LOADTEST
Arthur Ravenel Jr. Bridge – Charleston, SC.

Project	**Arthur Ravenel Jr. Bridge**
Location	Charleston, S.C.
Client	South Carolina DOT, Parsons Brinckerhoff
Period	Fall 2000 and February 2002
Project Description	Completed in 2005, the Arthur Ravenel Jr. Bridge, honoring the South Carolina Senator, is the longest suspension bridge on the east coast of the United States.

The bridge's 1,546-ft main span is supported by two 575-ft-high, diamond-shaped towers
Source: constructoragc.construction.com

Contractors constructed more than 400 drilled shafts to support the 2.5 mile bridge from Charleston S.C. to Mt. Pleasant S.C. spanning the Cooper River. The South Carolina Department of Transportation and Parsons Brinckerhoff utilized Osterberg Cell technology to confirm shaft design. Loadtest completed a total of 14 O-cell tests on this project.

The first 12 tests (five single-level and seven multi-levels) were performed for TreviIcos Corporation during the fall of 2000 on dedicated test shafts. The shaft diameters were 72 in. and 96 in. and depths from 100 ft. to 150 ft.

Loadtest also performed CSL and Sonic Calipering quality control testing for TreviIcos during this testing phase. Representatives of TreviIcos, S&ME and the South Carolina Department of Transportation observed the shaft construction and testing.

Insertion of rebar cage and O-cell assembly

Loadtest returned to Charleston in February 2002 to test two 60 in diameter production shafts for Case Atlantic Co. These multi-level O-cell tests yielded loads of combined side shear and end bearing load of 14,064 kips (63MN) for the 222 ft. deep shaft and 13,295 kips (59MN) for the 225 ft. deep shaft. Representatives of Palmetto Bridge Constructors and Parsons Brinckerhoff were present to observe the testing. Mr. Michael Ahrens, P.E. was the Project Manager for Loadtest

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Source: wikipedia