



Certificate of Calibration

Transducer Model: PDI Transducer

Pile Dynamics, Inc.

Serial Number: T972

PDI Gage Factor: 143.1 me/V

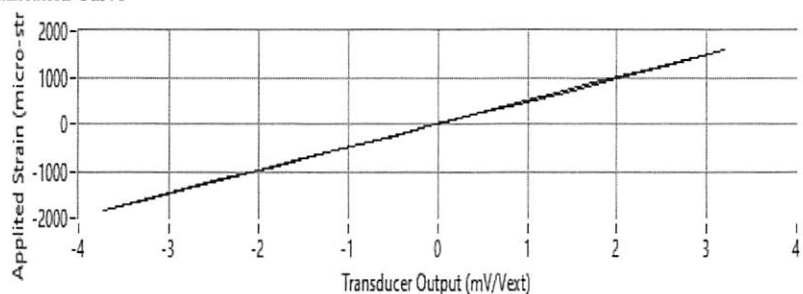
General Gage Factor: 497.0 me/mV/V_{ext}

Initial Offset Voltage: -0.095 mV/V_{ext}

Table 1: Representative Calibration Data

Applied Strain (micro-strain)	Transducer Output (mV/V _{ext})	Applied Strain (micro-strain)	Transducer Output (mV/V _{ext})
-51.967	-0.199	51.546	0.052
-98.418	-0.268	217.053	0.388
-306.333	-0.690	470.605	0.891
-576.209	-1.252	769.736	1.514
-867.578	-1.795	1073.330	2.084
-1154.332	-2.413	1370.621	2.714
-1448.743	-2.982	1615.172	3.197
-1741.291	-3.558	1539.552	3.025
-1817.521	-3.729	1221.545	2.404
-1608.586	-3.264	910.671	1.735
-1314.275	-2.705	603.314	1.159
-1018.624	-2.090	309.648	0.547
-727.274	-1.516	81.922	0.091
-450.486	-0.976	-35.332	-0.124
-215.438	-0.471	-54.294	-0.199
-52.438	-0.184	-56.703	-0.161

Calibration Curve



Mean Linear Correlation Coefficient (LCC): 0.999954

Calibrated By: Vanna Ouk

LCC Standard Deviation: 2.860603E-6

Signature: *[Handwritten Signature]*

Temperature (Degrees C): 26.3



Pile Dynamics, Inc.

www.pile.com

ORIGINAL

Specifications

PDI Automated Strain Transducer Calibration System (PDI - ASTCS)

ASTCS Serial Number:	PDI CAL 2015-02-
ASTCS Software Version Number:	3.001
ASTCS Independent Verification Date:	12/14/2018 10:34 AM
Transducer Gage Length:	3 inches (76.2 mm)
Full Scale Displacement Range:	+/- 0.0075 (inches)
Method for Applying Displacement:	Precision Stepper Motor Connected to Linear Stage
Excitation Voltage for Calibration:	2.5 VDC
Displacement Measurements:	Dual Precision LVDTs, Output Averaged
Displacement Certification:	NIST 274437-07
Linearity Verification Technique:	Linear Correlation Coefficient < 0.9996
Repeatability Verification Technique	Standard Deviation < 0.5% of mean

ASTCS System Check

Reference Strain Transducer:	B5580
Reference General Gage Factor:	529.70 micro-strain/mV/V
LVDT #1 Sensitivity (inches/volt):	0.0056
LVDT #2 Sensitivity (inches/volt):	0.0055
System Temperature Status	Passed
Date/Time of Last System Check	12/14/2018 10:34 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.