

## Software brings SPT calibration nearer

THE CALIBRATION of Standard Penetration Test (SPT) rigs has moved a step forward in the form of piling software developer Pile Dynamics' SPT Analyzer. The new tool is wireless and meets both US ASTM and Eurocode requirements.

Because SPT hammers have significant varying efficiencies, codes and standards recommend that the N-value be normalised, and only one sensory method used to measure energy transferred to the SPT rod. The procedure should be performed periodically on SPT equipment.

Eurocodes require calibration of SPT rigs every six months, while the departments of transportation of California, Florida, Utah, Oregon and other US states require calibration 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 Pile Dynamics president Garland Likins.

"Now we have capitalised 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 eight hours of continuous use, an enhanced touch screen for easy

operation, and a bright colour 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 SPT Analyzer also has a wireless option that dispenses with cables from the sensors to the instrument, and offers digitising frequencies of up to 100kHz that meet Eurocode requirements.



### 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 300mm. This is known as the N-Value, which is a relative indicator of soil strength.



The new SPT Analyzer meets ASTM and Eurocode standards