



Pile Dynamics, Inc.

Certificate of Calibration

Transducer Model: PDI Transducer

Serial Number: L036

PDI Gage Factor: 91.3 $\mu\epsilon/V$

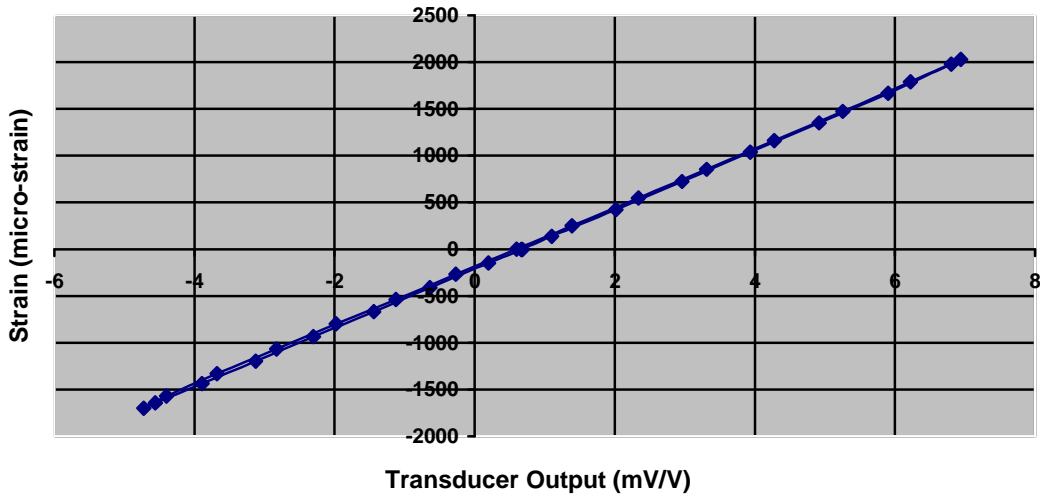
General Gage Factor: 317.0 $\mu\epsilon/mV/V_{ext}$

Initial Offset Voltage: 0.280 mV/V_{ext}

Table 1 – Representative Calibration Data

Applied Strain ($\mu\epsilon$)	Transducer Output (mV/V _{ext})	Applied Strain ($\mu\epsilon$)	Transducer Output (mV/V _{ext})
-1	0.680	252	1.389
-149	0.196	548	2.338
-410	-0.638	854	3.311
-666	-1.440	1162	4.278
-934	-2.301	1473	5.253
-1197	-3.127	1791	6.222
-1436	-3.892	2029	6.937
-1645	-4.558	1982	6.804
-1701	-4.721	1667	5.901
-1571	-4.399	1350	4.919
-1332	-3.676	1038	3.933
-1066	-2.829	725	2.960
-798	-1.977	426	2.017
-537	-1.126	137	1.100
-268	-0.270	-1	0.669
2	0.596	-2	0.663

Calibration Curve



Mean Linear Correlation Coefficient (LCC): 9.998840E-1

LCC Standard Deviation: 2.135370E-6

Calibrated By: VT

Signature: _____

Date/Time: 1/26/2015 11:14 AM

Temperature: 25.7

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 (762 mm)
Applied Full Scale Displacement Range:	$\pm 7.500000E-3$ 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 Certificate #729970 & #821/274437-07
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 $\mu\epsilon/mV/V$
LVDT #1 Sensitivity (inches/volt):	7.916500E-3
LVDT #2 Sensitivity (inches/volt):	8.042000E-3
Date/Time of Last System Check:	1/26/2015 11:08 AM
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.