Certificate of Calibration

Transducer Model: BDI ST350

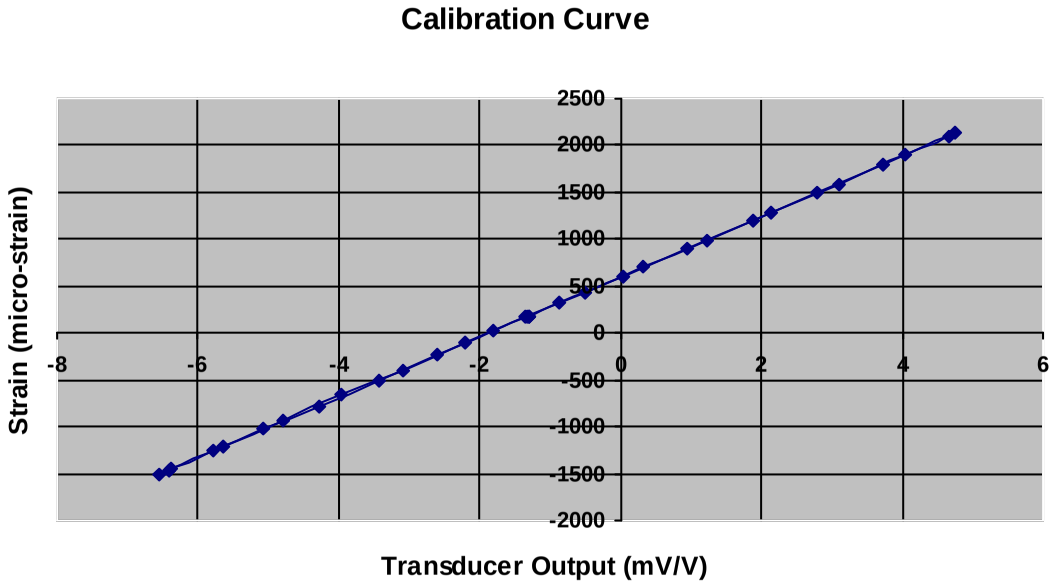
Serial Number: P418

PDI Gage Factor: 92.4 με/V

General Gage Factor: 320.7 $\mu\varepsilon/mV/V_{ext}$
Initial Offset Voltage: -0.553 mV/V_{ext}

Table 1 – Representative Calibration Data

Applied Strain (με)	Transducer Output (mV/V_{ext})	Applied Strain (με)	Transducer Output (mV/V_{ext})
169	-1.324	436	-0.505
22	-1.796	700	0.323
-230	-2.591	986	1.225
-499	-3.435	1284	2.146
-774	-4.279	1589	3.094
-1028	-5.069	1900	4.051
-1259	-5.782	2140	4.763
-1460	-6.403	2102	4.652
-1513	-6.558	1790	3.725
-1444	-6.369	1489	2.799
-1204	-5.636	1193	1.889
-936	-4.794	897	0.959
-665	-3.961	605	0.047
-391	-3.096	314	-0.867
-110	-2.215	172	-1.310
170	-1.342	170	-1.312



Mean Linear Correlation Coefficient (LCC): 9.999833E-1

LCC Standard Deviation: 1.078555E-6

Calibrated By: Vanna Thach

Signature:_____

Date/Time: 12/5/2017 10:43 AM

Temperature (°C): 25.8

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:	±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):	7.916500E-3
LVDT #2 Sensitivity (inches/volt):	8.042000E-3
Date/Time of Last System Check:	12/5/2017 9:03 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.