



Pile Dynamics, Inc.

Certificate of Calibration

Transducer Model: BDI ST350

Serial Number: E727

PDI Gage Factor: 103.1 $\mu\epsilon/V$

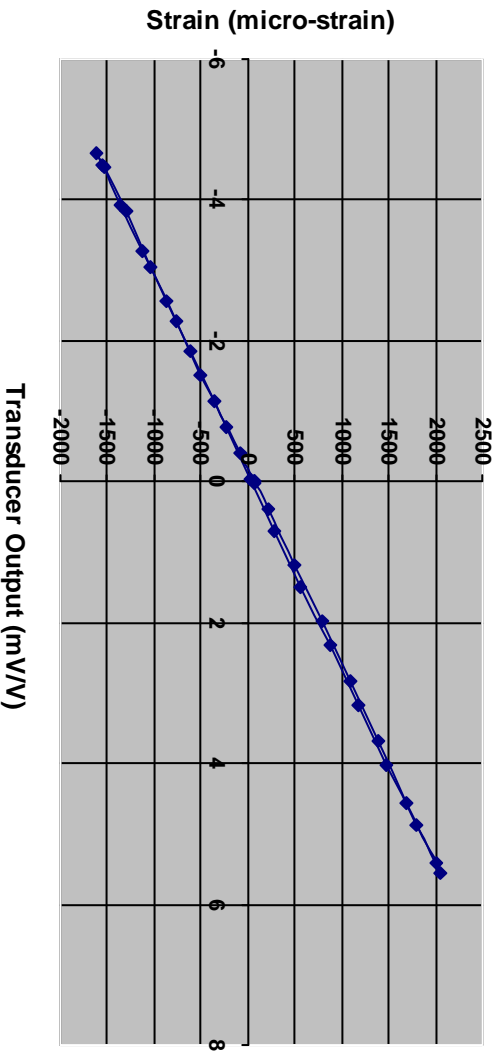
General Gage Factor: 357.9 $\mu\epsilon/mV/V_{ext}$

Initial Offset Voltage: 0.076 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})
62	0.022	280	0.691
-86	-0.398	568	1.501
-358	-1.157	869	2.327
-609	-1.855	1178	3.180
-867	-2.578	1487	4.025
-1124	-3.287	1797	4.867
-1354	-3.935	2048	5.545
-1555	-4.505	2011	5.425
-1615	-4.666	1697	4.560
-1533	-4.470	1386	3.682
-1305	-3.828	1086	2.833
-1040	-3.055	785	1.994
-770	-2.280	497	1.187
-504	-1.514	213	0.398
-238	-0.765	66	-0.002
25	-0.026	64	-0.007

Calibration Curve



Mean Linear Correlation Coefficient (LCC): 9.999362E-1

LCC Standard Deviation: 7.448956E-6

Calibrated By: ES

Signature: _____

Date/Time: 6/26/2017 10:53 AM

Temperature (°C): 26.9

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:	6/23/2017 12:20 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.