stability and easy transportation, the PMx rigs also have a unique, purpose-built piling rig control system, the Junttan X control system, which controls all the vital rig functions, and provides plenty of useful features for adjustments, operation and maintenance. Thanks to the X-system, a Junttan rig is more fuel efficient and environmentally friendly than ever. Accompanied by the new Tier 4-certified engine, the carbon footprint for driven pile foundations made by Junttan rigs is basically off the charts.

The first thoroughbred Junttan is still working on a daily basis in the Netherlands after 30 years of piling and with a meter showing over 40,000 operating hours. When it comes down to determining the lifespan of Junttan’s machines, no one really knows – they just keep running.

About Junttan Oy
Junttan Oy specializes in the design, manufacture, marketing and service of hydraulic piling equipment and excavator-mounted rock drills. Junttan is one of the few independent manufacturers in its product range. Founded in 1976 and located in Kuopio, Finland, Junttan has been the leading company in its segment since inventing the concept of the fully hydraulic PM20 pile driving rig.

Inventors from Pile Dynamics and the University of South Florida receive International NOVA Award for Thermal Integrity Profiler (TIP)
George Piscsalko, P.E., and Dean Cotton, with Pile Dynamics, Inc. (PDI) of Cleveland, and Gray Mullins, Ph.D., P.E., with the University of South Florida in Tampa, Fla., have received the prestigious 2013 NOVA Award from the Construction Innovation Forum (CIF).

The engineers and researchers received the award for the Thermal Integrity Profiler (TIP), an instrument that uses the heat generated by curing concrete to reveal the shape of cast-in-place concrete foundations. The initial research for the TIP was conducted at the University of South Florida. PDI formed a joint venture with Foundation and Geotechnical Engineering (FGE), of Plant City, Fla. to design the instrument and take it to market.

CIF is an international, non-profit organization that encourages and recognizes construction innovations. The 2013 NOVA winners, selected from more than 700 nominations from 20-plus countries, were announced November 12 at the Annual Construction Users Roundtable (CURT) National Conference. CURT represents more than 100 of the United States’ top construction purchasers, the majority of which are Fortune 500 companies.

“Each year since it was created in 1989, the NOVA Awards honor top innovations in construction from around the world that increase quality and efficiency and reduce cost,” said Rasha Stino, CIF vice-chair.

“An expert jury carefully selects award-winning innovations with the assistance of leading engineers serving as investigators. CIF congratulates George Pisesalko, Gray Mullins and Dean Cotton, as well as Pile Dynamics, Inc., the University of South Florida and FGE.”

“It is exciting to see the industry recognize a game-changing technology,” said Gina Beim, marketing director of Pile Dynamics. “In the past year, we saw the interest in Thermal Integrity Profiling increase at a significant pace.”

After several months of successful testing on drilled shafts, the TIP is now being employed in the evaluation of augered cast-in-place piles, jet grouting columns, soil nails and micropiles. Pile Dynamics expects the technology to be adopted in more and more countries in the next few years, and is forecasting the number of foundation elements to be tested with TIP to at least double in 2014.

PDI manufactures electronic instruments that evaluate the quality and control the execution of deep foundations. Its systems are extensively used around the world. For more information, visit www.pile.com/pdi.

Learn more about the TIP in the Technology Update section of this issue of Piling Canada, starting on page 19.

CONTINUED ON PAGE 16