

# Bits & Pieces

## Latest Model of Pile Dynamics' SPT Analyzer Meets New Codes

Pile Dynamics, Inc., developer and manufacturer of quality control solutions for deep foundations, has introduced a new model of its tried and true SPT ANALYZER for calibrating SPT rigs. The Standard Penetration Test (SPT) is a widely used soil exploration method that involves driving a split barrel sampler into the soil, retrieving samples of the disturbed soil for classification purposes, and noting the number of blows required to penetrate the last 300 mm. This is known as the N-Value, which is a relative indicator of soil strength.

Because SPT hammers have significantly varying efficiencies, SPT codes and standards from both ASTM and Eurocode recommend that the N-value be normalized based on the energy transferred to the SPT rod, and accept only one method of measuring the energy transferred to the SPT rod: through the measurement of force and velocity by sensors attached to the SPT rod. This procedure is

commonly known as "calibration of the SPT rigs," and should be performed periodically on SPT equipment. Eurocode requires calibration of SPT rigs every 6 months, while the Departments of Transportation of California, Florida, Utah, Oregon and many other US States require calibration of their SPT rigs every two years.

"When it was first introduced, the SPT ANALYZER was a pioneer in the technology of calibrating SPT rigs through the measurement of energy using the Force-Velocity method," said Garland Likins, President of Pile Dynamics, adding "Now we have capitalized on our experience to develop a new generation of the instrument. The new model meets all requirements of both ASTM and Eurocode, and is simpler to use than earlier ones." The new SPT ANALYZER has a rechargeable internal battery with up to 8 hours of continuous use, an enhanced touch screen for easy operation, and a bright color screen visible in all lighting conditions. Test results are displayed on the screen in real time and its software produces a variety of relevant graphs and tables. The new SPT ANALYZER also has a wireless option that dispenses with cables from the sensors to the instrument, and offers digitizing frequencies of up to 100 KHZ that meet Eurocode requirements.

Pile Dynamics products are available directly from its Cleveland, Ohio headquarters or through its network of worldwide representatives. For more information visit [www.pile.com/pdi](http://www.pile.com/pdi).

