

CALIBRATION SYSTEM CERTIFICATE

With respect to products (measuring instruments and testing instruments), we hereby certify that we have established our calibration system traceable to the national (international) standards, as shown below.

Mitutoyo Corporation qualifies for the registered business operator^{*1} of the Japan Calibration Service System (JCSS^{*2}) and use standards that are traceable to the national standard owned by the National Metrology Institute of Japan, National Institute of Advanced Industrial Science and Technology (NMIJ, AIST) for calibration service.

Being endorsed by the above facts, the calibration results stated in the Mitutoyo-issued calibration certificate stamped with a JCSS mark shall be deemed to be traceable to the national standard.

The Production, Inspection and Calibration Service Departments of Mitutoyo Corporation also use standards which are traceable to the standard calibrated in advance by one of the registered operators of JCSS to perform inspection and calibration services for products (measuring equipment) so that calibration results are traceable to the national standard.

Since the International Accreditation Japan, National Institute of Technology and Evaluation (IAJapan, NITE), which is the accredited organization of JCSS, has signed in the International Laboratory Accreditation Cooperation (ILAC) and the Asia Pacific Accreditation Cooperation (APAC), the calibration certificate issued by Mitutoyo Corporation and stamped with a JCSS mark shall be valid in the countries and commercial areas which also have signed in ILAC and APAC.

*1) In Mitutoyo Corporation, we have 6 JCSS registered operations as follows:

- Standard Management Section
- Miyazaki Plant
- Utsunomiya Calibration Center
- Kawasaki Calibration Center
- Hiroshima Calibration Center
- Sales and Service Division

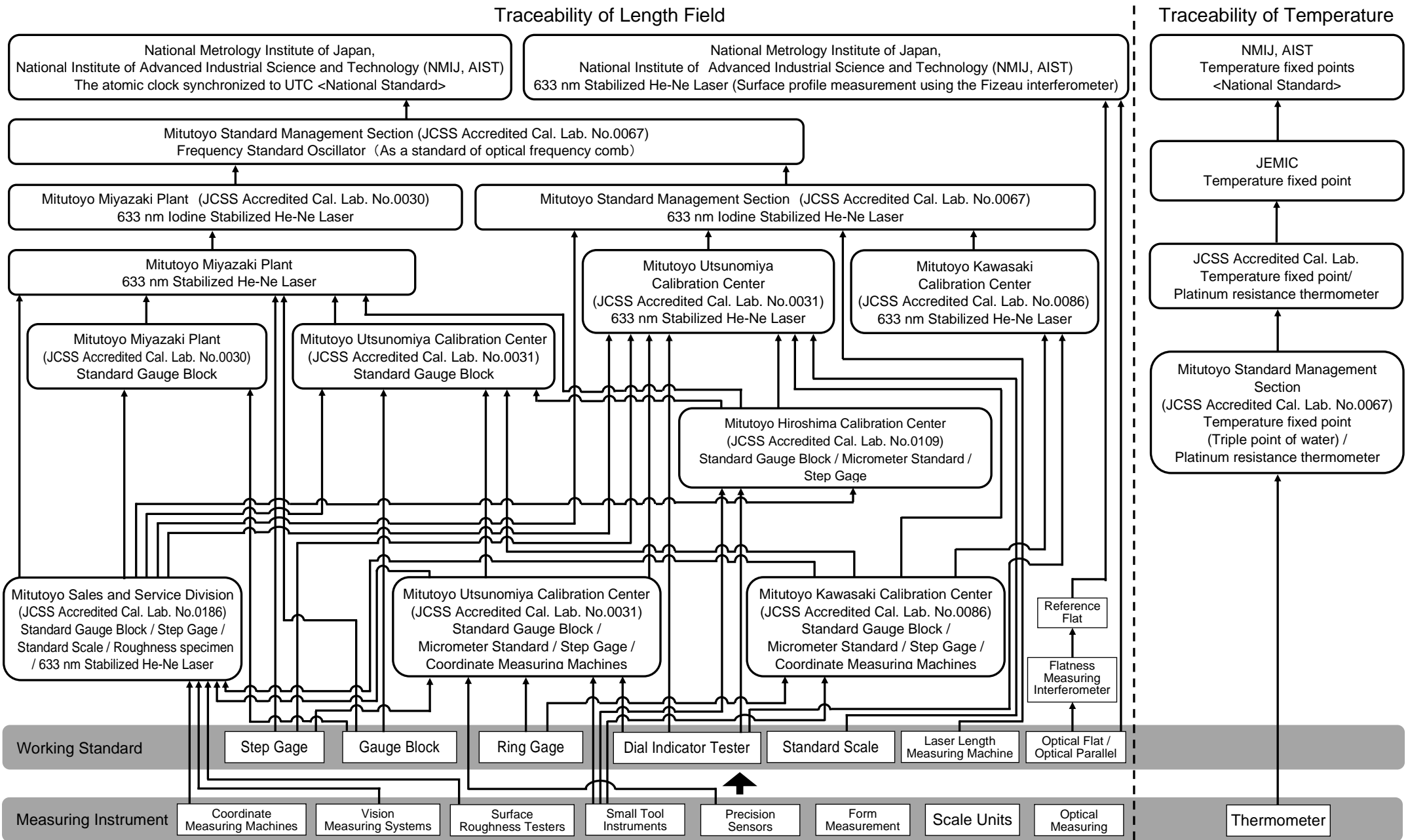
*2) The JCSS registered operator conforms to the requirement of ISO/IEC 17025.

Mitutoyo Corporation
Quality Assurance Department

Tatsuya Narumi,
Department Manager

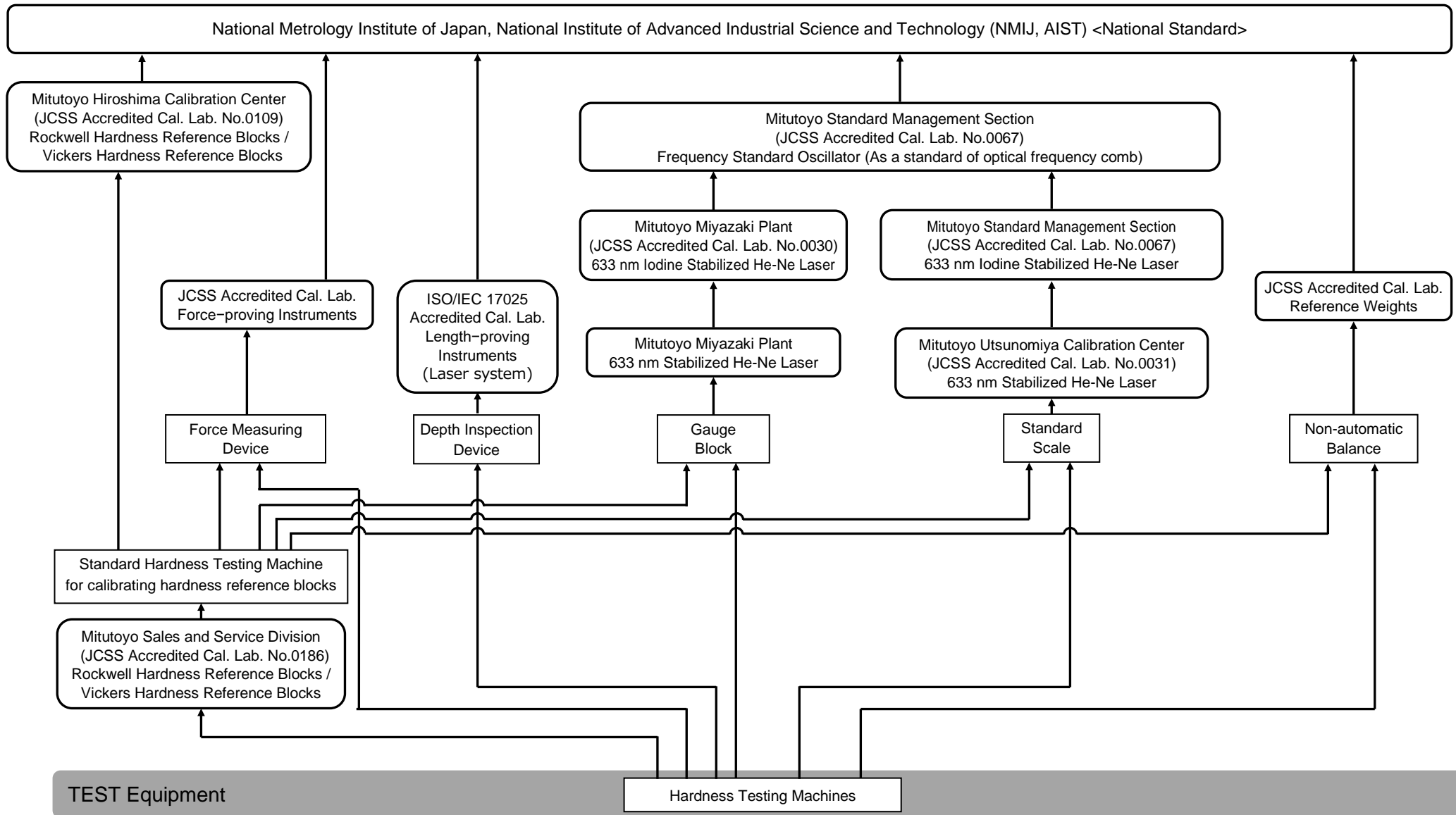
As of 2025-1-27

Traceability of Mitutoyo Standard



◆ This chart shows a simplified traceability system of a part of Mitutoyo products. Detailed traceability charts are published for each product.

Traceability of Hardness Field



◆ This chart shows a simplified traceability system of a part of Mitutoyo products. Detailed traceability charts are published for each product.

Certificate of Accreditation – COPY –

【Standard Management Section】



24-02-06-NITE-009
2 0 2 4 - 0 2 - 1 6

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: JCSS 0067 Calibration
 Name of Conformity Assessment Body: Standard Management Section,
 Quality Assurance Department, Mitutoyo Corporation
 Name of Legal Entity: Mitutoyo Corporation
 Location of Conformity Assessment Body: 1-20-1 Sakado Takatsu-ku, Kawasaki-shi,
 Kanagawa 213-8533, JAPAN
 Scope of Accreditation: Length, Temperature (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: 2022-07-19
 Expiry Date of Accreditation: 2026-07-18
 Date of Initial Accreditation: 2017-04-28



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.

Attachment

General Field of Calibration: Length
Date of Initial Accreditation of the Field: 2017-04-28
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 %)
Laser Wavelength	Frequency stabilized laser in the 633 nm region	1.4×10^{-13}
	Frequency stabilized laser in the 532 nm region	1.4×10^{-13}

#All Calibration Procedures are in-house procedures developed by this laboratory.
 *The values in the CMC column exclude sources of uncertainty attributed to a unit under test.

General Field of Calibration: Temperature
Date of Initial Accreditation of the Field: 2018-08-30
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 %)
Contact Type Thermometer	Resistance thermometer (Comparison calibration) 100 Ω (Four wires System) *	From 0 °C up to 40 °C 6 mK
	Temperature sensors with display unit (Comparison calibration)	From 0 °C up to 40 °C 8 mK

#All Calibration Procedures are in-house procedures developed by this laboratory.
 *Temperature converted from resistance $R(T_{50})$

2024/02/16 JCSS0067 1/1

The above Certificate of Accreditation is quoted from NITE's website. <https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0067m-e.pdf>

[Miyazaki Plant]



24-05-31-NITE-020
2024-09-27

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: JCSS 0030 Calibration
 Name of Conformity Assessment Body: Miyazaki Plant, Mitutoyo Corporation
 Name of Legal Entity: Mitutoyo Corporation
 Location of Conformity Assessment Body: 10652-1 Kou, Tano-cho, Miyazaki-shi, Miyazaki 889-1701, JAPAN

Scope of Accreditation: Length (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: 2024-11-02
 Expiry Date of Accreditation: 2028-11-01
 Date of Initial Accreditation: 2004-08-13



HORISAKA Kazuhide
 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.

Attachment

General Field of Calibration: Length
 Date of Initial Accreditation of the Field: 2004-08-13
 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 %) (L (mm): Nominal length)
Length Measuring Instrument	Gauge blocks (Interferometry method)	From 0.1 mm up to 100 mm	0.020 μm
		More than 100 mm up to 250 mm	(0.010+0.00010·L) μm
		More than 250 mm up to 1000 mm	(0.010+0.00012·L) μm
	Gauge blocks (Comparison method)	From 0.1 mm up to 100 mm	0.06 μm
		More than 100 mm up to 1000 mm	(0.04+0.00043·L) μm
		More than 1 mm up to 2200 mm	(0.21+0.39·L/1000) μm
End gauges with flat ends (Interferometry method)	Up to 1 mm	0.030 μm	

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

2024/09/27 JCSS0030 1/1

The above Certificate of Accreditation is quoted from NITE's website. <https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0030m-e.pdf>

【Utsunomiya Calibration Center】



24·06·20-NITE-001
2024-12-06

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: JCSS 0031 Calibration
 Name of Conformity Assessment Body: Mitutoyo Corporation Sales and Service Division
 Utsunomiya Calibration Center
 Name of Legal Entity: Mitutoyo Corporation
 Location of Conformity Assessment Body: 2200-1 Shimoguri-machi, Utsunomiya-shi,
 Tochigi 321-0923, JAPAN
 Scope of Accreditation: Length (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: 2024-12-06
 Expiry Date of Accreditation: 2028-12-05
 Date of Initial Accreditation: 1994-05-02

K. Horisaka

HORISAKA Kazuhide
 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-IAP Communiqué dated April 2017).
 - The latest accreditation information is publicly available on IAJapan Website as an accreditation certificate.

Attachment

General Field of Calibration: Length
 Date of Initial Accreditation of the Field: 1994-05-02
 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 %) (L (mm): Nominal length)
Length Measuring Instrument	Gauge blocks (Comparison method)	From 0.5 mm up to 100 mm	0.06 μm
	End gauges with Flat ends (Interferometry method)	Up to 2100 mm	(0.18 + 0.38 × L/1000) μm
	End gauges with Flat ends (Comparison method)	From 25 mm up to 1000 mm	(0.4 + L/1000) μm
		From 0.5 mm up to 1060 mm	(0.5 + L/1000) μm
Standard Scale		Up to 350 mm	(0.10 + 0.12 × L/1000) μm
		More than 350 mm up to 1000 mm	(0.06 + 0.25 × L/1000) μm
Micrometers		Up to 25 mm (Micrometer head only)	0.4 μm
		Up to 500 mm	(1.2 + L/175) μm
Indicating Micrometers	Micrometer	Up to 100 mm	(0.7 + L/250) μm
	Indicator	± 0.06 mm	(0.3 + L/180) μm
Callipers		Up to 600 mm	0.02 mm
		More than 600 mm up to 1000 mm	0.03 mm
Height gauges		Up to 600 mm	0.015 mm
		More than 600 mm up to 1000 mm	0.020 mm
Depth gauges		Up to 600 mm	0.02 mm
		More than 600 mm up to 1000 mm	0.03 mm
Calibration testers for dial gauges		Up to 5 mm (0.002 mm scale)	0.20 μm
		Up to 25 mm	0.4 μm
		Up to 100 mm	(0.1 + 1.2 × L/1000) μm
Dial gauges		Up to 5 mm (scale interval 0.001 mm and 0.002 mm)	0.5 μm
		Up to 10 mm (scale interval 0.01 mm)	1.1 μm
		More than 10 mm up to 50 mm (scale interval 0.01 mm)	1.3 μm
		More than 50 mm up to 100 mm (scale interval 0.01 mm)	2.2 μm
		Up to 50.8 mm (digital)	0.8 μm
		More than 50.8 mm up to 100 mm (digital)	1.2 μm
Dial test indicators		Up to 0.6 mm (scale interval 0.001 mm and 0.002 mm)	0.5 μm
		Up to 1.6 mm (scale interval 0.01 mm)	1.3 μm
Cylinder gauges		From 6 mm up to 400 mm	0.5 μm
		± 5 μm	0.15 μm
		± 200 μm	0.2 μm
Electrical comparators		± 2000 μm	1.0 μm

The above Certificate of Accreditation is quoted from NITE's website. <https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0031m-e.pdf>

【Utsunomiya Calibration Center】

Attachment

	Ring gauges	From 1.75 mm up to 80 mm	0.7 μm
		More than 80 mm up to 140 mm	0.8 μm
		More than 140 mm up to 200 mm	1.0 μm
		More than 200 mm up to 250 mm	1.1 μm
		More than 250 mm up to 300 mm	1.3 μm
Dimensional Measuring Instrument	Sphere (Average diameter)	From 10 mm less than 17 mm	$(0.024 + 2.6 \times L/1000) \mu\text{m}$
		From 17 mm up to 45 mm	$(0.06 + 0.4 \times L/1000) \mu\text{m}$
	Gauges for Coordinate Measuring Machines (Sphere)	Φ30 mm	0.83 μm

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

2024/12/06 JCSS0031 2/2

The above Certificate of Accreditation is quoted from NITE's website.
<https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0031m-e.pdf>

【Kawasaki Calibration Center】



23·09·26-NITE-018
2 0 2 4 - 0 1 - 3 0

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: JCSS 0086 Calibration
 Name of Conformity Assessment Body: Mitutoyo Corporation Sales and Service Division
 Kawasaki Calibration Center
 Name of Legal Entity: Mitutoyo Corporation
 Location of Conformity Assessment Body: 1-20-1 Sakado, Takatsu-ku, Kawasaki-shi, Kanagawa
 213-8533, JAPAN
 Scope of Accreditation: Length (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: 2020-02-04


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 Communique dated April 2017).
- The latest accreditation information is publicly available on IAJapan Website as an accreditation certificate.

Attachment

General Field of Calibration: Length
 Date of Initial Accreditation of the Field: 2020-02-04
 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 %) (L : length measurement mm)	
Length Measuring Instrument	Micrometers	Up to 25 mm (Limited to micrometer head)	0.6 μm
		Up to 500 mm	(1.0 + L/250) μm
	Calipers	Up to 1000 mm	0.02 mm
	Height gauges	Up to 1000 mm	0.015 mm
	Depth gauges	Up to 600 mm	0.02 mm
		More than 600 mm up to 1000 mm	0.03 mm
	Indicating Micrometers	Micrometer Up to 100 mm	(0.6 + L/250) μm
		Indicator ±0.06 mm	(0.4 + L/250) μm
	Cylinder gauges	From 6 mm up to 400 mm	0.5 μm
	Calibration testers for dial gauges	Indicator checker up to 100 mm	(0.1 + 2.6L/1000) μm
	Ring gauges	From 1.75 mm up to 80 mm	0.7 μm
		More than 80 mm up to 140 mm	0.8 μm
		More than 140 mm up to 200 mm	1.0 μm
		More than 200 mm up to 250 mm	1.1 μm
	Dial gauges	More than 250 mm up to 300 mm	1.3 μm
		Up to 50.8 mm (digital)	0.8 μm
		More than 50.8 mm up to 100 mm (digital)	1.2 μm
		Up to 5 mm (scale interval 0.001 mm and 0.002 mm)	0.6 μm
		Up to 10 mm (scale interval 0.01 mm.)	0.9 μm
		More than 10 mm up to 50 mm (scale interval 0.01 mm)	1.5 μm
Dial test indicators	More than 50 mm up to 100 mm (scale interval 0.01 mm)	2.2 μm	
	Up to 0.6 mm (scale interval 0.001 mm and 0.002 mm)	0.5 μm	
End Gauges with Flat Ends (Comparison Method)	Up to 1.6 mm (scale interval 0.01 mm)	1.0 μm	
	Micrometer setting standards From 25 mm up to 1000 mm	(0.5 + 1.2L/1000) μm	

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

2024/01/30 JCSS0086 1/2

The above Certificate of Accreditation is quoted from NITE's website. <https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0086m-e.pdf>

【Kawasaki Calibration Center】

Attachment

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 %)
Dimensional Measuring Instrument Gauges for Coordinate Measuring Machines (Sphere)	Φ30 mm	0.97 μm

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

2024/01/30 JCSS0086 2/2

The above Certificate of Accreditation is quoted from NITE's website. <https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0086m-e.pdf>

[Hiroshima Calibration Center]



24·12·20-NITE-014
2025-01-15

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: JCSS 0109 Calibration
 Name of Conformity Assessment Body: Hiroshima Calibration Center, Sales and Service Division, Mitutoyo Corporation
 Name of Legal Entity: Mitutoyo Corporation
 Location of Conformity Assessment Body: 10626-62 Ichinomakkoyama, Gouhara-cho, Kure-shi, Hiroshima 737-0161, JAPAN
 Scope of Accreditation: Length, Hardness (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: 2023-06-07
 Expiry Date of Accreditation: 2027-06-06
 Date of Initial Accreditation: 2002-04-11


HORISAKA Kazuhide
 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).

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- 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.

Attachment

General Field of Calibration: Length
 Date of Initial Accreditation of the Field: 2002-04-11
 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 %) (L(mm): Nominal length)	
Length Measuring Instrument	Dial Gauges	Up to 5 mm (scale interval 0.001 mm and 0.002 mm)	0.6 μm
		Up to 10 mm (scale interval 0.01 mm)	1.6 μm
		More than 10 mm Up to 50 mm (scale interval 0.01 mm)	1.8 μm
		More than 50 mm Up to 100 mm (scale interval 0.01 mm)	3.0 μm
		Up to 50.8 mm (digital)	0.8 μm
	Dial Test Indicators	More than 50.8 mm Up to 100 mm (digital)	1.2 μm
		Up to 0.6 mm (scale interval 0.001 mm and 0.002 mm)	0.5 μm
	Cylinder gauges	Up to 1.6 mm (scale interval 0.01 mm)	1.1 μm
		From 6 mm up to 400 mm	0.5 μm
	Calibration Testers for Dial Gauges	Up to 5 mm	0.20 μm
		Up to 25 mm	0.4 μm
	Calipers	Up to 600 mm	0.02 mm
		More than 600 mm Up to 1000 mm	0.03 mm
	Height Gauges	Up to 600 mm	0.015 mm
		More than 600 mm Up to 1000 mm	0.020 mm
Depth Gauges	Up to 600 mm	0.02 mm	
	More than 600 mm Up to 1000 mm	0.03 mm	
Micrometers	Up to 25 mm (Micrometer head only)	0.4 μm	
	Up to 500 mm	(1.2 + L/175) μm	
Indicating Micrometers	Micrometer	Up to 100 mm (0.9+ L/250) μm	
	Indicator	±0.06 mm (0.3+ L/125) μm	

2025/01/15 JCSS0109 1/2

The above Certificate of Accreditation is quoted from NITE's website. <https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0109m-e.pdf>

【Hiroshima Calibration Center】

Attachment

	End gauges with Flat ends (Comparison method)	From 25 mm Up to 1000 mm	$(0.5 + 1.2 L/1000) \mu\text{m}$
Dimensional Measuring Instrument	Surface Texture	Depth From 0.3 μm up to 20 μm	$2 \times \sqrt{6.70^2 + (2.74 \times d)^2}$ nm d (μm): Depth
		Arithmetical mean deviation of the roughness profile From 0.1 μm up to 5 μm	$2 \times \sqrt{6.82^2 + (2.74 \times Ra)^2}$ nm Ra (μm): Arithmetical mean deviation of the roughness profile
		Maximum height of the roughness profile From 0.3 μm up to 20 μm	$2 \times \sqrt{35.8^2 + (2.74 \times Rz)^2}$ nm Rz (μm): Maximum height of the roughness profile

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

General Field of Calibration: Hardness

Date of Initial Accreditation of the Field: 2007-02-21

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 %)
Rockwell Hardness Testing Machines, etc.	Rockwell Hardness Reference Blocks	From 20 HRC up to 25 HRC	0.43 HRC
		More than 25 HRC less than 35 HRC	0.44 HRC
		From 35 HRC up to 45 HRC	0.42 HRC
		More than 45 HRC less than 55 HRC	0.39 HRC
		From 55 HRC up to 65 HRC	0.35 HRC
Vickers Hardness Testing Machines, etc.	Vickers Hardness Reference Blocks	From 85 HV up to 1050 HV (Test force from 0.9807 N up to 490.3 N)	$d > 193 \mu\text{m}$ 2.2 % $d \leq 193 \mu\text{m}$ $(228 / d) + 1.02 \%$ Where: d is the length of a diagonal line of the indentation (μm)

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

2025/01/15 JCSS0109 2/2

The above Certificate of Accreditation is quoted from NITE's website. <https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0109m-e.pdf>



22-09-22-N I T E-007
2 0 2 3 - 0 3 - 0 7

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: JCSS 0186 Calibration
 Name of Conformity Assessment Body: Sales and Service Division, Mitutoyo Corporation
 Name of Legal Entity: Mitutoyo Corporation
 Location of Conformity Assessment Body: 796-1 Hiramatsu-honcho, Utsunomiya-shi, Tochigi 321-0932, JAPAN

Scope of Accreditation: Length, Hardness (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: 2023-03-22
 Expiry Date of Accreditation: 2027-03-21
 Date of Initial Accreditation: 2006-12-27


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

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

Attachment

General Field of Calibration: Length
 Date of Initial Accreditation of the Field: 2006-12-27
 Laboratory's permanent facility/On-site Calibration: On-site Calibration
 Calibration and Measurement Capabilities

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range	Expanded Uncertainty (Level of Confidence Approximately 95 %) [L is measured length (mm)]
Dimensional Measuring Instrument	Coordinate Measuring Machines	up to 61 mm	$(0.1+0.6 \cdot L/1000) \mu\text{m}$
		up to 650 mm	$(0.13+0.11 \cdot L/1000) \mu\text{m}$
		up to 1000 mm	$(0.2+0.2 \cdot L/1000) \mu\text{m}$
		up to 10000 mm	$(0.1+0.6 \cdot L/1000) \mu\text{m}$
	Surface Texture	Arithmetical mean deviation of the roughness profile R_a	0.2 μm
			0.5 μm
			1.5 μm
	Maximum height of the roughness profile R_z	1.5 μm	
		3.0 μm	
		8.5 μm	

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

General Field of Calibration: Hardness
 Date of Initial Accreditation of the Field: 2019-03-22
 Laboratory's permanent facility/On-site Calibration: On-site Calibration
 Calibration and Measurement Capabilities

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range	Expanded Uncertainty (Level of Confidence Approximately 95 %)
Rockwell Hardness Testing Machine, etc.	Rockwell Hardness Testing Machines	From 20 HRC up to 25 HRC	0.45 HRC
		More than 25 HRC to less than 35 HRC	0.46 HRC
		From 35 HRC up to 45 HRC	0.44 HRC
		More than 45 HRC to less than 55 HRC	0.41 HRC
		From 55 HRC up to 65 HRC	0.37 HRC
Vickers Hardness Testing Machine, etc.	Vickers Hardness Testing Machines	From 85 HV up to 1050 HV (Test force from 0.9807 N up to 490.4 N)	a) $d > 170 \mu\text{m}$ 2.4 % b) $d \leq 170 \mu\text{m}$ $(230 / d + 1.1) \%$ Where: d is the length of the diagonal line of the indentation(μm)

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

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The above Certificate of Accreditation is quoted from NITE's website. <https://www.nite.go.jp/en/iajapan/jcss/labsearch/pdf/d0186m-e.pdf>