

Pile Dynamics Develops New Software for Pile Integrity Testing

ADSC Associate Member, Pile Dynamics headquartered in Cleveland, Ohio, announced the development of software that simulates a low strain Pile Integrity Test. These tests are performed with Pile Dynamics' Pile Integrity Tester (PIT) and consist of attaching an accelerometer to a pile, impacting it with a hand held hammer, and drawing conclusions about the pile integrity from the analysis of wave propagation data collected by the accelerometer.

The new software program "PIT-S" will be used for educational purposes, to train new PIT users and to assist existing PIT users in their record evaluation. It is available as shareware from www.pile.com.

"PIT-S" allows a user to enter the pile shape, realistic soil layer properties and characteristics of the low strain hammer impact, including point of impact. The program then displays the velocity reflections versus time and versus pile length that a PIT test under such conditions would produce. The display of force and velocity curves or of two velocity curves (integrity testing of piles integral to a structure is accomplished by analyzing two velocity curves) simulate integrity tests performed with the PIT model FV. The program also shows acceleration and displacement data and includes a slow motion animated display of the wave transmission and reflections that is particularly educational.

Current PIT users may overlay the curves simulated by PIT-S over measured curves for a simple signal matching process and a simplified investigation of the cause of observed reflections.

For more information, visit
Pile Dynamics website at
www.pile.com.