Certificate of Calibration

Transducer Model: PDI Transducer

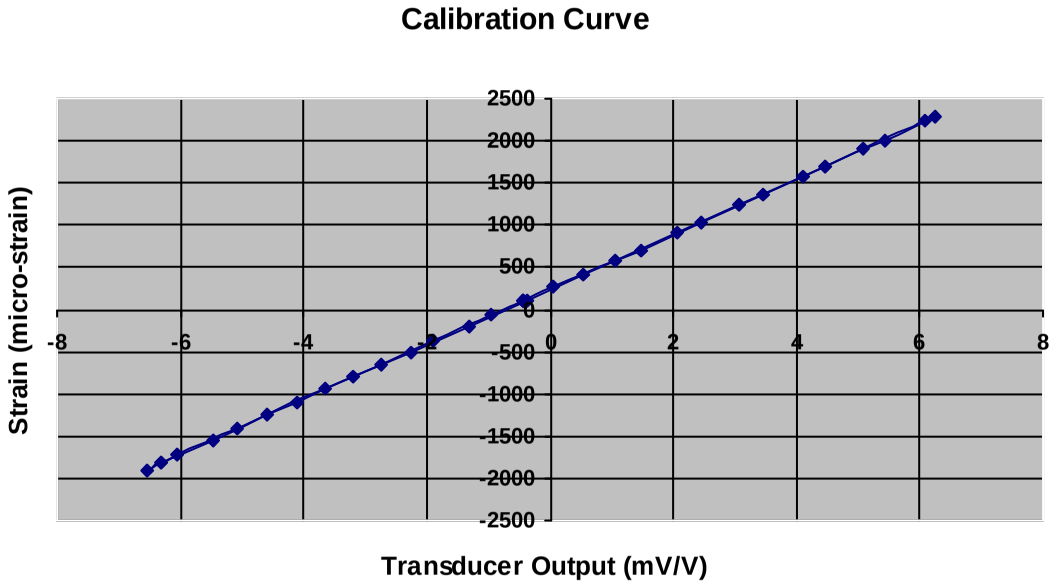
Serial Number: 203I

PDI Gage Factor: 93.8 με/V

General Gage Factor: 325.7 με/mV/V_{ext}
Initial Offset Voltage: -0.225 mV/V_{ext}

Table 1 – Representative Calibration Data

Applied Strain (με)	Transducer Output (mV/V_{ext})	Applied Strain (με)	Transducer Output (mV/V_{ext})
102	-0.440	411	0.536
-62	-0.949	709	1.468
-368	-1.895	1030	2.460
-641	-2.740	1355	3.457
-943	-3.656	1684	4.452
-1246	-4.583	2014	5.452
-1542	-5.476	2278	6.237
-1823	-6.321	2230	6.091
-1900	-6.536	1899	5.095
-1729	-6.039	1570	4.095
-1417	-5.075	1239	3.081
-1110	-4.120	909	2.057
-801	-3.186	585	1.061
-498	-2.261	264	0.051
-193	-1.320	103	-0.431
116	-0.378	103	-0.427



Mean Linear Correlation Coefficient (LCC): 9.999898E-1

LCC Standard Deviation: 1.698853E-6

Calibrated By: DJC

Signature:_____

Date/Time: 2/5/2019 5:04 PM

Temperature (°C): 25.2

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:	8/30/2018 2:36 PM
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):	7.911600E-3
LVDT #2 Sensitivity (inches/volt):	8.067200E-3
Date/Time of Last System Check:	2/5/2019 10:42 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.