



MTS FlexTest® Calibration

Benefits

- » Traceability
- » Data integrity
- » Speed of calibration
- » ISO/IEC 17025 accredited calibration available

To help ensure the quality of your test data and to make sure your MTS FlexTest Controller is operating in optimal condition, it is important to calibrate the controller electronics at least once a year. These partitioned calibrations are especially relevant in large structural test setups where it is not feasible to conduct an end-to-end calibration, but where data integrity is extremely important.

With the new, automated MTS FlexTest calibration process, the time to calibrate is half of what it used to be with a manual process. This significant time savings means testing can resume sooner with more confidence in the test data. Malfunctioning boards can negatively impact test data accuracy, and slow down your test program. With frequent calibrations, you maintain both your test schedule and data traceability.

Receiving a calibration is easy. An MTS Field Service Engineer arrives onsite to provide the calibration and leave a report. With controller calibration, you will receive comprehensive measurement performance data for each Signal Conditioner, A/D and D/A.

In addition, if adjustment is warranted or optimization is desired, the Field Service Engineer will consult with you regarding onsite adjustment options.

Your test data is only as good as the measurement accuracy of the equipment you use to collect it. Call MTS today to schedule an onsite FlexTest calibration to help make sure your controller is providing the best performance possible, and your test data is accurate.

Eligible Controllers

- » FlexTest 200
- » FlexTest 100
- » FlexTest 60
- » FlexTest 40

MTS FlexTest Calibration Options

- » Input A/D
- » Output D/A
- » Signal Conditioners
 - DC Mode Only
 - AC Mode Only
 - DC and AC Mode

Customer is responsible for disconnecting and reconnecting cables to the test system.

ISO/IEC 17025 accredited calibration is offered through MTS Field Service and MTS Factory Metrology Laboratory.

CERTIFICATE OF CALIBRATION

MANUFACTURER: MTS Systems Corporation CUSTOMER NAME: MTS Metrology Lab
 MODEL NUMBER: 494-26 (DC Mode) CUSTOMER ID NUMBER: 12145478
 SERIAL NUMBER: 2048106 MTS SITE NUMBER:
 DESCRIPTION: Signal Conditioner

Conditions At Time Of Calibration:
 As Found: In Tolerance Calibration Date:
 As Left: In Tolerance Calibration Due:
 Environment: TYP / 27% RH Software Procedure Used:

Standards Used For Calibration	Manufacturer	Model	Description
MTS Accel	Fiske	970	Temperature Standard
41801	Kentley	9010	Digital Multimeter
71884	Yokogawa	65111	DCV Calibrator

Additional Notes / Remarks:

Certified By: Kevin East
 Metrologist

CALIBRATION REPORT

MODEL NUMBER: 494-26 (CHB, DC Mode) CUSTOMER NAME: MTS Metrology Lab
 SERIAL NUMBER: 3048106 CUSTOMER ID NUMBER: 12145478
 DESCRIPTION: Signal Conditioner MTS SITE NUMBER: 121414
 SLOT LOCATION: 54-31A-B CALIBRATION DATE: 06-Feb-2015

EXCITATION VERIFICATION

Excitation (VDC)	Measured (VDC)	Deviation (%>Adj)
1.000	1.0004	-0.012
10.000	9.9998	-0.012
11.000	14.9925	-0.013
20.000	19.9947	-0.018

CHB Excitation Verification Summary

ZERO OFFSET VERIFICATION

Total Gain	*Zero Offset (mV)	Tolerance (mV)
1.0	-3.1	21.4
5.0	-2.7	41.3
10.0	-3.5	38.3
20.0	-2.3	38.3
50.0	-3.1	40.8
100.0	-2.0	76.8
200.0	-2.1	93.5
500.0	1.7	118.8
1000.0	3.5	232.8
2000.0	13.4	345.5

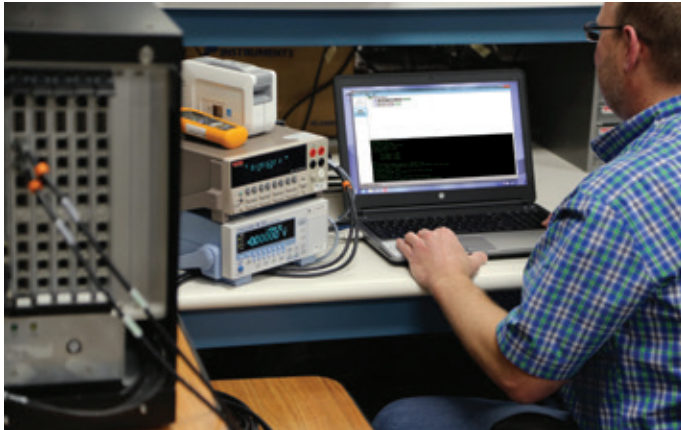
GAIN VERIFICATION

Measured Input (+VDC)	Measured Output (+VDC)	Deviation (%>Adj)
1.0	1.0000	0.000
5.0	4.9999	0.001
10.0	9.9998	0.001
20.0	19.9996	0.001
50.0	49.9993	0.001
100.0	99.9986	0.001
200.0	199.9972	0.001
500.0	499.9944	0.001
1000.0	999.9888	0.001
2000.0	1999.9776	0.001

CHB Gain Verification Summary

NOTES - REMARKS:
 1) DC Conditioner Accuracy Specifications: Excitation = 0.1% of Setting + 0.001V; Gain = 0.1% of Reading + 0.001% of Range
 2) *Zero offset measurement performed with a short applied to conditioner input.
 3) Any out-of-tolerance condition is indicated by associated cell highlighted in Yellow.
 4) Calibration uncertainty does not exceed 0.02% of Reading (95%, 95%).

Example of a calibration certificate and report



An MTS engineer calibrates an MTS FlexTest controller



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