



*Pile Dynamics, Inc.*

# Certificate of Calibration

Transducer Model: PDI Transducer

**Serial Number: G896**

**PDI Gage Factor: 97.1  $\mu\epsilon/V$**

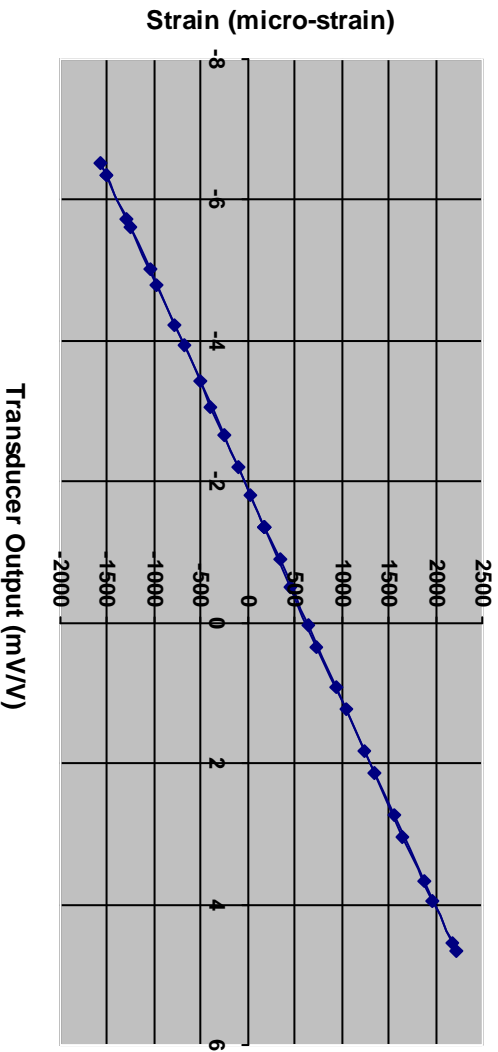
General Gage Factor: 337.2  $\mu\epsilon/mV/V_{ext}$

Initial Offset Voltage: -0.610 mV/V<sub>ext</sub>

Table 1 – Representative Calibration Data

Applied Strain ( $\mu\epsilon$ )	Transducer Output (mV/V <sub>ext</sub> )	Applied Strain ( $\mu\epsilon$ )	Transducer Output (mV/V <sub>ext</sub> )
186	-1.343	458	-0.502
32	-1.808	738	0.343
-251	-2.661	1040	1.238
-508	-3.421	1344	2.130
-778	-4.221	1657	3.035
-1046	-5.004	1970	3.942
-1292	-5.718	2225	4.662
-1512	-6.358	2189	4.555
-1577	-6.536	1874	3.661
-1504	-6.334	1558	2.737
-1255	-5.622	1250	1.827
-973	-4.781	944	0.921
-686	-3.929	644	0.028
-397	-3.066	343	-0.890
-107	-2.200	186	-1.350
176	-1.351	185	-1.352

## Calibration Curve



Mean Linear Correlation Coefficient (LCC): 9.999811E-1

LCC Standard Deviation: 1.851199E-6

Calibrated By: MJ

Signature: \_\_\_\_\_

Date/Time: 10/31/2016 2:40 PM

Temperature (°C): 26.8

# Specifications

## PDI Automated Strain Transducer Calibration System (PDI-ASTCS)

ASTCS Calibration Information	
ASTCS Serial Number:	ASTCS-0005
ASTCS Software Version:	2.310
ASTCS Independent Verification Date:	11/5/2014 11:54 AM
Strain Transducer Gage Length:	3.0 inches (76.2 mm)
Applied Full Scale Displacement Range:	±7.500000E-3 inches
Method for Applying Displacement:	Precision Step Motor Coupled to Linear Stage
Excitation Voltage for Calibration:	2.5 VDC
Displacement Measurements:	Dual Precision AC LVDT's, Output Averaged
Displacement Certification:	NIST 274437-07
Linearity Verification Technique:	Linear Correlation Coefficient > 0.9999
Repeatability Verification Technique:	Standard Deviation < 0.5 % (of mean)
ASTCS System Check	
Reference Strain Transducer:	4367T
Reference General Gage Factor:	293.000 µε/mV/V
LVDT #1 Sensitivity (inches/volt):	7.916500E-3
LVDT #2 Sensitivity (inches/volt):	8.042000E-3
Date/Time of Last System Check:	10/31/2016 2:10 PM
PDI Strain Transducer Connections	
Black:	+ Excitation
Green:	- Excitation
Red:	+ Signal
White:	- Signal
Grey:/BARE	Shield

NIST Reference:

PDI certifies the above PDI-ASTCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique. The calibration of this instrument was performed in accordance with the PDI Quality Assurance program. Measurements and information provided on this report are valid at the time of calibration only.