

Name of Accreditation Program	JCSS Accreditation Program
Accreditation Identification	JCSS 0025 Calibration
Name of Conformity Assessment Body	Thermometer Calibration Laboratory, Isehara Plant, TANAKA KIKINZOKU KOUGYO K.K.
Name of Legal Entity	TANAKA KIKINZOKU KOUGYO K.K. JCN 6010001127950
Inquiry Point	Thermometer Calibration Laboratory TEL: +81-463-94-5811 FAX: +81-463-94-3114

*JCN: Japan Corporate Number



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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 0025 Calibration

Name of Conformity Assessment Body: Thermometer Calibration Laboratory, Isehara Plant,
TANAKA KIKINZOKU KOUGYO K.K.

Name of Legal Entity: TANAKA KIKINZOKU KOUGYO K.K.

Location of Conformity Assessment Body: 26 Suzukawa, Isehara-shi, Kanagawa 259-1146, JAPAN

Scope of Accreditation: Temperature (as the following page)

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: 2024-02-17

Expiry Date of Accreditation: 2028-02-16

Date of Initial Accreditation: 1994-03-01

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.

General Field of Calibration: Temperature

Date of Initial Accreditation of the Field: 1994-03-01

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 %)		
Contact Type Thermometer	Fixed point apparatus	Triple point of Mercury		2.0 mK		
		Triple point of water		1.0 mK		
		Melting point of Gallium		1.5 mK		
		Freezing point of Indium		2.5 mK		
		Freezing point of Tin		2.5 mK		
		Freezing point of Zinc		3.0 mK		
	Resistance thermometer (Fixed point calibration)	(25 Ω)	Triple point of Mercury		$W(T_{90})$ (*1)	$R(T_{90})$ (*2)
			Triple point of water		-	1.5 mK
			Melting point of Gallium		2.0 mK	2.5 mK
			Freezing point of Indium		3.0 mK	3.5 mK
			Freezing point of Tin		3.0 mK	3.5 mK
			Freezing point of Zinc		4.0 mK	4.5 mK
		(100 Ω)	Triple point of Mercury		2.0 mK	3.0 mK
			Triple point of water		-	1.5 mK
			Melting point of Gallium		2.0 mK	3.0 mK
			Freezing point of Indium		3.0 mK	4.0 mK
			Freezing point of Tin		3.0 mK	4.0 mK
			Freezing point of Zinc		3.5 mK	4.5 mK
		Resistance thermometer (Comparison calibration)	From -40 °C up to 160 °C		10 mK	
			More than 160 °C up to 230 °C		12 mK	
	More than 230 °C up to 420 °C		25 mK			
		Resistance thermometers with 3-wires	From -40 °C up to 420 °C		50 mK	
	Thermocouple (Fixed point calibration)		Triple point of Mercury		0.3 K	
			Melting point of Gallium			
			Freezing point of Indium			
			Freezing point of Tin			
			Freezing point of Zinc			
Type R Type S		Freezing point of Aluminum		0.4 K		
		Freezing point of Silver				
		Freezing point of Gold				
		Freezing point of Copper				
Melting point of Palladium		1.2 K				
Thermocouple (Comparison calibration)	Comparison with Platinum resistance thermometer	From -40 °C up to 420 °C		0.3 K		
Temperature sensors with display unit (Comparison calibration)	indicator to 1 mK	From -40 °C up to 420 °C		50 mK		
	indicator to 10 mK			0.1 K		
	indicator to 100 mK			0.2 K		
	indicator to 1 K			2 K		

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

(*1): Temperature converted from the ratio of the resistance $R(T_{90})$ to $R(273.16K)$, $W(T_{90})$ (*2): Temperature converted from resistance $R(T_{90})$