Pile Dynamics, Inc.

Certificate of Calibration

Transducer Model: PDI Transducer

Serial Number: V462

PDI Gage Factor: 143.6 me/V

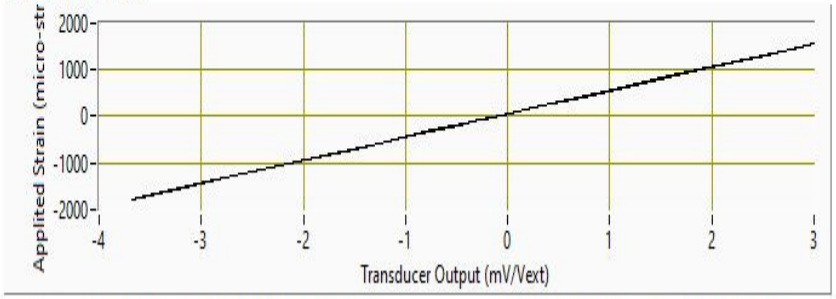
General Gage Factor: 498.6 **me**/mV/V*ext.*

Initial Offset Voltage: -0.104 mV/V*ext.*

Table 1: Representative Calibration Data

Applied Strain (micro-strain)	Transducer Output (mV/Vext.)	Applied Strain (micro-strain)	Transducer Output (mV/Vext.)
-64.522	-0.264	27.419	-0.037
-113.351	-0.339	175.522	0.232
-300.874	-0.734	422.079	0.747
-559.962	-1.254	713.081	1.327
-837.558	-1.800	1006.907	1.896
-1128.208	-2.415	1308.314	2.534
-1416.377	-2.950	1557.120	2.998
-1698.216	-3.532	1486.447	2.865
-1781.205	-3.683	1175.636	2.229
-1569.952	-3.241	864.383	1.592
-1273.176	-2.681	567.617	1.032
-979.930	-2.052	283.333	0.423
-689.111	-1.499	66.573	0.014
-408.003	-0.933	-50.499	-0.225
-178.025	-0.467	-60.796	-0.253
-75.885	-0.284	-62.491	-0.231

Calibration Curve



Mean Linear Correlation Coefficient (LCC): 0.999957

LCC Standard Deviation: 1.738137E-6

Calibrated By: Kay Tol

Signature: _____

Temperature (Degrees C): 25.8

Specifications

PDI Automated Strain Transducer Calibration System (PDI - ASTCS)

ASTCS Serial Number:	PDI CAL 2015-02-
ASTCS Software Version Number:	3.001
ASTCS Independant Verification Date:	12/8/2020 1:28 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):	0.0056
LVDT #2 Sensitivity (inches/volt):	0.0055
System Temperature Status	Passed
Date/Time of Last System Check	12/8/2020 1:28 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.