



Certificate of Calibration

Transducer Model: PDI Transducer

Pile Dynamics, Inc.

Serial Number: Q029

PDI Gage Factor: 150.6 mV

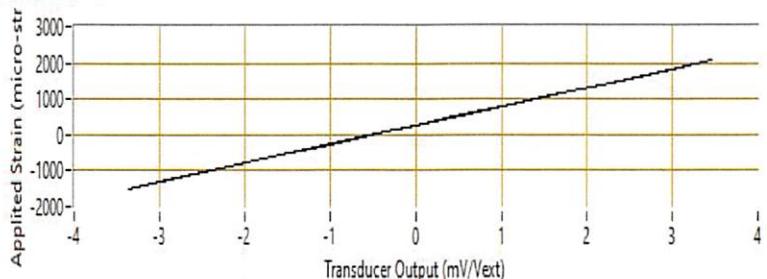
General Gage Factor: 522.8 mV/V_{ext}

Initial Offset Voltage: -0.154 mV/V_{ext}

Table 1: Representative Calibration Data

Applied Strain (micro-strain)	Transducer Output (mV/Vext)	Applied Strain (micro-strain)	Transducer Output (mV/Vext)
80.204	-0.349	331.533	0.113
-60.869	-0.628	594.970	0.625
-311.383	-1.101	902.234	1.216
-561.206	-1.586	1205.619	1.800
-817.827	-2.070	1517.072	2.398
-1048.265	-2.513	1833.863	2.997
-1259.437	-2.918	2077.863	3.451
-1442.338	-3.267	2033.268	3.368
-1490.353	-3.358	1715.935	2.773
-1441.774	-3.275	1397.352	2.167
-1228.559	-2.877	1091.952	1.575
-972.224	-2.386	789.558	0.997
-711.187	-1.883	500.430	0.438
-447.568	-1.378	215.333	-0.096
-187.588	-0.875	82.948	-0.348
79.991	-0.364	82.460	-0.351

Calibration Curve



Mean Linear Correlation Coefficient (LCC): 0.999992

LCC Standard Deviation: 9.683576E-7

Calibrated By: DJC

Signature:

Date and Time: 2/18/2020 10:14 AM

Temperature (Degrees C): 26.4

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:	9/22/2015 1:48 PM
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):	0.0079
LVDT #2 Sensitivity (inches/volt):	0.0081
System Temperature Status	Passed
Date/Time of Last System Check	9/22/2015 1:48 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.