



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.

be certain.

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: 404-26 (DC Mode) CUSTOMER ID NUMBER: 13145678
 SERIAL NUMBER: 3048506 MTS SITE: 123456
 DESCRIPTION: Signal Conditioner

CALIBRATION REPORT

MODEL NUMBER: 404-26 (DC Mode) CUSTOMER NAME: MTS Metrology Lab
 SERIAL NUMBER: 3048506 CUSTOMER ID NUMBER: 13145678
 DESCRIPTION: Signal Conditioner MTS SITE NUMBER: 123456
 SLOT LOCATION: 54-23AB CALIBRATION DATE: 06-Feb-2015

EXCITATION VERIFICATION

Excitation (VDC)	Measured (VDC)	Deviation (%Delta)
1.000	1.0000	-0.032
10.000	9.998	-0.032
10.000	14.892	-0.033
20.000	19.897	-0.028

ZERO OFFSET VERIFICATION

Total Gain	*Zero Offset (mV)	Tolerance
1.0	-2.5	15.7
1.0	-2.1	25.4
1.0	-2.7	45.2
10.0	-2.5	62.3
20.0	-2.3	28.3
10.0	2.1	48.0
100.0	-2.0	70.6
200.0	-2.1	55.5
100.0	1.7	118.8
1000.0	1.1	222.8
2000.0	23.4	302.5

GAIN VERIFICATION

Input (VDC)	Measured Output (VDC)	Deviation (%Delta)
1.0	1.0000	-0.032
10.0	9.998	-0.032
10.0	14.892	-0.033
20.0	19.897	-0.028

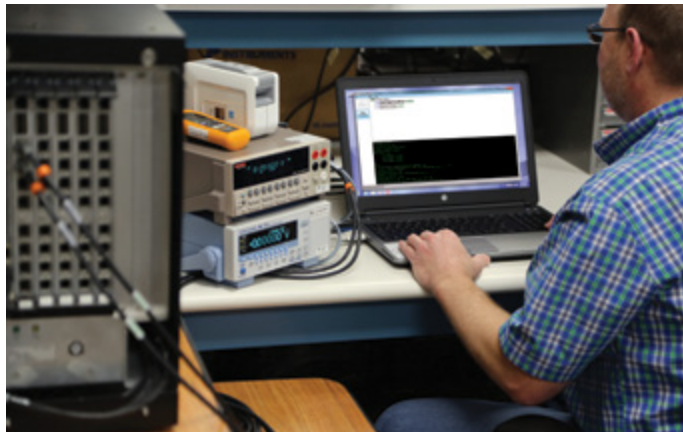
EXCITATION VERIFICATION SUMMARY

GAIN VERIFICATION SUMMARY

NOTES / REMARKS:

- DC Conditioner Accuracy Specifications: Excitation = 0.1% of Setting + 0.01% Gain + 0.1% of Reading + 0.01% of Range
- *Zero offset assessment performed with a short applied to conditioner input.
- Any out-of-tolerance condition is indicated by associated cell highlighted in Yellow.
- Calibration uncertainty does not exceed 1.02% at Reading (k=2, 95%).

Example of a calibration certificate and report



An MTS engineer calibrates an MTS FlexTest controller



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