



GASKETED MECHANICAL JOINT VACUUM PROOF TEST ASTM F1476-95a



Professional Service Industries, Inc.

ORDER NO: 47048035 DATE: March 6, 2000

On March 6, 2000, a 30" diameter by 4' long, plain end by plain end ductile iron pipe, lined with Protecto 401™ Ceramic Epoxy, was subjected to a vacuum proof test. The test conducted was in accordance to the Standard Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Application, ASTM F 1476-95a, a Class 3 design, gasketed mechanical coupling, i.e., a flexible and unrestrained coupling.

For the vacuum test, each end of the 30" pipe was capped off with a TYTON® Joint Cap Fitting. After connecting the test assembly to the vacuum pump, the pump was turned on, a vacuum of 25 inches of mercury was drawn, and the assembly was sealed with a 3/4" DynaQuip® ball valve.

The vacuum was held for an uninterrupted time period of 7 minutes without loss of vacuum. The vacuum gage used for measurement during this test was a Model No. 1980, Ametek gage with a range of 0-30" Hg, graduated in 1/10th inches of mercury. The gage was certified to be in conformance with the requirements of ASTM F 1476, i.e., +/- 1% or better throughout the gage's range.

After the vacuum test, the pipe was uncapped and the lining was examined. No disbondment or damage to the lining was detected.

This test was performed in the presence of a representative of Professional Service Industries. We certify that the results of this test are correct and accurately reported herein as observed by our representative.

PROFESSIONAL SERVICE INDUSTRIES, INC.

Wesley Parkhurst Jr.

