



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

MTS JAPAN FIELD SERVICE  
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CALIBRATION

Valid To: April 30, 2019

Certificate Number: 3854.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations<sup>1</sup>:

I. Dimensional

Parameter/Equipment	Range	CMC <sup>2,4</sup> (±)	Comments
Linear Displacement <sup>3</sup>	(1 to 2000) mm	0.1 % IV	ASTM E2309 Linear encoder
Extensometers <sup>3</sup> –			
Gage Length	(10 to 50) mm	(1.3 + 5L) μm	ASTM E83, ISO 9513
Displacement	(0.04 to 50) mm	0.13 % IV + 1 μm	ASTM E83, E399; ISO 9513

II. Mechanical

Parameter/Equipment	Range	CMC <sup>2,4</sup> (±)	Comments
Force Transducers <sup>3</sup>	(0.005 to 100) kN (100 to 500) kN	0.1 % IV 0.25 % IV	ASTM E4, ISO 7500-1, load cells

Parameter/Equipment	Range	CMC <sup>2,4</sup> (±)	Comments
Testing Machines <sup>3</sup> – Crosshead Speed	(1 to 250) mm/min	0.1 % IV	Magneto-restrictive linear transducer

<sup>1</sup> This laboratory offers commercial calibration service and field calibration service.

<sup>2</sup> Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of  $k = 2$ . The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

<sup>3</sup> Field calibration service is available for this calibration and this laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these calibrations. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

<sup>4</sup> In the statement of CMC,  $L$  is the numerical value of the nominal length of the device measured in mm and IV is the Indicated Value.



## *Accredited Laboratory*

A2LA has accredited

### **MTS JAPAN FIELD SERVICE**

*Sumida-ku, Tokyo, JAPAN*

for technical competence in the field of

## Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).



Presented this 17<sup>th</sup> day of April 2017.

A handwritten signature in black ink, written over a horizontal line.

President and CEO  
For the Accreditation Council  
Certificate Number 3854.01  
Valid to April 30, 2019  
Revised April 20, 2017

*For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.*