



# Shaft Area Profile Evaluator (SHAPE®)

## Shaft Area Profile Evaluator (SHAPE®-AIR) for Dry Holes

*Wireless Data Acquisition of Drilled Shaft Radius, Volume and Verticality in a Dry Shaft*

### Fast. Accurate. Cost Effective.

Drilled shafts are rarely ideal cylinders, and irregularities can affect capacity, durability and performance. SHAPE®-AIR is a cost-effective, quality assurance testing device used for deep foundations such as drilled shafts, bored piles, and more to ensure the design intentions are satisfied for the project.

SHAPE®-AIR has eight Lidar Sensors to scan the sides of an excavation, providing a quick and economical view of the shaft verticality, radius, shape, and drilled hole volume, prior to placing concrete in a dry hole.

SHAPE®-AIR offers:

- Quick connection to Kelly bar or can be used with an optional winch system
- Multi-channel Lidar sensor device to scan the sidewalls of a dry excavation
- Wireless data acquisition at a rate of approximately one (1) scan per second
- Eight (8) channels scanned simultaneously
- Effective in dry, open holes or shafts
- Sitelink® Remote Technology
- Battery powered

SHAPE®-AIR's drilling stem advancement rate is approximately one (1) foot per second (0.3 m/sec), offering 360°, 2D and 3D profile views.



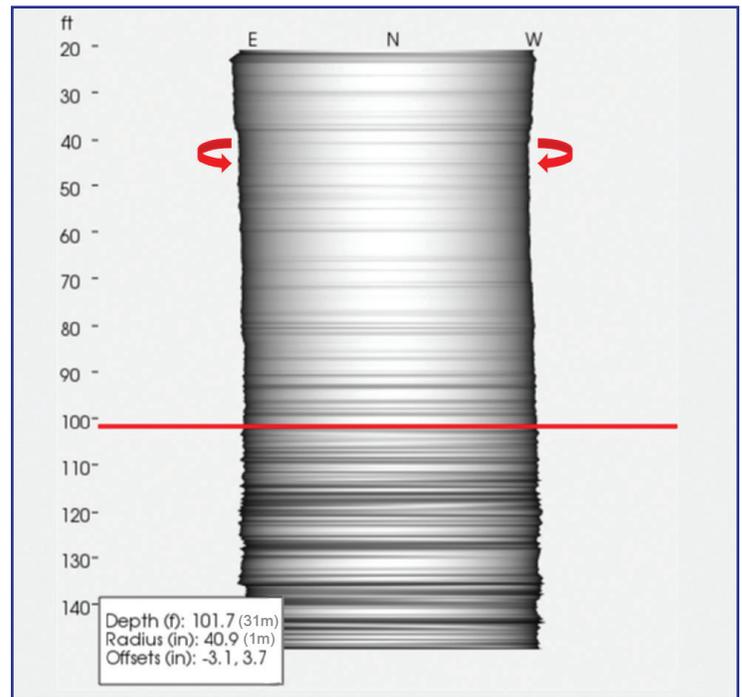
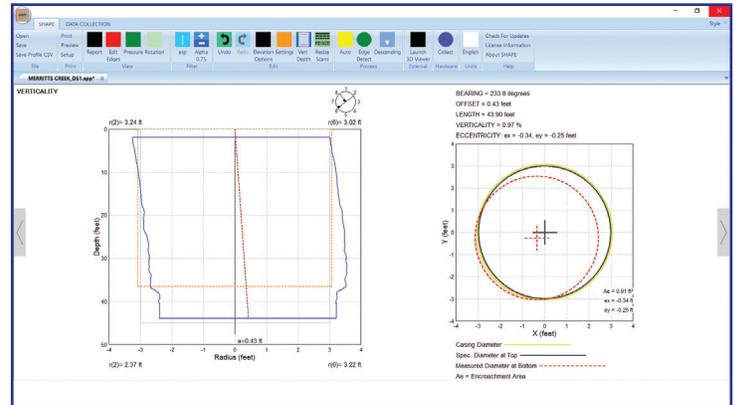
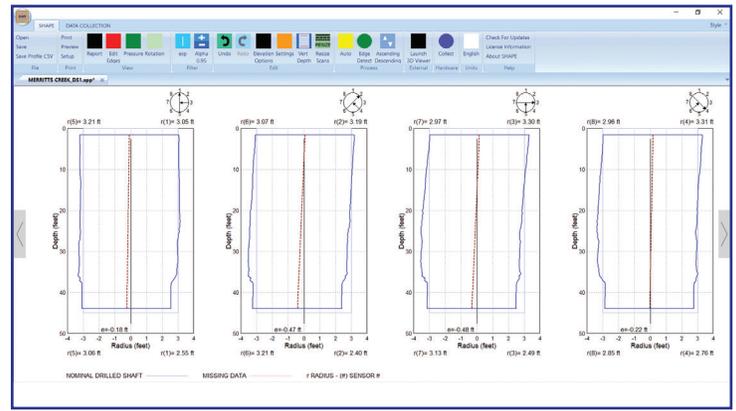
# SHAPE®-AIR Data Collection Software

SHAPE®-AIR software generates reports based on data collection during testing. The software allows users to view or edit the collected data with the following features:

- Edit Edges - select edges for the circle fit process
- Depth measured by Lidar sensor
- Sensor Data – view measured pulses
- Report – view the sensor profiles containing their verticality and eccentricity information

The program produces a 3-dimensional image of the boring by calculating the distance between each sensor and the excavation wall.

- Quick, cost effective views of the excavation to ensure design intentions
- 8 Lidar sensor signals providing 360°, 2- & 3-Dimensional profile views
- Wireless data acquisition



[www.pile.com/products/shape-2/](http://www.pile.com/products/shape-2/)

**Pile Dynamics, Inc. (PDI)** is the world leader in developing, manufacturing and supplying state of the art QA/QC products and systems for the deep foundations industry. The company is headquartered in Cleveland, Ohio, USA, with offices and representatives worldwide. For additional information visit us at [www.pile.com](http://www.pile.com) or contact [info@pile.com](mailto:info@pile.com).

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