDA, which remained safe and dry on shore a considerable distance away (transmission range is typically 100 m). A similar setup was used in the Port of Koper, Slovenia, which helped Gorazd, (see photo), principal of the company SLP in that

country. In addition to the benefit for projects such as ports, jetties and others where it may be challenging to set up the equipment, the elimination of cables significantly reduces weight — an advantage for air transport of the testing equipment.

Pile Dynamics has expanded its line of wireless PDA sensors to include piezoelectric (PE) accelerometers (photo). While piezoresistive (PR) accelerometers have been available with wireless transmission option for over a year and are suitable for any testing application, some PDA testers prefer using PE accelerometers.

Pile Dynamics products are available directly from the company's Cleveland, Ohio headquarters or through its network of worldwide representatives. For more information, visit www.pile.com/pdi.

