

**THIS IS TO CERTIFY THAT AFFRI INC. HAS CALIBRATED THE FOLLOWING  
FORCE TESTING MACHINE IN ACCORDANCE WITH ASTM-E4-21.**

**CUSTOMER**

COMPANY: [REDACTED]  
ADDRESS: [REDACTED]  
CITY/PROVINCE: [REDACTED]

**CALIBRATION INFORMATION**

PURCHASE ORDER NUMBER: NG-553  
CERTIFICATE NUMBER: [REDACTED]  
CERTIFICATE ISSUED: March 6, 2025  
CALIBRATION DATE: March 6, 2025  
REQUESTED DUE DATE: March 6, 2026  
SYSTEM LOCATION: R&D Lab  
MANUFACTURER: [REDACTED]  
MODEL: [REDACTED]  
SERIAL NUMBER: [REDACTED]  
ASSET NUMBER: 50kN Load  
LOAD CELL/TRANSDUCER: 5T  
INDICATOR RESOLUTION: 0.2 lbf  
TEMPERATURE / RELATIVE HUMIDITY: 21.46°C/37.04%  
CALIBRATION TECHNICIAN: [REDACTED]

**CALIBRATION IS VALID FOR THE SCALE(S), ITEMS AND RESULTS SHOWN AND HAS BEEN FOUND TO BE WITHIN TOLERANCE UNLESS OTHERWISE NOTED.**

**STANDARDS USED**

FILE	SERIAL #	MFG	CAL DATE	DUE DATE	CERT BY	CERT #	CAPACITY	UNC
TH 003	S2450843/S2310657	Vaisala	02/02/24	02/02/26	Transcat	33-Q3F0N-20-1	Deg/%RH	0.5/0.14 Deg/%RH
AMP 003	818375701	HBM	05/11/24	05/11/25	Affri	AffriUS_818375701-AMP_003_AMP_060123	2 mV/V	0.012 %FS
AUF 008 C 5 kN	926987	AEP	29/07/21	29/01/25	AEP	LAT 093 211221F	5 kN	0.0025 kN
AUF 010 C 50 kN	921913	AEP	18/02/22	18/02/25	Morehouse	921913B1822	5012.2 kgf	0.0025 kgf
AUF 008 T 5 kN	926987	AEP	29/07/21	29/01/25	AEP	LAT 093 211321F	5 kN	0.0025 kN
AUF 010 T 50 kN	921913	AEP	18/02/22	18/02/25	Morehouse	921913B1822	5012.2 kgf	0.0025 kgf

**TRACEABILITY, UNCERTAINTY AND DECISION RULE STATEMENTS**

The expanded uncertainties shown above use a confidence level of 95% and a coverage factor of  $k = 2$ . Expanded uncertainties are valid from 18°C to 28°C. ALL REFERENCE STANDARDS USED FOR VERIFICATION ARE TRACEABLE TO NIST OR ACCREDIA. Services comply with PO requirements. Affri uses a binary decision rule of pass or fail where tolerance limit equals acceptance limits without considering uncertainty. Uncertainty and measured results are provided for the user to consider their own risk.

**COMMENTS**

Preventative maintenance was performed.

# AFFRI Inc

## CALIBRATION REPORT



**CUSTOMER**

COMPANY: [REDACTED]

**CALIBRATION INFORMATION**

CERTIFICATE NUMBER: [REDACTED]  
 CERTIFICATE ISSUED: March 6, 2025  
 CALIBRATION DATE: March 6, 2025  
 REQUESTED DUE DATE: March 6, 2026  
 MODEL: [REDACTED]  
 SERIAL NUMBER: [REDACTED]  
 LOAD CELL/TRANSDUCER: 5T

Certificate #: AC-3026

**AS FOUND:**

REFERENCE STANDARDS USED	REF STD READING lbf	DUT READING RUN #1 lbf	DIRECTION:	COMPRESSION
			DUT ERROR RUN #1 lbf	DUT %RD ERROR RUN #1 (%RD)
AUF 010 C 50 kN	0.0	0.0	0.0	
AUF 008 C 5 kN	110.0	106.5	-3.5	-3.18%
AUF 008 C 5 kN	220.0	215.3	-4.7	-2.14%
AUF 008 C 5 kN	440.0	434.5	-5.5	-1.25%
AUF 008 C 5 kN	660.0	653.6	-6.4	-0.97%
AUF 008 C 5 kN	880.0	873.6	-6.4	-0.73%
AUF 010 C 50 kN	1100.0	1093.0	-7.0	-0.64%
AUF 010 C 50 kN	2200.0	2188.0	-12.0	-0.55%
AUF 010 T 50 kN	4400.0	4385.0	-15.0	-0.34%
AUF 010 C 50 kN	6600.0	6585.0	-15.0	-0.23%
AUF 010 C 50 kN	8800.0	8786.0	-14.0	-0.16%
AUF 010 C 50 kN	11000.0	10986.0	-14.0	-0.13%
AUF 010 C 50 kN	0.0	1.0	1.0	

**AS LEFT:**

REFERENCE STANDARDS USED	REF STD READING lbf	DUT READING lbf	REF STD READING lbf	DUT READING lbf	DUT ERROR		DUT %RD ERROR		DUT REPEAT. (%RD)	STD UNC. DUE TO REPEAT. (%RD)	MEASURE. UNC. (K=2) (%RD)
					DUT ERROR RUN #1 lbf	DUT ERROR RUN #2 lbf	DUT %RD ERROR RUN #1 (%RD)	DUT %RD ERROR RUN #2 (%RD)			
					RUN #1	RUN #2	RUN #1	RUN #2			
AUF 010 C 50 kN	0.0	0.0	0.0	0.0	0.0	0.0					
AUF 008 C 5 kN	110.0	109.0	110.0	109.1	-1.0	-0.9	-0.91%	-0.82%	0.09%	0.18%	0.49%
AUF 008 C 5 kN	220.0	218.8	220.0	218.6	-1.2	-1.4	-0.55%	-0.64%	0.09%	0.09%	0.36%
AUF 008 C 5 kN	440.0	437.2	440.0	437.1	-2.8	-2.9	-0.64%	-0.66%	0.02%	0.05%	0.32%
AUF 008 C 5 kN	660.0	656.2	660.0	655.9	-3.8	-4.1	-0.58%	-0.62%	0.05%	0.03%	0.32%
AUF 008 C 5 kN	880.0	874.4	880.0	874.9	-5.6	-5.1	-0.64%	-0.58%	0.06%	0.04%	0.32%
AUF 010 C 50 kN	1100.0	1093.6	1100.0	1093.4	-6.4	-6.6	-0.58%	-0.60%	0.02%	0.04%	0.32%
AUF 010 C 50 kN	2200.0	2189.6	2200.0	2188.6	-10.4	-11.4	-0.47%	-0.52%	0.05%	0.03%	0.31%
AUF 010 T 50 kN	4400.0	4384.3	4400.0	4385.3	-15.7	-14.7	-0.36%	-0.33%	0.02%	0.02%	0.31%
AUF 010 C 50 kN	6600.0	6585.3	6600.0	6584.2	-14.7	-15.8	-0.22%	-0.24%	0.02%	0.02%	0.31%
AUF 010 C 50 kN	8800.0	8786.7	8800.0	8784.4	-13.3	-15.6	-0.15%	-0.18%	0.03%	0.02%	0.31%
AUF 010 C 50 kN	11000.0	10989.3	11000.0	10985.3	-10.7	-14.7	-0.10%	-0.13%	0.04%	0.01%	0.31%
AUF 010 C 50 kN	0.0	1.2	0.0	0.4	1.2	0.4					

# AFFRI Inc

## CALIBRATION REPORT



**CUSTOMER**

COMPANY: [REDACTED]

**CALIBRATION INFORMATION**

CERTIFICATE NUMBER: [REDACTED]  
 CERTIFICATE ISSUED: March 6, 2025  
 CALIBRATION DATE: March 6, 2025  
 REQUESTED DUE DATE: March 6, 2026  
 MODEL: [REDACTED]  
 SERIAL NUMBER: [REDACTED]  
 LOAD CELL/TRANSDUCER: 5T

Certificate #: AC-3026

**AS FOUND:**

REFERENCE STANDARDS USED	REF STD READING lbf	DUT READING RUN #1 lbf	DIRECTION:	TENSION
			DUT ERROR RUN #1 lbf	DUT %RD ERROR RUN #1 (%RD)
AUF 010 T 50 kN	0.0	0.0	0.0	
AUF 008 T 5 kN	110.0	108.5	-1.5	-1.36%
AUF 008 T 5 kN	220.0	217.4	-2.6	-1.18%
AUF 008 T 5 kN	440.0	436.0	-4.0	-0.91%
AUF 008 T 5 kN	660.0	654.8	-5.2	-0.79%
AUF 008 T 5 kN	880.0	872.4	-7.6	-0.86%
AUF 010 T 50 kN	1100.0	1091.6	-8.4	-0.76%
AUF 010 T 50 kN	2200.0	2186.2	-13.8	-0.63%
AUF 010 T 50 kN	4400.0	4378.2	-21.8	-0.50%
AUF 010 T 50 kN	6600.0	6574.4	-25.6	-0.39%
AUF 010 T 50 kN	8800.0	8774.4	-25.6	-0.29%
AUF 010 T 50 kN	11000.0	10970.3	-29.7	-0.27%
AUF 010 T 50 kN	0.0	1.0	1.0	

**AS LEFT:**

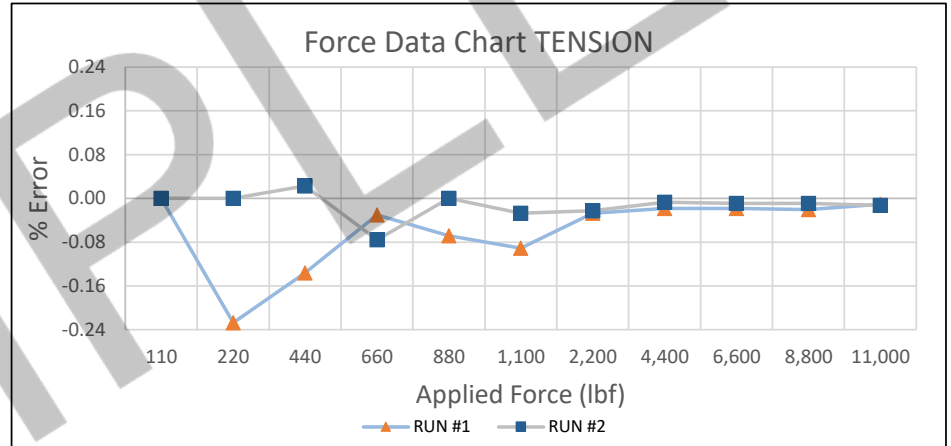
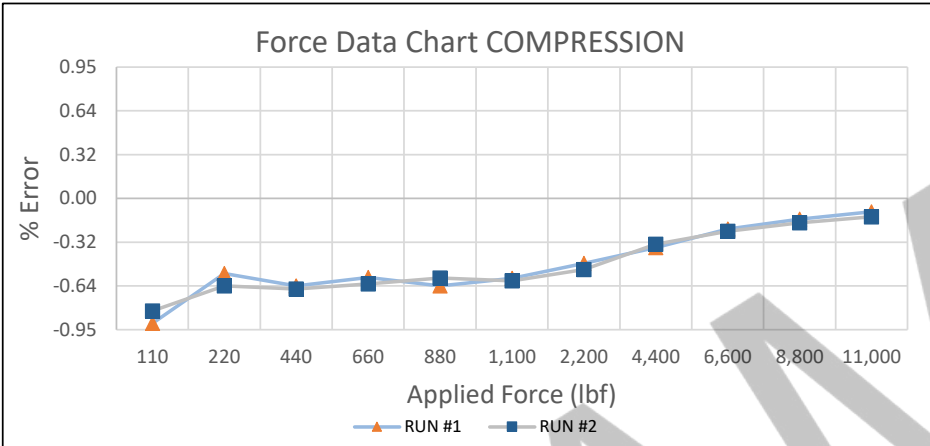
REFERENCE STANDARDS USED	REF STD READING lbf	DUT READING RUN #1 lbf	REF STD READING RUN #2 lbf	DUT READING RUN #2 lbf	DUT ERROR		DUT %RD ERROR		DUT REPEAT. (%RD)	STD UNC. DUE TO REPEAT. (%RD)	MEASURE. UNC. (K=2) (%RD)
					DUT ERROR RUN #1 lbf	DUT ERROR RUN #2 lbf	DUT %RD ERROR RUN #1 (%RD)	DUT %RD ERROR RUN #2 (%RD)			
					DUT ERROR		DUT %RD ERROR				
AUF 010 T 50 kN	0.0	0.0	0.0	0.0	0.0	0.0					
AUF 008 T 5 kN	110.0	110.0	110.0	110.0	0.0	0.0	0.00%	0.00%	0.00%	0.31%	0.71%
AUF 008 T 5 kN	220.0	219.5	220.0	220.0	-0.5	0.0	-0.23%	0.00%	0.23%	0.16%	0.44%
AUF 008 T 5 kN	440.0	439.4	440.0	440.1	-0.6	0.1	-0.14%	0.02%	0.16%	0.08%	0.35%
AUF 008 T 5 kN	660.0	659.8	660.0	659.5	-0.2	-0.5	-0.03%	-0.08%	0.05%	0.06%	0.33%
AUF 008 T 5 kN	880.0	879.4	880.0	880.0	-0.6	0.0	-0.07%	0.00%	0.07%	0.04%	0.32%
AUF 010 T 50 kN	1100.0	1099.0	1100.0	1099.7	-1.0	-0.3	-0.09%	-0.03%	0.06%	0.03%	0.32%
AUF 010 T 50 kN	2200.0	2199.4	2200.0	2199.5	-0.6	-0.5	-0.03%	-0.02%	0.00%	0.02%	0.31%
AUF 010 T 50 kN	4400.0	4399.2	4400.0	4399.7	-0.8	-0.3	-0.02%	-0.01%	0.01%	0.01%	0.31%
AUF 010 T 50 kN	6600.0	6598.8	6600.0	6599.4	-1.2	-0.6	-0.02%	-0.01%	0.01%	0.01%	0.31%
AUF 010 T 50 kN	8800.0	8798.2	8800.0	8799.2	-1.8	-0.8	-0.02%	-0.01%	0.01%	0.00%	0.31%
AUF 010 T 50 kN	11000.0	10998.8	11000.0	10998.6	-1.2	-1.4	-0.01%	-0.01%	0.00%	0.00%	0.31%
AUF 010 T 50 kN	0.0	0.4	0.0	0.0	0.4	0.0					

**CUSTOMER**

COMPANY: [REDACTED]

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MODEL: [REDACTED]  
SERIAL NUMBER: [REDACTED]  
LOAD CELL/TRANSDUCER: 5T



[REDACTED]