22･07･29-NITE-AC-004
2023-02-14

Certificate of Accreditation

International Accreditation Japan (IAJapan) hereby accredits the following conformity assessment body as a calibration laboratory of ASNITE accreditation program.

Accreditation Identification: ASNITE 0013 Calibration

Name of Conformity Assessment Body: Measurement & Calibration Center,
Toyota Technical Development Corporation

Name of Legal Entity: Toyota Technical Development Corporation

Location of Conformity Assessment Body: 1 Toyota-cho, Toyota-shi, Aichi 471-8571, JAPAN

Scope of Accreditation: as the following pages

Accreditation Requirement: ISO/IEC 17025:2017*

* The relevant accreditation requirements described in the Accreditation Scheme Document for ASNITE-C(General) are also applied.

Effective Date of Accreditation: 2023-04-25

Expiry Date of Accreditation: 2027-04-24

Date of Initial Accreditation: 2005-12-26

K. Saito

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: Calibration of Noise test facilities and Emission test facilities
Date of Initial Accreditation of the Field: 2005-12-26
Laboratory's permanent facility/On-site Calibration: Laboratory's permanent facility, 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 %)
Noise test facilities	Sound level meter (permanent laboratory)	Frequency characteristic of Electrical network		20 Hz～12500 Hz		0.1 dB
	Level recorder (permanent laboratory)	Error of record		31.5 Hz～8000 Hz		0.32 dB
		Speed of paper feeding		3 mm/s		0.19 %
	Engine tachometer (permanent laboratory)	Error of tachometer indication		1000 r/min～6000 r/min		1 r/min
		Error of changing the number of cylinders		1000 r/min		
	Speed meter (on-site)	Length between detectors		2 m		1.1 mm
		Indication of speed meter		20 km/h～100 km/h		0.09 km/h
	Mechanical wind speed meter (permanent laboratory)	Wind speed indication		3 m/s～5 m/s		0.60 m/s
Emission test facilities	Exhaust gas Analyser/CVS (on-site)	Calibration curve		THC meter	0～500 ppmC	1.7 %
				HC meter	0～1000 ppmC	
				CH_4 meter	0～20 ppm	
				CO meter	0～20 %	
				CO_2 meter	0～20 %	
				NO_x meter	0～500 ppm	
		Propane shot		3 m^3/min～20 m^3/min		0.8 %
	Driver's aid (on-site)	Linearity		0～140 km/h		0.1 km/h
	Pen recorder (on-site)	Linearity		0～1 V		0.16 %
		Paper feeding time		600 mm/min		0.39 %
	Chassis dynamometer (on-site)	Engine tachometer	Indication	0～10000 r/min		0.012 % F.S.
			Output 1V			0.082 % F.S.
			Output 10V			0.086 % F.S.
		Vacuum gauge	Indication	- 80 kPa～80 kPa		0.35 % F.S.
			Output 1V			0.36 % F.S.
			Output 10V			0.36 % F.S.
		Speed meter	Indication	0～200 km/h		0.029 % F.S.
			Output 1V			0.082 % F.S.
			Output 10V			0.082 % F.S.
			Pulse	0 km/h～140 km/h		0.6 km/h
		Speed linkage cooling fan		20 km/h～60 km/h		3.8 km/h
		Braking and driving force meter	Indication	0～10000 N		0.15 % F.S.
			Output 1V			0.17 % F.S.
			Output 10V			0.17 % F.S.
	Evaporative emission test facilities (on-site)	Calibration curve		THC meter	0～500 ppmC	1.7 %
		Capacity check		0～100 m^3		0.75 %

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