Thermal Integrity Profiler wins Manufacturing Innovation Project Award

Pile Dynamics, Inc. (PDI) has announced that its Thermal Integrity Profiler (TIP) is among the winners of a Manufacturing Innovation Project Award.

The award is conferred by a partnership between the City of Cleveland, Ohio, Cuyahoga County (where PDI is located), the Manufacturing Advocacy & Growth Network (MAGNET) and the NASA Glenn Research Center and is part of the White House’s Office of Science and Technology Policy “Strong Cities, Strong Communities” (SC2) effort. PDI was one of nine manufacturers selected by an independent panel of judges to work with NASA scientists on incorporating NASA technologies into their already successful products.

“NASA is proud to be a part of a venture that promises to be a successful partnership between the space program and local companies in the City of Cleveland and in Cuyahoga County,” said NASA Chief Technologist Mason Peck.

Following the announcement of the award, PDI was honored by the visits of Jay Williams, executive director of the Office of Recovery for Auto Communities and Workers of the Department of Labor, his Special Assistants Tom Kelly and Lauren Leonard, and SC2 representatives Grace Kilbane (Department of Labor) and Carol Tolbert (NASA). The dignitaries toured the PDI facilities and were briefed on the TIP.

Developed as a joint venture of PDI and FGE, LLC from Plant City, Fla., the TIP is used to evaluate concrete foundations such as drilled shafts and augered cast-in-place piles. It gives information on the integrity and as-built shape of the tested foundation, as well as on the alignment of its reinforcing cage, by measuring the temperature of the concrete during the cement curing process. TIP measurements are taken with a reusable thermal probe that is lowered onto specially built tubes built into the foundation, or with Thermal Wires™ tied onto the reinforcing cage prior to concreting.

The collaboration with NASA will focus on the Thermal Wires™ system of obtaining measurements. The wires are built with multiple temperature sensors embedded along their length at regularly spaced intervals. PDI expects that this technology will be very well received by the industry, creating a need for mass production of Thermal Wires™.

“Since the sensors built onto those wires are not recovered, it is important to mass produce them with high quality but low cost,” said George Piscsalko, vice president of PDI. “The collaboration with NASA will allow us to identify new materials that will accomplish this goal.”