



Calibration Report

Customer Name: _____ System: _____
Location: Eden Prairie

Equipment

Device Type: Length Model: 370.25 Serial No.: 10665988
Controller/Conditioner Model: 494.16 Serial No.: 9198643
Readout Device Model: FLEXTTEST_40 Serial No.: 9201050 Channel: Axial

Procedure

MTS Procedure: Integration Calibration ACS Version: 9.1
Calibration has been performed in accordance with:
Method of Verification:

Calibration Equipment Asset No.

Dead Weight Set: _____ HighLevel Board: _____ LowLevel Board: _____ Standard Asset No.: 22548
DW Compensation: _____ DMM: _____ Digital Indicator: _____ Lower Limit: _____
Temperature Readout: 24856 Additional Equipment: _____ Standardizer: _____

Conditions

Ambient Temperature: 24.70 °C Polarity(+): Retraction Bidirectional: _____ Cable Length: 25 Feet

In Tolerance

X

As Found:

X

Classification: A >=10% of Range, A <10% of Range

Out of Tolerance

As Adjusted: _____

As Found System Condition: Good

Conditioner Parameters

Excitation: 10.0000 Delta K: _____ Zero Offset: 0.0000 Multiplier: _____ Phase: 58
Cal Factor: Positive: _____ Negative: _____ Range Gain: _____ PreAmp Gain: 0.9025 Post Amp/FineGain: 1.7033 Polarity: Normal

Calibration Data

Range: 1
Resolution: 0.002 Full Scale: 100
Report Units: mm 0.0000

Applied Percent of Full Scale Length	Series 1		Series 1 Errors				Series 2		Series 2 Errors				Repeatability	
	Indicated Reading Ascending	Indicated Reading Descending	Units Error Asc	Percent Error Asc	Units Error Desc	Percent Error Desc	Indicated Reading Ascending	Indicated Reading Descending	Units Error Asc	Percent Error Asc	Units Error Desc	Percent Error Desc	Percent Error	
													Asc	Desc
0	0.000	-0.010	0.000		0.010	-0.01	0.000	-0.002	0.000	0.00	0.002	0.00	0.00	0.01
-2	-2.001		0.001	0.07			-2.004		0.004	0.22			0.15	
-4	-3.998		0.002	-0.04			-4.002		0.002	0.05			0.09	
-6	-5.999		0.001	-0.02			-6.004		0.004	0.06			0.08	
-8	-8.003		0.003	0.03			-8.009		0.009	0.11			0.08	
-10	-10.000		0.000	0.00			-10.005		0.005	0.05			0.05	
-20	-20.006		0.006	0.03			-20.015		0.015	0.07			0.04	
-40	-40.007		0.007	0.02			-40.003		0.003	0.01			0.01	
-70	-69.934		0.066	-0.09			-69.975		0.025	-0.04			0.06	
-85	-84.964		0.036	-0.04			-84.964		0.036	-0.04			0.00	

Retraction

Range: 1

Report Units: mm

Applied Percent of Full Scale Length	Series 1		Series 1 Errors				Series 2		Series 2 Errors				Repeatability	
	Indicated Reading Ascending	Indicated Reading Descending	Units Error Asc	Percent Error Asc	Units Error Desc	Percent Error Desc	Indicated Reading Ascending	Indicated Reading Descending	Units Error Asc	Percent Error Asc	Units Error Desc	Percent Error Desc	Percent Error	
													Asc	Desc
0	0.000	-0.012	0.000	0.00	0.012	-0.01	0.000	-0.004	0.000	0.00	0.004	0.00	0.00	0.01
2	1.998		0.002	-0.12			1.999		0.001	-0.06			0.06	
4	3.995		0.005	-0.12			3.998		0.002	-0.05			0.07	
6	6.005		0.005	0.09			6.007		0.007	0.12			0.03	
8	8.011		0.011	0.13			8.013		0.013	0.16			0.03	
10	10.017		0.017	0.17			10.020		0.020	0.20			0.03	
20	19.966		0.034	-0.17			19.970		0.030	-0.15			0.02	
40	39.981		0.019	-0.05			39.992		0.008	-0.02			0.03	
70	70.035		0.035	0.05			70.052		0.052	0.07			0.02	
85	85.065		0.065	0.08			85.081		0.081	0.10			0.02	

Errors at Zero are computed in % of Range.

 Out of Tolerance in % column

This report shall not be reproduced except in full, without the written approval of the laboratory.

Calibrations are performed with standards whose values and measurements are traceable to the National Institute of Standards and Technology.

Notes: Linearized Data

Performed By: Tim Niehaus

Test Technician

Date: 8-Apr-25

Signature:



MTS Systems Corporation

14000 Technology Drive
Eden Prairie, MN 55344-2290

Certificate of Calibration

Page: 1 of 2
Certificate Number: 0000-4859
Site: 50000
Country Code: US

Customer Name:	System:	Location: Eden Prairie	Country Code: US
Equipment	Device Type: Length	Model: 370.25	Serial No.: 10665988
	Controller/Conditioner Model: 494.16	Serial No.: 9198643	
	Readout Device Model: FLEXTTEST_40	Serial No.: 9201050	Channel: Axial

Defined and documented measurement assurance techniques or uncertainty analyses are used to verify the adequacy of the measurement processes.

Calibrations are performed with standards whose values and measurements are traceable to the National Institute of Standards and Technology.

When parameter(s) are certified to be within specified tolerance(s), the measured value(s) shall fall within the appropriate specification limit and the uncertainty of the measured value(s) shall be stated and provided to the customer for evaluation.

CALIBRATION INFORMATION

As Found:	In Tolerance	Calibration Date:	8-Apr-25
As Left:	In Tolerance	Calibration Due:	8-Apr-26
Class:	A >=10% of Range, A <10% of Range		
Calibration Procedure:	Integration Calibration		
Full Scale Ranges:	100 mm		
Note:			

STANDARDS USED FOR CALIBRATION

MTS Asset Number	Manufacturer	Model Number	Description	Cal. Date	Cal. Due
24856	Extech	39240	Temperature Pen	2-Jun-24	2-Jun-25
22548	MTS	MTS 1200	Linear Encoder	17-Mar-25	17-Mar-26

Certified by: Issued on: 8-Apr-25

ACS Version: 9.1