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| Name of Accreditation Program | JCSS Accreditation Program |
| Accreditation No. | JCSS0056 |
| Date of Initial Accreditation | 1995-06-21 |
| Latest Date of Issue | 2018-03-20 |
| Name and Address of Accredited Organization | MEASUREMENT & CALIBRATION CENTER BUSINESS DIV. Toyota Technical Development Corporation 1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan JCN 7180301018923 |
| Inquiry Point | MEASUREMENT & CALIBRATION CENTER BUSINESS DIV. Tel: +81-565-23-6637 FAX: +81-565-23-5779 |
| Accreditation Standards | ISO/IEC 17025:2005 (Calibration) |
| Accreditation Scope | As attached |

*JCN : Japan Corporate Number

General Field of Calibration : LengthDate of Initial Accreditation of the Field : 2007-05-24Permanent Laboratory/On-site Calibration : Permanent Laboratory

| Type of Service | | Calibration Scope | CMC (Level of Confidence Approximately 95 %) (L(mm):Nominal length) |
|--------------------------------|--|-------------------------------|---|
| Length Measuring Instrument | Gauge Blocks (Comparison method) | From 0.5 mm up to 100 mm | 0.07 μ m |
| | | More than 100 mm up to 500 mm | $(0.15+0.00077 \cdot L)$ μ m |
| | Calipers | Up to 200 mm | 0.02 mm |
| | Height gauges | Up to 600 mm | 0.03 mm |
| | Depth gauges | Up to 150 mm | 0.02 mm |
| | Micrometers | Up to 100 mm | 2 μ m |
| | Calibration testers for dial gauges | Up to 25 mm | 1.0 μ m |
| | Dial gauges | Up to 5 mm | 1.1 μ m |
| | | More than 5 mm up to 50 mm | 2.0 μ m |
| | | More than 50 mm up to 100 mm | 3.1 μ m |
| | Dial test indicators | Up to 1 mm | 1.0 μ m |
| | Ring gauges | From 6 mm less than 15 mm | 0.5 μ m |
| | | From 15 mm up to 315 mm | 0.8 μ m |
| | Plug gauges | From 2 mm up to 100 mm | 0.9 μ m |
| | Rules (Starting Point of Edge) | Up to 1000 mm | 0.05 mm |
| | Steel Tape Measures | Up to 1 m | 0.07 mm |
| | | More than 1 m up to 100 mm | Add 0.07 mm to the value above for every 1 m |

General Field of Calibration : Mass

Date of Initial Accreditation of the Field : 2008-11-06

Permanent Laboratory/On-site Calibration : Permanent Laboratory

| Type of Service | | Calibration Scope | CMC (Level of Confidence Approximately 95 %) |
|-----------------------------|------------------------|-----------------------------|---|
| Weight | Weight | 1 mg | 0.0050 mg |
| | | 2 mg | 0.0050 mg |
| | | 5 mg | 0.0050 mg |
| | | 10 mg | 0.0054 mg |
| | | 20 mg | 0.0060 mg |
| | | 50 mg | 0.012 mg |
| | | 100 mg | 0.013 mg |
| | | 200 mg | 0.014 mg |
| | | 500 mg | 0.015 mg |
| | | 1 g | 0.017 mg |
| | | 2 g | 0.019 mg |
| | | 5 g | 0.048 mg |
| | | 10 g | 0.050 mg |
| | | 20 g | 0.072 mg |
| | | 50 g | 0.076 mg |
| | | 100 g | 0.11 mg |
| | | 200 g | 0.16 mg |
| | | 500 g | 0.36 mg |
| | | 1 kg | 0.90 mg |
| | | 2 kg | 1.5 mg |
| | 5 kg | 7.0 mg | |
| | 10 kg | 11 mg | |
| | 20 kg | 17 mg | |
| | Weight (Deadweight) | From 100 g up to 200 g | 1.2 mg |
| | | More than 200 g up to 500 g | 1.4 mg |
| | | More than 500 g up to 1 kg | 2.8 mg |
| | | More than 1 kg up to 2 kg | 3.4 mg |
| More than 2 kg up to 5 kg | | 60 mg | |
| More than 5 kg up to 10 kg | | 60 mg | |
| More than 10 kg up to 20 kg | | 64 mg | |

Permanent Laboratory/On-site Calibration : Permanent Laboratory, On-site Calibration

| Type of Service | | Calibration Scope | CMC (Level of Confidence Approximately 95 %) | |
|-----------------------------|--|-----------------------------|---|---------------------|
| | | | Permanent Laboratory | On-site Calibration |
| Scale | Non-Automatic Electronic Weighing Instruments | 1 mg | 0.0031 mg | 0.0031 mg |
| | | 2 mg | 0.0031 mg | 0.0031 mg |
| | | 5 mg | 0.0031 mg | 0.0031 mg |
| | | 10 mg | 0.0040 mg | 0.0040 mg |
| | | 20 mg | 0.0044 mg | 0.0044 mg |
| | | 50 mg | 0.0058 mg | 0.0058 mg |
| | | 100 mg | 0.0072 mg | 0.0072 mg |
| | | 200 mg | 0.0086 mg | 0.0086 mg |
| | | 500 mg | 0.012 mg | 0.012 mg |
| | | From 1 g up to 2 g | 0.026 mg | 0.027 mg |
| | | More than 2 g up to 5 g | 0.076 mg | 0.076 mg |
| | | More than 5 g up to 10 g | 0.079 mg | 0.079 mg |
| | | More than 10 g up to 20 g | 0.088 mg | 0.089 mg |
| | | More than 20 g up to 50 g | 0.12 mg | 0.13 mg |
| | | More than 50 g up to 100 g | 0.16 mg | 0.18 mg |
| | | More than 100 g up to 200 g | 0.29 mg | 0.32 mg |
| | | More than 200 g up to 500 g | 0.70 mg | 0.79 mg |
| | | More than 500 g up to 1 kg | 1.5 mg | 3.6 mg |
| | | More than 1 kg up to 2 kg | 2.8 mg | 7.2 mg |
| | | More than 2 kg up to 5 kg | 13 mg | 36 mg |
| More than 5 kg up to 10 kg | 25 mg | 71 mg | | |
| More than 10 kg up to 20 kg | 49 mg | 0.15 g | | |
| More than 20 kg up to 30 kg | 0.15 g | 0.25 g | | |

General Field of Calibration : Temperature

Date of Initial Accreditation of the Field : 2009-10-30

Permanent Laboratory/On-site Calibration : Permanent Laboratory

| Type of Service | | Calibration Scope | CMC (Level of Confidence Approximately 95 %) | |
|-----------------------------|--|--|--|----------|
| Contact Type Thermometer | Resistance thermometer (Comparison calibration) | Platinum Resistance thermometer with 4-wires (100 Ω) | From -40 °C up to 150 °C | 0.048 K |
| | | | More than 150 °C up to 300 °C | 0.11 K |
| | Temperature sensors with display unit (Comparison calibration) | Platinum Resistance Thermometer | From -40 °C up to 150 °C | 0.038 °C |
| | | Thermocouple Thermistor | More than 150 °C up to 300 °C | 0.095 °C |

General Field of Calibration : Acceleration

Date of Initial Accreditation of the Field : 2016-12-08

Permanent Laboratory/On-site Calibration : Permanent Laboratory

| Type of Service | | Calibration Scope | CMC (Level of Confidence Approximately 95 %) |
|---|--|-------------------|--|
| Vibration Acceleration Measuring Equipment ,etc. | Reference Accelerometer (Charge Sensitivity) | 20 Hz | 1.1 % |
| | | 25 Hz | 1.1 % |
| | | 31.5 Hz | 1.1 % |
| | | 40 Hz | 1.1 % |
| | | 50 Hz | 1.1 % |
| | | 63 Hz | 1.1 % |
| | | 80 Hz | 1.1 % |
| | | 100 Hz | 0.9 % |
| | | 125 Hz | 0.9 % |
| | | 160 Hz | 0.9 % |
| | | 200 Hz | 1.1 % |
| | | 250 Hz | 1.3 % |
| | | 315 Hz | 1.3 % |
| | | 400 Hz | 1.5 % |
| | | 500 Hz | 1.1 % |
| | | 630 Hz | 1.1 % |
| | | 800 Hz | 1.1 % |
| | | 1000 Hz | 1.2 % |
| | | 1250 Hz | 1.2 % |
| | | 1600 Hz | 1.2 % |
| 2000 Hz | 1.5 % | | |
| 2500 Hz | 2.0 % | | |
| 3150 Hz | 3.0 % | | |
| 4000 Hz | 3.0 % | | |
| 5000 Hz | 3.0 % | | |

General Field of Calibration : Electricity (Direct Current & Low Frequency)

Date of Initial Accreditation of the Field : 1995-06-21

Permanent Laboratory/On-site Calibration : Permanent Laboratory

| Type of Service | | Calibration Scope | CMC (Level of Confidence Approximately 95 %) |
|--|--|--|--|
| Direct Current & Low Frequency Measuring Equipment, etc. | DC Resistor | From 10 m Ω less than 100 m Ω | 0.69 % |
| | | 100 m Ω | 14 ppm |
| | | More than 100 m Ω less than 1 Ω | 0.69 % |
| | | 1 Ω | 20 ppm |
| | | More than 1 Ω less than 10 Ω | 82 ppm |
| | | 10 Ω | 10 ppm |
| | | More than 10 Ω less than 100 Ω | 30 ppm |
| | | 100 Ω | 7.8 ppm |
| | | More than 100 Ω less than 1 k Ω | 13 ppm |
| | | 1 k Ω | 4.5 ppm |
| | | More than 1 k Ω less than 10 k Ω | 14 ppm |
| | | 10 k Ω | 4.4 ppm |
| | | More than 10 k Ω less than 100 k Ω | 13 ppm |
| | | 100 k Ω | 4.6 ppm |
| | | More than 100 k Ω less than 1 M Ω | 25 ppm |
| | | 1 M Ω | 14 ppm |
| | More than 1 M Ω less than 10 M Ω | 0.010 % | |
| | | 10 M Ω | 65 ppm |
| | DC Resistance Measuring Equipment | 100 m Ω | 17 ppm |
| | | 1 Ω | 3.5 ppm |
| | | 10 Ω | 3.8 ppm |
| | | 100 Ω | 3.6 ppm |
| | | 1 k Ω | 3.7 ppm |
| | | 10 k Ω | 3.6 ppm |
| | | 100 k Ω | 3.8 ppm |
| | | 1 M Ω | 3.9 ppm |
| | | 10 M Ω | 8.4 ppm |
| | DC Voltage Source | From 10 mV less than 50 mV | 27 ppm |
| | | From 50mV up to 100 mV | 12 ppm |
| | | More than 100 mV less than 1 V | 7 ppm |
| | | 1 V | 2.4 ppm |
| | | 1.018 V | 2.4 ppm |
| | | More than 1 V less than 10 V | 5 ppm |
| 10 V | | 2.4 ppm | |
| More than 10 V up to 100 V | | 9 ppm | |
| More than 100 V up to 1 kV | | 20 ppm | |

| Type of Service | | Calibration Scope | | CMC (Level of Confidence Approximately 95 %) | |
|--|--|-----------------------------------|--------|--|---------|
| Direct Current & Low Frequency Measuring Equipment, etc. | DC Voltage Measuring Equipment | From 10 mV up to 50 mV | | 65 ppm | |
| | | More than 50 mV up to 200 mV | | 18 ppm | |
| | | More than 200 mV up to 2 V | | 10 ppm | |
| | | More than 2 V less than 10 V | | 6 ppm | |
| | | 10 V | | 2.4 ppm | |
| | | More than 10 V up to 20 V | | 5 ppm | |
| | | More than 20 V up to 200 V | | 8 ppm | |
| | | More than 200 V up to 1 kV | | 9 ppm | |
| | Direct Current Source | From 10 μ A up to 100 μ A | | 41 ppm | |
| | | More than 100 μ A up to 1 mA | | 41 ppm | |
| | | More than 1 mA up to 10 mA | | 44 ppm | |
| | | More than 10 mA up to 100 mA | | 41 ppm | |
| | | More than 100 mA up to 1 A | | 41 ppm | |
| | | More than 1 A up to 10 A | | 41 ppm | |
| | | More than 10 A up to 20 A | | 59 ppm | |
| | Direct Current Measuring Equipment | 100 μ A | | 0.011% | |
| | | 1 mA | | 56 ppm | |
| | | 10 mA | | 57 ppm | |
| | | 100 mA | | 61 ppm | |
| | | 1 A | | 92 ppm | |
| | AC Voltage Source | 10 Hz | 300 mV | | 0.020 % |
| | | | 10 V | | 0.018 % |
| | | | 200 V | | 0.018 % |
| | | 20 Hz | 10 V | | 94 ppm |
| | | 50 Hz | 10 mV | | 0.045 % |
| | | | 30 mV | | 0.024 % |
| | | | 100 mV | | 0.011 % |
| | | | 300 mV | | 59 ppm |
| | | | 1 V | | 45 ppm |
| | | | 3 V | | 48 ppm |
| | | | 10 V | | 47 ppm |
| | | | 20 V | | 45 ppm |
| | | | 30 V | | 52 ppm |
| 60 V | | | 45 ppm | | |
| 100 V | | | 48 ppm | | |
| 200 V | | 48 ppm | | | |
| 300 V | | 63 ppm | | | |
| 700 V | | 62 ppm | | | |
| 1 kV | | 53 ppm | | | |

| Type of Service | | Calibration Scope | | CMC (Level of Confidence Approximately 95 %) |
|--|-------------------|-------------------|--------|--|
| Direct Current & Low Frequency Measuring Equipment, etc. | AC Voltage Source | 60 Hz | 10 mV | 0.045 % |
| | | | 30 mV | 0.024 % |
| | | | 100 mV | 0.011 % |
| | | | 300 mV | 59 ppm |
| | | | 1 V | 45 ppm |
| | | | 3 V | 48 ppm |
| | | | 10 V | 46 ppm |
| | | | 30 V | 52 ppm |
| | | | 100 V | 47 ppm |
| | | | 300 V | 63 ppm |
| | | 1 kV | 53 ppm | |
| | | 1 kHz | 10 mV | 0.045 % |
| | | | 30 mV | 0.024 % |
| | | | 33 mV | 0.024 % |
| | | | 100 mV | 0.011 % |
| | | | 300 mV | 59 ppm |
| | | | 330 mV | 66 ppm |
| | | | 1 V | 40 ppm |
| | | | 2 V | 38 ppm |
| | | | 3 V | 46 ppm |
| | | | 3.3 V | 47 ppm |
| | | | 6 V | 39 ppm |
| | | | 10 V | 42 ppm |
| | | | 20 V | 41 ppm |
| | | | 30 V | 50 ppm |
| | | | 33 V | 49 ppm |
| | | | 60 V | 44 ppm |
| | | | 100 V | 43 ppm |
| | | | 200 V | 44 ppm |
| | | | 300 V | 60 ppm |
| | | 330 V | 60 ppm | |
| | | 700 V | 60 ppm | |
| | | 1 kV | 51 ppm | |
| 10 kHz | 300 mV | 59 ppm | | |
| | 1 V | 41 ppm | | |
| | 2 V | 40 ppm | | |
| | 3 V | 45 ppm | | |
| | 6 V | 40 ppm | | |
| | 20 V | 41 ppm | | |
| | 30 V | 50 ppm | | |
| | 60 V | 42 ppm | | |
| | 200 V | 44 ppm | | |
| | 300 V | 61 ppm | | |
| 1 kV | 52 ppm | | | |

| Type of Service | | Calibration Scope | | CMC (Level of Confidence Approximately 95 %) |
|---|--------------------------------------|-------------------|---------|--|
| Direct Current & Low Frequency Measuring Equipment, etc. | AC Voltage Source | 20 kHz | 300 mV | 59 ppm |
| | | | 1 V | 42 ppm |
| | | | 3 V | 46 ppm |
| | | | 10 V | 42 ppm |
| | | | 30 V | 50 ppm |
| | | | 300 V | 61 ppm |
| | | 50 kHz | 300 mV | 75 ppm |
| | | | 1 V | 58 ppm |
| | | | 3 V | 72 ppm |
| | | | 10 V | 52 ppm |
| | | | 30 V | 75 ppm |
| | | | 100 V | 68 ppm |
| | | 100 kHz | 300 V | 0.019 % |
| | | | 300 mV | 0.015 % |
| | | | 1 V | 92 ppm |
| | | | 10 V | 91 ppm |
| | | 200 kHz | 200 V | 0.011 % |
| | | | 1 V | 0.022 % |
| | | 500 kHz | 10 V | 0.024 % |
| | | | 300 mV | 0.081 % |
| | | 1 MHz | 1 V | 0.077 % |
| | 1 V | | 0.30 % | |
| | AC Voltage Measuring Equipment | 50 Hz | 10 V | 68 ppm |
| | | | 100 V | 75 ppm |
| | | 60 Hz | 10 V | 68 ppm |
| | | | 100 V | 75 ppm |
| | | 1 kHz | 10 V | 68 ppm |
| | | | 100 V | 75 ppm |
| | Alternating Current Source | 60 Hz | 10 mA | 93 ppm |
| | | | 100 mA | 96 ppm |
| 1 A | | | 0.012 % | |
| Alternating Current Measuring Equipment | 60 Hz | 10 mA | 0.018 % | |
| | | 100 mA | 0.017 % | |
| | | 1 A | 0.031 % | |

General Field of Calibration : ForceDate of Initial Accreditation of the Field : 2014-03-20Permanent Laboratory/On-site Calibration : Permanent Laboratory

| Type of Service | | Calibration Scope | | CMC (Level of Confidence Approximately 95 %) |
|------------------------------|------------------------|-------------------|--------------------------|--|
| Force-proving Instruments | Applying JIS B 7721 | Compression | From 39.23 N up to 100 N | 0.20 % |
| | | | From 0.1 kN up to 100 kN | 0.10 % |
| | | Tension | From 39.23 N up to 100 N | 0.20 % |
| | | | From 0.1 kN up to 100 kN | 0.10 % |

General Field of Calibration : PressureDate of Initial Accreditation of the Field : 2009-03-04Permanent Laboratory/On-site Calibration : Permanent Laboratory

| Type of Service | | Calibration Scope | | CMC (Level of Confidence Approximately 95 %) |
|-------------------|---|----------------------------------|----------------------------|---|
| Pressure Gauge | Mechanical Type Pressure Gauges | Gas Gauge Pressure | From -90 kPa up to -25 kPa | 0.05 kPa |
| | | | From 20 kPa up to 700 kPa | 2 kPa |
| | Pressure Gauges (Digital Pressure Gauges) | Gas Absolute Pressure | From 20 kPa up to 130 kPa | 0.015 kPa |
| | | | Gas Gauge Pressure | From -90 kPa up to -25 kPa |
| | | From 20 kPa up to 100 kPa | | 0.02 kPa |
| | | More than 100 kPa up to 1050 kPa | | 0.12 kPa |

General Field of Calibration : Acoustics & UltrasoundDate of Initial Accreditation of the Field : 2016-09-08Permanent Laboratory/On-site Calibration : Permanent Laboratory

| Type of Service | | Calibration Scope | | CMC (Level of Confidence Approximately 95 %) |
|---|------------------|-------------------|--|--|
| Acoustic Measuring Equipment, etc. | Sound Calibrator | 94 dB, 1 kHz | | 0.13 dB |
| | | 114 dB, 250 Hz | | 0.12 dB |
| | | 124 dB, 250 Hz | | 0.13 dB |