CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Imada, Inc.
and Hoto Instruments (Division of Imada, Inc.)
3100 Dundee Road, Suite 707
Northbrook, IL 60062

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.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 27 June 2022
Certificate Number: L2086-1

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

Imada, Inc. and Hoto Instruments (Division of Imada, Inc.)

3100 Dundee Road, Suite 707
Northbrook, IL 60062
Aki Morita 847-562-0834

CALIBRATION

Valid to: **June 27, 2022** Certificate Number: **L2086-1**

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Digital Distance Meter	(0.000 5 to 8) in	800 µin	Gauge Blocks
Durometer Indenter Diameter	(0.001 to 26) mm	0.01 mm	Image Measuring System
Durometer Indenter Angle	(0.01 to 35) °	0.15 °	Image Measuring System
Durometer Indenter Radius	(0.001 to 15) mm	0.006 mm	Image Measuring System
Durometer Indenter Length	(0.001 to 3) mm	0.012 5 mm	Gauge Blocks

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Mechanical Force Gauges	(0.2 to 300) lbf	0.08 % of reading	Dead Weight applied
	(301 to 500) lbf	0.22 % of reading	Dead Weight applied and Load Cell System
Digital Force Gauges	(0.044 to 220) lbf	0.11 % of reading	Dead Weight applied
	(44 to 4 400) lbf	0.2 % of reading	Dead Weight applied and Load Cell System
Torque Testers	(0.1 to 1.4) lbf·in (1.4 to 4 344) lbf·in	0.003 3 lbf·in 0.24 % of reading	Torque Arm with Dead Weight applied

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Durometer Spring Force	(0.01 to 9) N (0.01 to 45) N	0.05 N 0.2 N	Force Gauge

Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Digital Stroboscope[1]	(0.1 to 150 000) fpm	0.005 % of reading	Universal Counter
Digital Tachometer	(0.01 to 25 000) rpm	0.005 % of reading	Universal Counter

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. The unit of measure fpm corresponds to flashes per minute as measured in Hz using an electronic counter.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. L2086-1.

R. Douglas Leonard Jr., VP, PILR SBU