Name of Accreditation Program	JCSS Accreditation Program		
Accreditation Identification	JCSS 0184 Calibration		
Name of Conformity Assessment Body	Tokyo Metropolitan Industrial Technology Research Institute		
Name of Legal Entity	Tokyo Metropolitan Industrial Technology Research Institute JCN 6010605002434		
Inquiry Point	Technology Support Division, Engineering Validation Technology Group TEL: +81-3-5530-2193 FAX: +81-3-5530-2318		

*JCN: Japan Corporate Number



Certificate of Accreditation

International Accreditation Japan (IAJapan) hereby accredits the following conformity assessment body as a calibration laboratory of Japan Calibration Service System.

Accreditation Identification:	n: JCSS 0184 Calibration			
Name of Conformity Assessment Body:	Tokyo Metropolitan Industrial Technology Research Institute			
Name of Legal Entity:	Same as above			
Location of Conformity Assessment Body:	2-4-10 Aomi, Koto-ku, Tokyo 135-0064, JAPAN			
Scope of Accreditation: Length, Temperature, Electricity (Direct Current & Low Frequency) (as the following pages)				
Accreditation Requirement: ISO/IEC 17025:2017*				
	* The relevant accreditation requirements described in the Accreditation Scheme Document for JCSS are also applied.			
Effective Date of Accreditation :	2024-02-04			
Expiry Date of Accreditation:	2028-02-03			
Date of Initial Accreditation:	2013-08-01			

L. Saile

SAITO Kazunori Chief Executive, International Accreditation Japan (IAJapan) National Institute of Technology and Evaluation

- International Accreditation Japan (IAJapan) is a laboratory accreditation body which has signed MRAs of ILAC (International Laboratory Accreditation Cooperation) and APAC (Asia Pacific Accreditation Cooperation).

⁻ MRA requirements are, in addition to relevant international standards and guides, requirements for participation in proficiency testing programs, surveillance and reassessment, and the policy for the traceability of measurement for MRA purpose.

This laboratory fulfills ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation means this laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

⁻ The latest accreditation information is publicly available on IAJapan Website as an accreditation certificate.

<u>General Field of Calibration: Length</u> <u>Date of Initial Accreditation of the Field: 2015-06-12</u> <u>Laboratory's permanent facility/On-site Calibration: Laboratory's permanent facility</u> <u>Calibration and Measurement Capabilities</u>

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range	Expanded Uncertainty (Level of Confidence Approximately 95 %)	
	Calipers		Up to 600 mm	0.02 mm
	Micrometers		Up to 25 mm	0.5 μm
			More than 25 mm up to 100 mm	2 μm
	Dial gauges		Up to 5 mm	0.7 μm
			Up to 10 mm	0.5 μm
			More than 5 mm up to 50.8 mm	1.4 μm
			More than 50.8 mm up to 100 mm	2.3 μm
			Up to 100 mm	1.6 µm
	Dial test indicators		Up to 1.6 mm	1.1 μm
	Cylinder gauges		From 6 mm up to 400 mm	1.3 μm
	Depth gauges		Up to 300 mm	0.02 mm
Length Measuring Instrument	Height gauges		Up to 1000 mm	0.014 mm
	Calibration testers for dial gauges		Up to 25 mm	0.3 μm
	Calibration apparatus for extensometers		Up to 10 mm	0.15 μm
			More than 10 mm up to 100 mm	0.40 µm
	Gauge Blocks (Comparison method)		From 0.5 mm up to 100 mm	0.11 μm
			More than 100 mm up to 250 mm	0.20 µm
	End Gauges with flat ends (Comparison method)		Up to 310 mm	0.6 µm
			More than 310 mm up to 610 mm	0.8 µm
			More than 610 mm up to 1010 mm	1.1 μm
	Ring gauges		From 10 mm up to 200 mm	0.5 µm
	Plug gauges		From 1 mm up to 200 mm	0.6 µm
Dimensional Measuring Instrument	Gauges for Coordinate measuring machines	Length, Distance, Coordinate, or	Up to 200 mm	0.3 µm
		Least Squares Diameter	Up to 310 mm	0.6 µm
			More than 310 mm up to 1010 mm	0.7 µm
		Geometrical Deviations	up to 10 µm	0.3 μm
	Sphere	Average	From 5 mm up to 15 mm	0.08 µm
		diameter	More than 15 mm up to 30 mm	0.09 µm

#All Calibration Procedures are in-house procedures developed by this laboratory.

General Field of Calibration: Temperature Date of Initial Accreditation of the Field: 2013-08-01 Laboratory's permanent facility/On-site Calibration: Laboratory's permanent facility Calibration and Measurement Capabilities

Canoration and Weasurement Capaonities				
Type of Service	Range			

Type of Service		Range	Expanded Uncertainty (Level of Confidence Approximately 95 %)
Contact Type Thermometer	Thermocouple (Comparison Calibration)	From 200 °C up to 1000 °C	1.8 °C

#All Calibration Procedures are in-house procedures developed by this laboratory.

General Field of Calibration: Electricity (Direct Current & Low Frequency)

Date of Initial Accreditation of the Field: 2013-08-01

Laboratory's permanent facility/On-site Calibration: Laboratory's permanent facility

Calibration and Measurement Capabilities

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range		Expanded Uncertainty (Level of Confidence Approximately 95 %)
Direct Current & Low Frequency Measuring Equipment, etc.	DC Resistor	1 Ω		1.1 ppm
		10 Ω		1.7 ppm
		100 Ω		1.3 ppm
		1 kΩ		1.8 ppm
		10 kΩ		1.6 ppm
			$100 \mathrm{k}\Omega$	2.3 ppm
	DC Voltage Measuring Equipment	From 0 mV up to 110 mV		3.3 µV
		More than 110 mV up to 1000 V		8.5 ppm
	AC Voltage Measuring Equipment	50 Hz	From 10 mV up to 220 mV	0.011 mV
		50 Hz	More than 220 mV up to 1000 V	0.0065 %
	Direct Current Measuring Equipment	From 0 μA up to 110 μA		0.013 μΑ
		More than 110 µA up to 11 A		0.013 %
		More than 11 A up to 30 A		0.15 %
	Alternating Current Measuring Equipment	50 Hz	From 0.1 mA up to 11 A	0.061 %
		50 Hz	More than 11 A up to 50 A	0.15 %

#All Calibration Procedures are in-house procedures developed by this laboratory.