Earth Products China Limited (EPC) provides advanced civil engineering testing solutions in China, Hong Kong and Macau. EPC is the sole agent for over 70 international manufacturers of instruments for non-destructive and in-situ testing, geotechnical, laboratory, highway, foundations and bridge testing, geophysical, geotechnical and environmental monitoring, electronic measurements, etc. EPC has been the sole agent of Pile Dynamics, Inc. (PDI) for 19 years. Among the several lightweight and portable products that EPC offers, four of them are manufactured by PDI.

The Pile Integrity Tester (PIT) is used for augercast piles, driven concrete piles, concrete filled pipe or drilled shafts. It detects potentially dangerous defects such as major cracks, necking, soil inclusions or voids and can determine unknown lengths of existing piles and test piles supporting existing bridges or towers. It performs low strain tests using a small impact hammer and a highly sensitive accelerometer connected to its main unit. It features a high visibility touch screen display and 3 hour internal battery.

Pile Dynamics’ Pile Driving Analyzer (PDA), model PAL evaluates the capacity and integrity of driven and bored piles, measures compression and tension stresses of driven piles during piling, and analyses the performance of driving hammers. The PAL is set up in minutes and relies on high quality, reusable sensors that are quickly attached to any foundation type. For driven piles PAL aids in decision-making during installation. Up to 3,500 blows of collected data are stored automatically on a PCMCIA card, then transferred to a PC for permanent storage. Analysis by the CAPWAP software yields bearing capacity, soil resistance distribution and a simulated static load test. PDA is also available in the larger model PAK with additional functions.

The Cross-Hole Analyzer (CHA) model CHAMP uses Crosshole Sonic Logging technology to determine the quality and consistency of concrete between pairs of PVC or steel tubes pre-installed in drilled shafts, and other types of concrete foundations. It features a long lasting internal battery. The CHA-W software processes the collected data, and the Tomosonic tomography software uses 2-D and 3-D imaging to produce color coded presentations that help visualisation of local defects. CHA is also available in the larger model CHA-QX with additional functions.

The Acoustic Concrete Tester (ACT) determines the thickness of concrete pavements, slabs, tunnels and other structures using Resonant Response technology. It can calibrate the wave speed of concrete structure of unknown thickness. The ACT avoids manual impact and coring for unsurpassed convenience and reliability.