



Pile Dynamics, Inc.

Certificate of Calibration

Transducer Model: PDI Transducer

Serial Number: K465

PDI Gage Factor: 93.0 $\mu\epsilon/V$

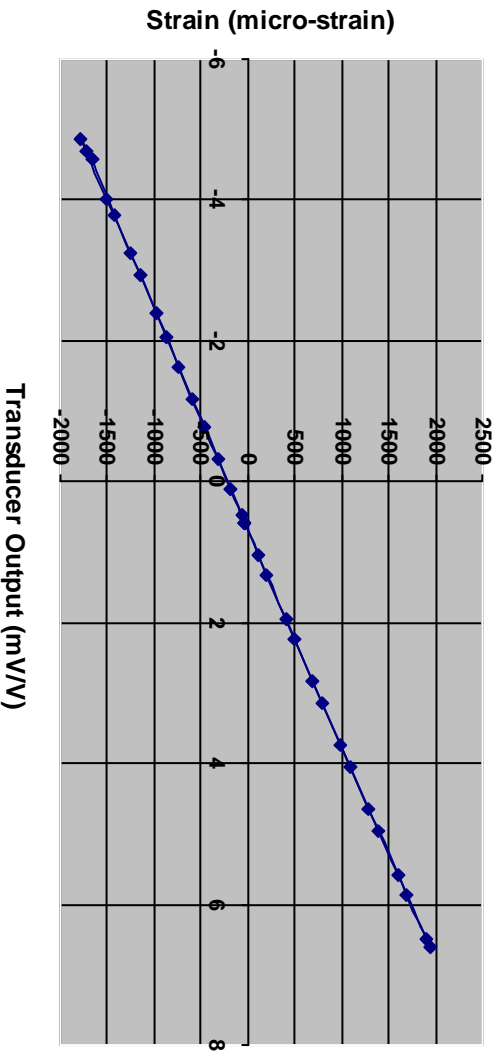
General Gage Factor: 322.8 $\mu\epsilon/mV/V_{ext}$

Initial Offset Voltage: 0.266 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})
-36	0.589	200	1.319
-186	0.111	492	2.236
-471	-0.778	795	3.154
-735	-1.615	1093	4.062
-983	-2.399	1393	4.967
-1252	-3.241	1697	5.866
-1507	-4.023	1943	6.598
-1726	-4.701	1909	6.486
-1785	-4.871	1600	5.588
-1669	-4.571	1292	4.654
-1417	-3.776	991	3.743
-1145	-2.922	696	2.840
-870	-2.055	404	1.940
-591	-1.183	114	1.040
-320	-0.328	-33	0.589
-62	0.484	-34	0.586

Calibration Curve



Mean Linear Correlation Coefficient (LCC): 9.999385E-1

LCC Standard Deviation: 2.657031E-6

Calibrated By: Erik Scerbak

Signature: _____

Date/Time: 8/17/2016 8:49 AM

Temperature ($^{\circ}C$): 24.0

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:	8/17/2016 8:39 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.