



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

S K Sales & Service Co., Ltd.
194/56, 194/57 Thakham Rd., Samae Dam, Bang Khun Thian,
Bangkok 10150 Thailand

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 26 January 2028

Certificate Number: AC-3279



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
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 April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

S K Sales & Service Co., Ltd.

194/56, 194/57 Thakham Rd., Samae Dam, Bang Khun Thian,
Bangkok 10150 Thailand

Mr. Sarawut Koetphon +66 24172144

CALIBRATION

ISO/IEC 17025 Accreditation Granted: **26 January 2026**

Certificate Number: **AC-3279**

Certificate Expiry Date: **26 January 2028**

Acoustics and Vibration

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ Sound Level Meter	94 dB 114 dB	0.13 dB 0.13 dB	SK-WI-031 by comparison to Sound Level Calibrator

Chemical Quantities

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
^{1,2} pH Meter (~25 °C)	1.68 pH 2.00 pH 4.0 pH 6.86 pH 7.0 pH 9.18 pH 10 pH	0.012 pH 0.015 pH 0.024 pH 0.04 pH 0.042 pH 0.054 pH 0.059 pH	SK-WI-001 by comparison with certified values of certified reference materials.
^{1,2} Conductivity Meter (~25 °C)	5 µS/cm 10 µS/cm 84 µS/cm 1413 µS/cm 5 mS/cm 12.88 mS/cm 50 mS/cm 111 mS/cm	0.051 µS/cm 0.34 µS/cm 0.84 µS/cm 14 µS/cm 0.049 mS/cm 0.13 mS/cm 0.49 mS/cm 1.1 mS/cm	SK-WI-003 by comparison with certified values of certified reference materials.

Chemical Quantities

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
^{1,2} TDS Meter (~25 °C)	10 mg/L 50 mg/L 100 mg/L 500 mg/L 1 000 mg/L 1 500 mg/L	0.3 mg/L 0.4 mg/L 0.8 mg/L 4.1 mg/L 7.9 mg/L 12 mg/L	SK-WI-004 by comparison with certified values of certified reference materials.
^{1,2} Turbidity Meter (20 to 25) °C	1 NTU 10 NTU 20 NTU 50 NTU 100 NTU 500 NTU 800 NTU 1 000 NTU 2 000 NTU 4 000 NTU	0.02 NTU 0.13 NTU 0.18 NTU 0.37 NTU 1.2 NTU 4.3 NTU 6.9 NTU 8.4 NTU 19 NTU 42 NTU	SK-WI-005 by comparison with certified values of certified reference materials.

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ pH Meter Indicator - DC Voltage	(- 414.12 to 414.12) mV	0.17 mV	SK-WI-02 by comparison with Multifunction Calibrator
¹ DC Voltage – Digital Indicators/ Digital Controllers/ Voltage Meters	(-0.15 to 0.15) V (> 0.15 to 1.5) V (>1.5 to 5) V (>5 to 10) V (>10 to 15) V	0.001 V 0.001 2 V 0.002 V 0.003 V 0.003 7 V	SK-WI-023 by comparison with Multifunction Calibrator
¹ DC Current – Digital Indicators/ Digital Controllers/ Current Meters	Up to 4 mA (>4 to 8) mA (>8 to 12) mA (>12 to 16) mA (>16 to 20) mA	0.003 mA 0.003 5 mA 0.004 mA 0.004 5 mA 0.005 2 mA	SK-WI-023 by comparison with Multifunction Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ DC Voltage – Electrical Measurement of Voltage Sources	(-0.3 to 0.3) V (> 0.3 to 2) V (>2 to 4) V (>4 to 6) V (>6 to 8) V (>8 to 10) V (> 10 to 20) V (>20 to 30) V	0.001 9 V 0.002 2 V 0.002 6 V 0.003 V 0.003 2 V 0.003 6 V 0.005 3 V 0.007 1 V	SK-WI-024 by measurement with Multimeter
¹ DC Current – Electrical Measurement of Current Sources	Up to 4 mA (>4 to 8) mA (>8 to 12 mA (>12 to 16) mA (>16 to 20) mA	0.003 4 mA 0.004 mA 0.004 5 mA 0.005 2 mA 0.005 8 mA	SK-WI-024 by measurement with Multimeter

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ Height Gauge	Up to 300 mm (>300 to 600) mm (>600 to 1 000) mm	0.015 mm 0.016 mm 0.02 mm	SK-WI-011 by comparison with gage Blocks
Steel Ruler	Up to 1 000 mm (>1 000 to 2 000) mm	0.031 mm 0.058 mm	SK-WI-009 by comparison with Scale Measuring Machine
Steel Tape Measure	Up to 1 m (>1 to 2) m (>2 to 3) m (>3 to 4) m (>4 to 5) m (>5 to 6) m (>6 to 7) m (>7 to 8) m (>8 to 9) m (>9 to 10) m (>10 to 20) m (>20 to 30) m (>20 to 40) m (>40 to 50) m	0.021 mm 0.031 mm 0.043 mm 0.056 mm 0.069 mm 0.082 mm 0.095 mm 0.11 mm 0.13 mm 0.14 mm 0.27 mm 0.4 mm 0.54 mm 0.67 mm	SK-WI-010 by comparison with Scale Measuring Machine

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Textile Tape Measure	Up to 1 m	0.049 mm	SK-WI-010 by comparison with Scale Measuring Machine
	(>1 to 2) m	0.094 mm	
	(>2 to 3) m	0.14 mm	
	(>3 to 4) m	0.19 mm	
	(>4 to 5) m	0.24 mm	
	(>5 to 6) m	0.28 mm	
	(>6 to 7) m	0.33 mm	
	(>7 to 8) m	0.37 mm	
	(>8 to 9) m	0.42 mm	
Textile Tape Measure	(>9 to 10) m	0.47 mm	SK-WI-010 by comparison with Scale Measuring Machine
	(>10 to 20) m	0.93 mm	
	(>20 to 30) m	1.4 mm	
	(>30 to 40) m	1.9 mm	
	(>40 to 50) m	2.4 mm	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
^{1,3} Balance/Scale	(1 to 20) mg	0.007 4 mg	SK-WI-013 based on UKAS LAB 14:2019
	(>20 to 50) mg	0.008 7 mg	
	(>50 to 100) mg	0.011 mg	
	(>100 to 200) mg	0.012 mg	
	(>200 to 500) mg	0.016 mg	
	(>0.5 to 1) g	0.019 mg	
	(>1 to 2) g	0.023 mg	
	(>2 to 5) g	0.029 mg	
	(>5 to 10) g	0.036 mg	
	(>10 to 20) g	0.045 mg	
	(>20 to 50) g	0.055 mg	
	(>50 to 100) g	0.09 mg	
	(>100 to 220) g	0.23 mg	
	(>220 to 320) g	0.33 mg	
	(>320 to 500) g	0.46 mg	
	(>500 to 1 000) g	0.90 mg	
	(>1 000 to 2 000) g	1.8 mg	
	(>2 000 to 3 000) g	2.9mg	
	(>3 000 to 5 000) g	4.6 mg	
	(>5 000 to 6 000) g	5.5 mg	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
^{1,3} Balance/Scale	(>6 to 10) kg (>10 to 20) kg (>20 to 50) kg (>50 to 100) kg (>100 to 200) kg (>200 to 300) kg (>300 to 500) kg (>500 to 1 000) kg (>1 000 to 2 000) kg (>2 000 to 3 000) kg	10 mg 21 mg 0.99 g 2.7 g 4.7 g 7.2 g 16 g 95 g 0.11 kg 0.12 kg	SK-WI-013 based on UKAS LAB 14:2019
^{1,3} Moisture Analyzer (Balance)	Up to 100 g (>100 to 200) g	0.6 mg 0.64 mg	SK-WI-012 based on UKAS LAB 14:2019
Piston-operated volumetric Apparatus (POVA) - (Micro-pipette, Piston Pipette, Burette, Dispenser, Dilutors, Syringes)	(20 to 100) µL (> 100 to 200) µL (> 200 to 300) µL (> 300 to 1 000) µL (> 1 000 to 2 000) µL (> 2 000 to 5 000) µL (> 5 000 to 10 000) µL (> 10 to 20) mL (> 20 to 50) mL (> 50 to 100) mL	0.21 µL 0.29 µL 0.39 µL 1.4 µL 2.7 µL 6.8 µL 14 µL 25 µL 59 µL 120 µL	SK-WI-027 based on ISO 8655-6:2022
Volumetric Glassware – (Graduated Burets, Graduated Cylinders, Pipets (one Mark), Volumetric Flasks (to Contain), Volumetric Flask (to Deliver), Measuring and Dilution Pipets, Beaker, Dilutor, Volumetric Dispenser	(100 to 200) µL (>200 to 500) µL (>500 to 1 000) µL (>1 000 to 2 000) µL (>2 000 to 5 000) µL (>5 000 to 10 000) µL (>10 000 to 20 000) µL (>20 000 to 50 000) µL (>50 to 100) mL (>100 to 200) mL (>200 to 500) mL (>500 to 1 000) mL (>1 000 to 2 000) mL (> 2 000 to 5 000) mL	0.25 µL 0.26 µL 0.98 µL 1.8 µL 3.1 µL 4.5 µL 9.5 µL 14 µL 0.02 mL 0.035 mL 0.083 mL 0.17 mL 0.33 mL 0.83 mL	SK-WI-006 based on ASTM E542-01(2021) ISO 4787: 2021

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Hydrometer Specific Gravity (Relative Density) (~25 °C)	(0.6 to 2) g/cm ³	0.000 5 g/cm ³	SK-WI-007 using values of Density of Solid Artifact and Electronic Balance (Cuckow's Method)
¹ Volume Liquid Flow Rate – Flow Meters (Ultrasonic Flowmeter, Variable Area Flowmeter, Coriolis Flowmeter, Magnetic Flow meter)	(100 to 15 000) l/h (1 000 to 40 000) l/h (15 000 to 120 000) l/h (1 to 300) m ³ /h (50 to 300) m ³ /h	0.15 % of reading 0.15 % of reading 0.13 % of reading 0.15 % of reading 0.15 % of reading	SK-WI-018, SK-WI-019 with reference flow meters (Mobile Laboratory) Media: Water Water Temperature: (15 to 40) °C
Volume Liquid Flow Rate – Flow Meters (Ultrasonic Flowmeter, Variable Area Flowmeter, Coriolis Flowmeter, Magnetic Flow meter)	(100 to 15 000) l/h (1 000 to 40 000) l/h (15 000 to 120 000) l/h (1 to 300) m ³ /h (50 to 300) m ³ /h	0.13 % of reading 0.13 % of reading 0.13 % of reading 0.12 % of reading 0.15 % of reading	SK-WI-019 with reference flow meter Media: Water Water Temperature: (15 to 40) °C
¹ Pressure/Vacuum Gauges (Digital Pressure Gauges, Pressure Transducers, Pressure Transmitters, Manometers, Vacuum Gauges)	Pneumatic (Air): (-95 to -0) kPa (> -0 to 2.5) kPa (> 2.5 to 100) kPa (> 100 to 200) kPa (> 200 to 2 000) kPa (> 2 000 to 7 000) kPa Hydraulic (Oil): (0 to 70) MPa	0.089 kPa 0.002 2 kPa 0.09 kPa 0.09 kPa 0.75 kPa 1.9 kPa 18 kPa	SK-WI-020 by comparison with Pressure Calibrator
¹ Differential Pressure Gauges	Pneumatic (Air): (-95 to -0) kPa (> -0 to 2.5) kPa (> 2.5 to 100) kPa (> 100 to 200) kPa (> 200 to 2 000) kPa (> 2 000 to 7 000) kPa	0.089 kPa 0.002 2 kPa 0.09 kPa 0.09 kPa 0.75 kPa 1.9 kPa	SK-WI-020 by comparison with Pressure Calibrator
¹ Pressure Safety Valves (Pressure release point)	Pneumatic (Air): (> 0 to 200) kPa (> 200 to 2 000) kPa (> 2 000 to 7 000) kPa Hydraulic (Oil): (0 to 70) MPa	0.3 kPa 0.81 kPa 1.8 kPa 20 kPa	SK-WI-025 by comparison with Pressure Calibrator

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ Pressure Switches (Pressure switching point)	Pneumatic (Air): (> 0 to 200) kPa (> 200 to 2 000) kPa (> 2 000 to 7 000) kPa Hydraulic (Oil): (0 to 70) MPa	0.3 kPa 0.81 kPa 1.8 kPa 20 kPa	SK-WI-026 by comparison with Pressure Calibrator
Hand Torque Tool (Torque Wrench)	(1 to 10) N·m (>10 to 100) N·m (>100 to 500) N·m (>500 to 1 000) N·m	0.45 % of reading 0.33 % of reading 0.25 % of reading 0.21 % of reading	SK-WI-029 based on ISO 6789-2:2017
¹ Rotational Viscometer - Dynamic Viscosity (25 to 40) °C	20 mPa·s (cP) 56 mPa·s (cP) 104 mPa·s (cP) 480 mPa·s (cP) 1 100 mPa·s (cP) 6 000 mPa·s (cP) 16 000 mPa·s (cP) 57 000 mPa·s (cP) 71 000 mPa·s (cP)	0.43 % of reading 0.5 % of reading 0.58 % of reading 0.59 % of reading 0.7 % of reading 0.87 % of reading 0.74 % of reading 0.72 % of reading 0.7 % of reading	SK-WI-030 by comparison with certified values of certified reference materials.

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ Thermometer with sensor / Temperature Data Logger	(-40 to 200) °C (>200 to 400) °C (>400 to 500) °C (>500 to 650) °C (>650 to 1 200) °C	0.05 °C 0.17 °C 0.21 °C 2.6 °C 3.4 °C	SK-WI-016 by Comparison to Standard Thermometer
¹ Infrared Thermometer	(50 to 100) °C (100 to 200) °C (200 to 300) °C (300 to 400) °C (400 to 500) °C	1.5 °C 2.4 °C 2.9 °C 4.7 °C 5.1 °C	SK-WI-014 by Comparison to flat plate blackbody source $\epsilon = 0.95$, $\lambda = (8 \text{ to } 14) \mu\text{m}$
¹ Liquid in Glass Thermometers	Total Immersion: (-40 to 200) °C Partial Immersion: (-40 to 200) °C	0.08 °C 0.08 °C	SK-WI-015 by Comparison to Digital thermometer with PRT sensor

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ Moisture Analyzer (Temperature)	(50 to 200) °C	0.6 °C	SK-WI-012 Comparison to Digital thermometer with PRT sensor
¹ Thermo-Reactor	(-10 to 150) °C	0.1 °C	SK-WI-017 Comparison to Data Acquisition with sensor

Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ Tachometer, RPM – Rotational Speed (Non-Contact)	(>6.0 to 99.99) rpm (>99.99 to 180.0) rpm (> 180.0 to 500.0) rpm (> 500.0 to 999.9) rpm (> 999.9 to 2 000) rpm (> 2 000 to 5 000) rpm (> 5 000 to 10 000) rpm (> 10 000 to 20 000) rpm (> 20 000 to 50 000) rpm (> 50 000 to 99 999) rpm	0.015 rpm 0.06 rpm 0.07 rpm 0.12 rpm 0.6 rpm 0.9 rpm 1.2 rpm 1.7 rpm 6.8 rpm 10 rpm	SK-WI-021 Comparison to Multifunction calibrator
¹ Stopwatch / Timer	0.1 s to 9 h	0.038 sec	SK-WI-008 Comparison to Frequency counter
¹ Frequency – Source Frequency Meters/ Device Input/Measurement Function	(0.1 to 5) Hz (>5 to 50) Hz (>50 to 500) Hz (>500 to 5 000) Hz (> 5 000 to 50 000) Hz	0.003 Hz 0.055 Hz 0.06 Hz 0.6 Hz 3.2 Hz	SK-WI-023 Comparison to Multifunction calibrator
¹ Frequency – Frequency Sources/ Device Output Function	(0.1 to 5) Hz (>5 to 50) Hz (>50 to 500) Hz (>500 to 5 000) Hz (> 5 000 to 50 000) Hz	0.003 Hz 0.055 Hz 0.060 Hz 0.60 Hz 3.2 Hz	SK-WI-024 by comparison with Multimeter
¹ Pulse – Pulse Counters	(0.6 to 9 999 999) Counts	1.8 Counts	SK-WI-023 Comparison to Multifunction calibrator

Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
¹ Pulse – Pulse Sources	(0.6 to 9 999 999) Counts	1.8 Counts	SK-WI-024 by comparison using Multimeter

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. The nominal values listed are approximate.
3. The CMC for scales and balances are highly dependent upon the resolution of the unit under test. The uncertainty presented here does not include the resolution of the unit under test. The resolution will be included in the reported measurement uncertainty at the time of calibration.



Jason Stine, Vice President