

Pile Dynamics, Inc

Certificate of Calibration

Transducer Model: PDI Transducer

Serial Number: L487

PDI Gage Factor: 94.6 $\mu\epsilon/V$

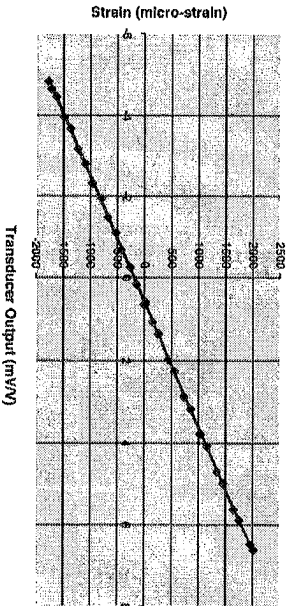
General Gage Factor: 328.5 $\mu\epsilon/mV/V_{out}$

Initial Offset Voltage: 0.256 mV/V_{in}

Table 1 - Representative Calibration Data

Applied Strain ($\mu\epsilon$)	Transducer Output (mV/V _{in})	Applied Strain ($\mu\epsilon$)	Transducer Output (mV/V _{in})
250	0.630	265	1.31
500	0.177	530	2.94
750	-1.271	795	4.57
1000	2.114	1060	6.20
1250	3.136	1325	7.83
1500	3.299	1590	9.46
1750	4.506	1855	11.09
2000	3.062	2120	12.72
2250	4.450	2385	14.35
2500	3.062	2650	15.98
2750	2.791	2915	17.61
3000	4.188	3180	19.24
3250	2.791	3445	20.87
3500	4.248	3710	22.50
3750	6.396	3975	24.13
4000		4240	25.76
4250		4505	27.39
4500		4770	29.02
4750		5035	30.65
5000		5300	32.28

Calibration Curve



Mean Linear Correlation Coefficient (LCC): 9.998710E-1

Calibrated By: KT

Date/Time: 11/13/2014 12:42 PM

ICC Standard Deviation: 1.509117E-6

Signature: Katy Toi

Temperature: 26.0

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:	E7.500000E-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 LYDT's, Output Averaged
Displacement Certification:	NIST Certificate #729970 & #821274437-07
Linearity Verification Technique:	Linear Correlation Coefficient > 0.9999
Repeatability Verification Technique:	Standard Deviation < 0.5 % (of mean)
ASTCS System Check	
Reference Strain Transducer:	43671
Reference General Gage Factor:	293.000 $\mu\epsilon/mV/V$
LYDT #1 Sensitivity (inches/volt):	7.916500E-3
LYDT #2 Sensitivity (inches/volt):	8.042000E-3
Date/Time of Last System Check:	11/13/2014 12:37 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.

Smart Sensor?

Yes

No Smart Chip

Programmed by:

KT

Date: 11-13-14

CRC value

26B8