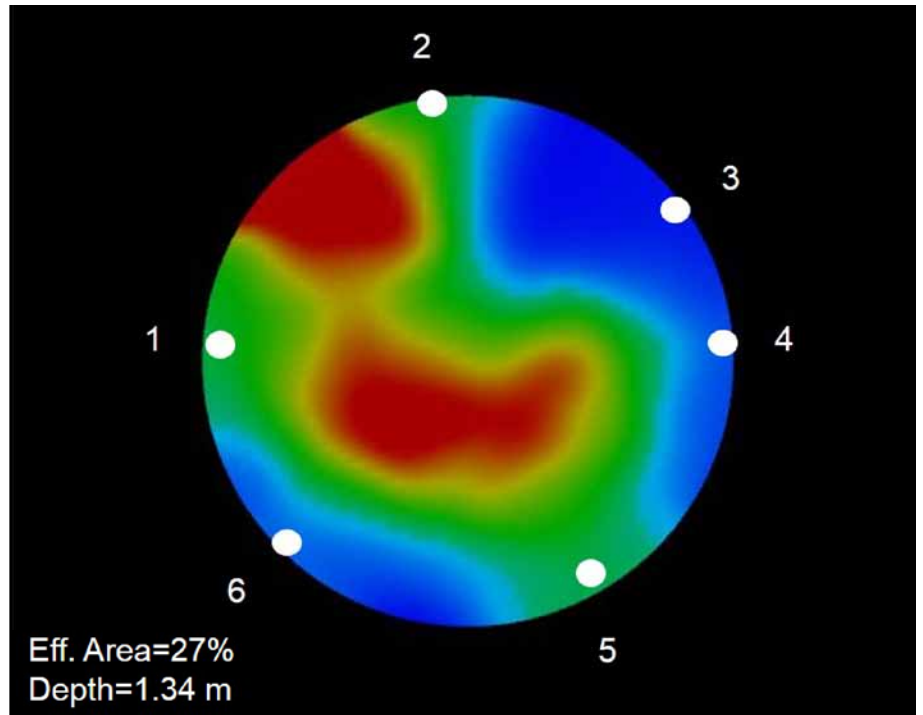
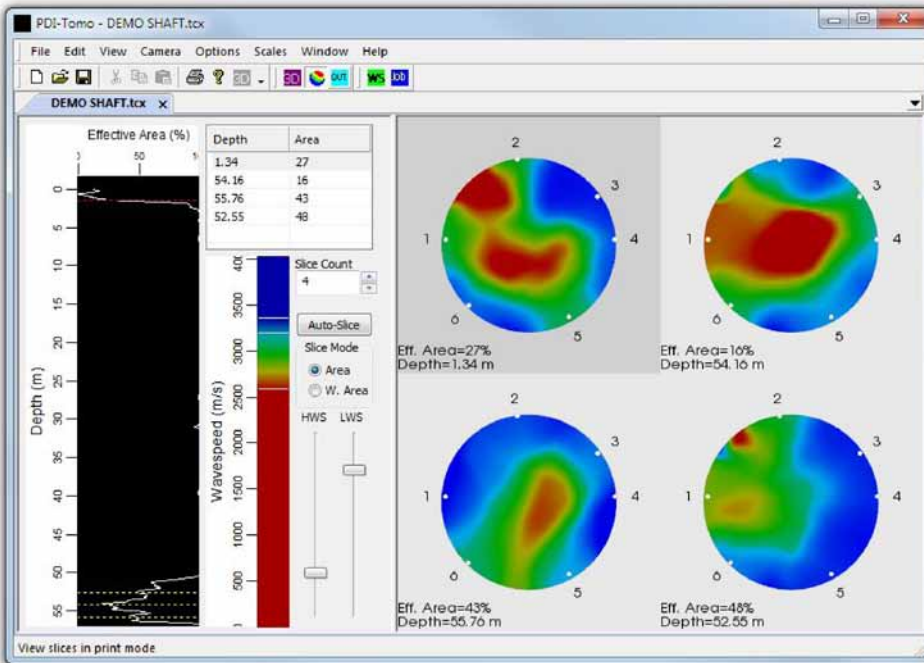


### What is Tomography?

Tomography is a mathematical procedure that is applied to Crosshole Sonic Logging (CSL) data, providing the user with a visual image of a shaft's internal defects. The procedure involves solving a system of equations based on First Arrival Times (FAT) in order to calculate wave speeds at various points within the shaft. Tomography wave speeds distributed throughout the shaft are directly proportional to density, indicating concrete quality. PDI-TOMO is an extension of the CHA-W software designed for superior tomographic results from CHAMP-XV data with increased efficiency for the user.



PDI-TOMO results: Wave speed contours at a cross-section depth of 1.34 m



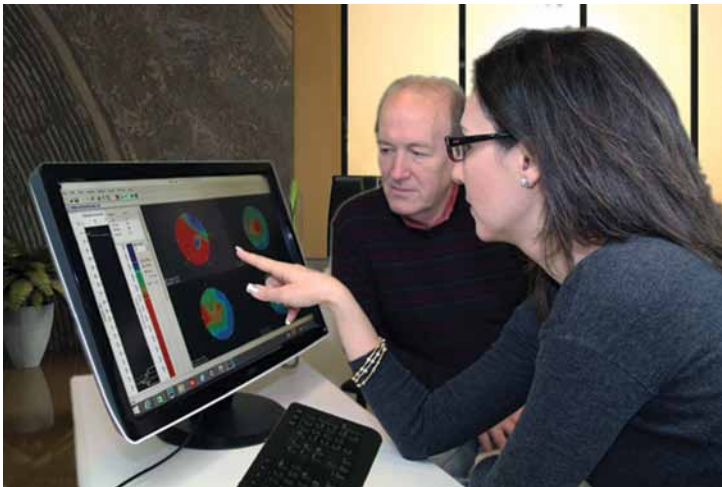
PDI-TOMO software

### Benefits of Tomography Analysis:

- Provides a more precise location and shape of a defect detected through CSL data
- Generates easily comprehensible and professional outputs of the engineering analysis
- Offers an intuitive visual identification of the damaged areas
- Provides a valuable add-on service for the testing engineer

## PDI-TOMO Features:

- Accurate 2D and 3D results
- Works with current Windows Operating Systems (WIN 7+)
- Seamless one-step operation from CHA-W export
- Significant reduction in analysis runtime, greatly improving productivity
- Smart user selection of "good" or "poor" concrete wave speeds
- Easily selectable wave speed limits to match typical CSL evaluation criteria
- Selection available in terms of percent reduction of average wave speed or absolute wave speed values
- Automatic critical slice detection
- User selectable number of slices for output reporting (1 through 4)
- Effective area vs depth plot for easy evaluation of critical sections
- Customizable and professional output report to fit the needs of each user
- Enhanced export options in updated CHA-W software for accurate tomographic results



*PDI-TOMO illustrates slices of the shaft where a detailed investigation of integrity may be warranted*



*CHAMP-XV collects data for use in CHA-W and PDI-TOMO*

## Minimum Requirements:

- CHA-W version 2016.017
- Windows 7
- Graphics card and driver supporting OpenGL 3.3.0

## About Pile Dynamics, Inc.

Since 1972, Pile Dynamics, Inc. (PDI) has been 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 in over 100 countries worldwide. For additional information visit us at [www.piledynamics.com](http://www.piledynamics.com) or contact [sales@pile.com](mailto:sales@pile.com) today.



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