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.

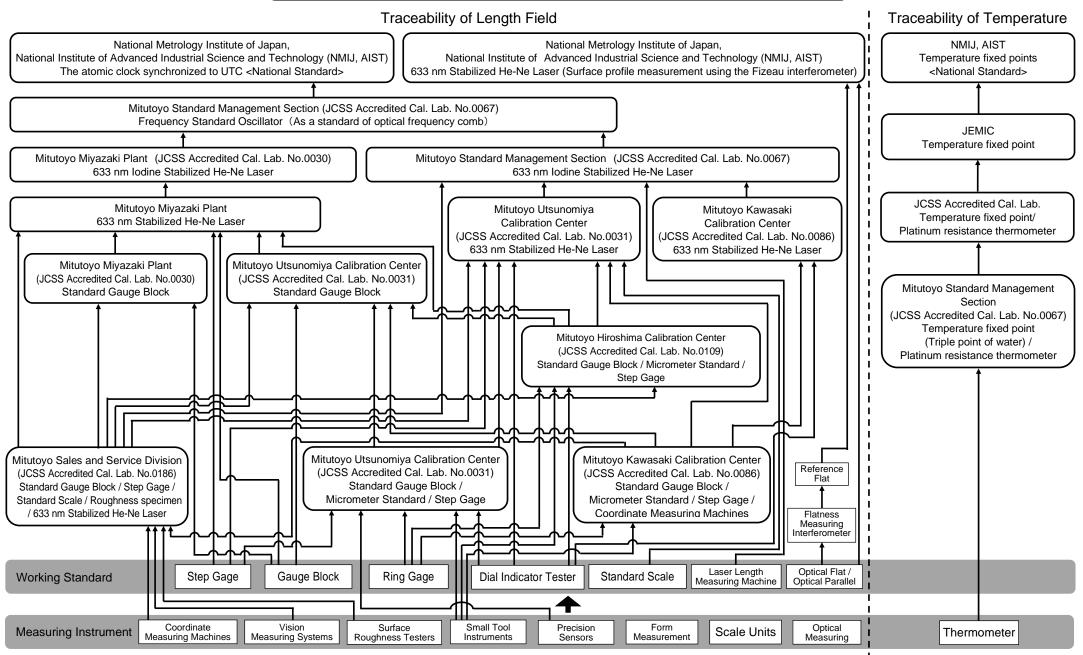
Mitutoyo Corporation

Quality Assurance Department

Tatsuya Narumi, Department Manager

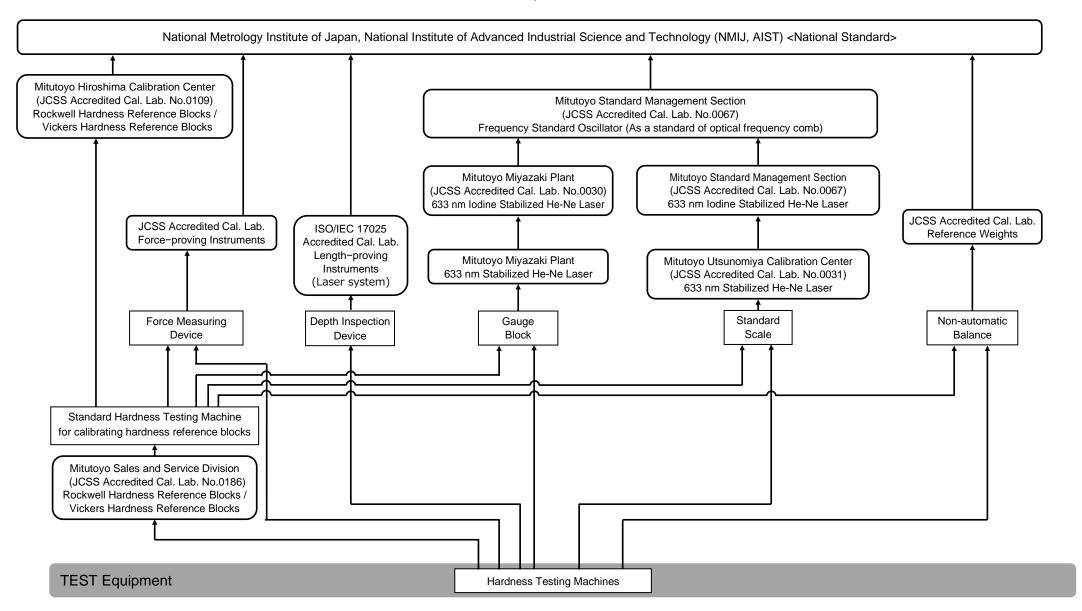
As of 2024-03-04

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.

QA-I000208 Rev.53.0

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

Attachment

Exmanded Uncortainty

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	

Type of Instruments/Materials to be calibrated		Range	(Level of Confidence Approximately 95 %)
Laser Wavelength	Frequ	ency stabilized laser in the 633 nm region	1.4×10 ⁻¹³
	Frequ	ency stabilized laser in the 532 nm region	1.4×10 ⁻¹³

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

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	Resistance thermometer (Comparison calibration)	100 Ω (Four wires System) *	From 0 °C up to 40 °C	6 mK
Thermometer	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

2024/02/16 JCSS0067 1/1

⁻ 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 carefully included 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.

^{*}The values in the CMC column exclude sources of uncertainty attributed to a unit under test.

^{*}Temperature converted from resistance $R(T_{90})$



23.02.28-NITE-008 2 0 2 3 - 0 8 - 0 3

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: 2020-11-02 Expiry Date of Accreditation: 2024-11-01 Date of Initial Accreditation: 2004-08-13

Chief Executive, International Accreditation Japan (IAJapan)

National Institute of Technology and Evaluation

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)
		From 0.1 mm up to 100 mm	0.020 μm
	Gauge blocks (Interferometry method) Length ang Instrument Gauge blocks (Comparison method) End gauges with flat ends (Interferometry method)	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
Length Measuring Instrument		From 0.1 mm up to 100 mm	0.06 μm
Weasting instantent		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
		Up to 1 mm	0.030 μm

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

2023/08/03 JCSS0030 1/1

⁻ 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.

[Utsunomiya Calibration Center]



23.02.20-NITE-016 2 0 2 3 - 1 2 - 0 1

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: 2020-12-08 Expiry Date of Accreditation: 2024-12-07 Date of Initial Accreditation: 1994-05-02

SAITO Kazunori

Chief Executive, International Accreditation Japan (IAJapan)

National Institute of Technology and Evaluation

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 Ca	apabilities		
Calibration Procedures# and Type of Instruments/Materials to be calibrated			Range	Expanded Uncertainty (Level of Confidence Approximately 95 %) (L (mm): Nominal length)
Length Measuring	Gauge blocks (Comparison	method)	From 0.5 mm up to 100 mm	0.06 μm
Instrument	End gauges w (Interferometr		Up to 2100 mm	(0.18 + 0.38 × L/1000) μm
	End gauges w	ith Flat ends	From 25 mm up to 1000 mm	$(0.4 + L/1000) \mu m$
	(Comparison	method)	From 0.5 mm up to 1060 mm	$(0.5 + L/1000) \mu m$
			Up to 350 mm	$(0.10 + 0.12 \times L/1000) \mu\text{m}$
	Standard Scale	е	More than 350 mm up to 1000 mm	$(0.06 + 0.25 \times L/1000) \mu m$
	Micrometers		Up to 25 mm (Micrometer head only)	0.4 μm
			Up to 500 mm	(1.2 + L/175) μm
	Indicating	Micrometer	Up to 100 mm	(0.7 + L/250) μm
	Micrometers	Indicator	± 0.06 mm	$(0.3 + L/180) \mu m$
			Up to 600 mm	0.02 mm
	Callipers		More than 600 mm up to 1000 mm	0.03 mm
			Up to 600 mm	0.015 mm
	Height gauges	3	More than 600 mm up to 1000 mm	0.020 mm
			Up to 600 mm	0.02 mm
	Depth gauges		More than 600 mm up to 1000 mm	0.03 mm
	Calibration tes	eters for dial	Up to 5 mm (0.0002 mm scale)	0.20 μm
	gauges	sters for diar	Up to 25 mm	0.4 μm
			Up to 100 mm	(0.1 + 1.2 × L/1000) μm
			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
	Dial gauges		More than 10 mm up to 50 mm (scale interval 0.01 mm)	1.3 μm
	Diai gauges		More than 50 mm up to 100 mm (scale interval 0.01 mm)	2.2 μm
			Up to 50.8 mm (digital)	1.1 μm
			More than 50.8 mm up to 100 mm (digital)	1.7 μm
	Dial test indic	atore	Up to 0.6 mm (scale interval 0.001 mm and 0.002 mm)	0.5 μm
	Diai test indic	ators	Up to 1.6 mm (scale interval 0.01 mm)	1.3 μm
	Cylinder gaug	es	From 6 mm up to 400 mm	0.7 μm
			± 5 μm	0.15 μm
	Electrical com	parators	± 200 μm	0.2 μm
			± 2000 μm	1.0 μm

2023/12/01 JCSS0031 1/2

⁻ 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

[Utsunomiya Calibration Center]

Attachment

	Ring gauges	From 6 mm up to 80 mm	0.7 μm
Rir		More than 80 mm up to 120 mm	0.8 µm
Dimensional	Sphere	From 10 mm less than 17 mm	(0.024 + 2.6 × L/1000) μm
Measuring Instrument	easuring (Average diameter)	From 17 mm up to 45 mm	(0.06 + 0.4 × L/1000) μm

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

2023/12/01 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

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[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

L. Saile

SAITO Kazunori

Chief Executive, International Accreditation Japan (IAJapan)

National Institute of Technology and Evaluation

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)
	Micrometers	Up to 25 mm (Limited to micrometer head)	0.6 μm
		Up to 500 mm	$(1.0 + L/250) \mu m$
	Calipers	Up to 1000 mm	0.02 mm
	Height gauges	Up to 1000 mm	0.015 mm
	D 4	Up to 600 mm	0.02 mm
	Depth gauges	More than 600 mm up to 1000 mm	0.03 mm
		Micrometer Up to 100 mm	$(0.6 + L/250) \mu m$
	Indicating Micrometers	Indicator ±0.06 mm	$(0.4 + L/250) \mu m$
	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 + 2.6 <i>L</i> /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
Length		More than 250 mm up to 300 mm	1.3 μm
Measuring Instrument	Dial gauges	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
		More than 50 mm up to 100 mm (scale interval 0.01 mm)	2.2 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)	1.0 μm
	End Gauges with Flat Ends (Comparison Method)	Micrometer setting standards From 25 mm up to 1000 mm	(0.5 + 1.2 <i>L</i> /1000) μm

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

2024/01/30 JCSS0086 1/2

⁻ 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

[Kawasaki Calibration Center]

			Attachmen
Laboratory's permanent fa Calibration and Measuren	acility/On-site Calibration: Labo nent Capabilities	oratory's permanent facility	
Calibration Pr	ocedures# and		Expanded Uncertainty
Type of Instrur	nents/Materials	Range	(Level of Confidence
	dibrated Gauges for Coordinate		Approximately 95 %)
Dimensional Measuring Instrument	Measuring Machines (Sphere)	Φ 30 mm	0.97 μm
All Calibration Procedur	es are in-house procedures deve	eloped by this laboratory.	
			2024/01/20 1/2050055 2/2
			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]



22·11·17-NITE-003 2 0 2 3 - 0 6 - 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 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

L. Saile

SAITO Kazunori

Chief Executive, International Accreditation Japan (IAJapan)

National Institute of Technology and Evaluation

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)		
			Up to 5 mm (scale interval 0.001 mm and 0.002 mm)		(scale interval 0.001 mm and	0.6 μ m
			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		
	Dial Gauges		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		
			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)	1.1 μm		
Length Measuring Instrument	Cylinder gauges		From 6 mm up to 400 mm	0.5 μm		
instrument	Calibration Testers for Dial Gauges				0.20 μm	
			Up to 25 mm	0.4 μm		
			Up to 600 mm	0.02 mm		
	Calipers		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		
			Up to 600 mm	0.02 mm		
	Depth Gauges		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	$(1.2 + L/175) \mu m$		
	Indicating	Micrometer	Up to 100 mm	(0.9+ L/250) μm		
	Micrometers	Indicator	±0.06 mm	$(0.3+L/125) \mu m$		

2023/06/07 JCSS0109 1/3

⁻ 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 laboratoriety 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.

[Hiroshima Calibration Center]

	End gauges with Flat ends (Comparison method)	From 25 mm Up to 1000 mm	(0.5 + 1.2 L/1000) μm
		From 6 mm Up to 80 mm	0.7 μm
	Ring Gauges	More than 80 mm Up to 120 mm	0.8 μm
Dimensional Measuring Instrument		Depth From 0.3 μm up to 20 μm	$2 \times \sqrt{6.70^2 + (2.74 \times d)^2}$ nm $d \text{ (µm): Depth}$
	Surface Texture	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 %)
		From 20 HRC up to 25 HRC	0.43 HRC
D 1 1177 1	Rockwell	More than 25 HRC less than 35 HRC	0.44 HRC
Rockwell Hardness Testing Machines,	Hardness Reference Blocks	From 35 HRC up to 45 HRC	0.42 HRC
etc.		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)	$d > 193 \mu m$ 2.2 % $d \le 193 \mu m$ (228 / d) + 1.02 % Where: d is the length of a diagonal line of the indentation (μm)

Attachment

2023/06/07 JCSS0109 3/3

11/12

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

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

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Attachment

[Sales and Service Division]



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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

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·L/1000) μm
intensating instrument	Macinics	up to 650 mm		(0.13+0.11·L/1000) μm
	Surface Texture	up to 1000 mm		(0.2+0.2·L/1000) μm
		up to 10000 mm		(0.1+0.6·L/1000) μm
		Arithmetical mean deviation of the roughness profile Ra Maximum height of the roughness profile Rz	0.2 μm	0.02 μm
			0.5 μm	
			1.5 µm	
			1.5 µm	0.15 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 Measur	rement Capabilities		
Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range	Expanded Uncertainty (Level of Confidence Approximately 95 %)
Rockwell Hardness Testing Machine,	Rockwell Hardness Testing Machines	From 20 HRC up to 25 HRC	0.45 HRC
etc.		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) $d > 170 \mu m$ 2.4 % b) $d \le 170 \mu m$ (230 / d + 1.1) % Where: d is the length of a diagonal line of the indentation(μm)

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

2023/03/07 JCSS0186 1/1

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