

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

EISEN CO., LTD.

10-6 Gokashoyanaze-cho Higashioumi-shi, Shiga 529-1413

(Hereinafter called the Organization) and hereby declares that Organization 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 (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Dimensional Calibration, Mechanical Calibration (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Initial Accreditation Date:

Issue Date:

Expiration Date:

April 11, 2023

March 10, 2025

May 31, 2027

Accreditation No.:

Certificate No.:

115792

L25-188

Tracy Szerszen President

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver Rd., Suite 1325 Troy, Michigan 48084 The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjlabs.com



Certificate of Accreditation: Supplement

EISEN CO., LTD.

10-6 Gokashoyanaze-cho Higashioumi-shi, Shiga 529-1413 Contact Name: Ryota Hamagaki Phone: 0748-45-5100

Accreditation is granted to the facility to perform the following calibration:

Dimensional

Dimensiona				
MEASURED INSTRUMENT, QUANTITY OR GAUGE		INAL DEVICE SIZE AS ROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pin gauge F	Φ 0.05 mm to Φ		19 nm/mm + 0.19 μm	"SOP for Certified Calibration of
(including	Φ 10 mm to Φ 25 mm		11 nm/mm + 0.44 μm	Pin Gauge"
plain plug	Φ 25 mm to Φ 30 mm		18 nm/mm + 0.55 μm	(EQA-09-0001)
gauge)	Φ 30 mm to Φ 50 mm		10 nm/mm + 0.53 μm	
	Φ 50 mm to Φ100 mm		9.7 nm/mm + 0.97 μm	On the basis of: JMAS 4009-2013
		A		Gauge block LVDT Micrometer Optical Scale ULM
Plain ring	Φ 3 mm to Φ 14 mm		1.2 μm	"SOP for Certified Calibration of Plain Ring Gauge"
gauge F	Φ 14 mm to Φ 80 mm		1.1 μm	
	Φ 80 mm to Φ 120 mm		1.5 μm	(EQA-09-0005)
				On the basis of: JMAS 4009-2013 Master ring gauge ULM
Thread plug	Pitch diameter	1 mm to 30 mm	46 nm/mm + 1.4 μm	"SOP for Certified Calibration of Parallel Screw Threads" (EQA-09-0003) On the basis of: JIS B 0261:2020 Parallel screw threads gauges-
gauge F		30 mm to 100 mm	18 nm/mm + 1.8 μm	
		100 mm to 120 mm	21 nm/mm + 2.5 μm	
	Major diameter	1 mm to 30 mm	43 nm/mm + 1.3 μm	
		30 mm to 100 mm	12 nm/mm + 1.2 μm	
		100 mm to 120 mm	13 nm/mm + 1.6 μm	
				Measuring method Gauge block Digital Measuring Unit
Thread ring	Pitch diameter	2.4 mm to 10 mm	360 nm/mm + 3.6 μm	"SOP for Certified Calibration of
gauge ^F		10 mm to 50 mm	60 nm/mm + 3.0 μm	Parallel Screw Threads" (EQA-09-0003)
	Minor diameter	2.4 mm to 10 mm	450 nm/mm + 4.5 μm	
		10 mm to 50 mm	60 nm/mm + 3.0 μm	On the basis of: IAC MasterScanner XP User Manual
				Master ring gauge IAC MasterScanner XP



Certificate of Accreditation: Supplement

EISEN CO., LTD.

10-6 Gokashoyanaze-cho Higashioumi-shi, Shiga 529-1413 Contact Name: Ryota Hamagaki Phone: 0748-45-5100

Accreditation is granted to the facility to perform the following calibration:

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE		CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Diamond indenter for Rockwell	Hardness	HRC 25 HRC 60	1.09 HRC 0.97 HRC	In-House Method revised in accordance with JIS B 7726:2017 Contour measuring system Standard Rockwell diamond indenter Standard block for Rockwell hardness calibration
hardness test F	Mean cone angle	120 °	0.38 °	
	Tip mean radius	0.2 mm	0.013 mm	

- 1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor k (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.
- 2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.
- 3. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location. Example: Outside Micrometer would mean that the laboratory performs this calibration at its fixed location.